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Breath-taking

Premature Mortality Due to Particulate Air Pollution in 239 American Cities

This material is from the May 1996 report from the Natural Resources Defense Council, by Deborah Sheiman Shprentz. For an online summary of the report see [Danger In The Air](#).

Guide to Mortality and Pollution Tables

The *Breath-taking* report estimates that approximately 64,000 premature deaths from cardiopulmonary causes may be attributable to particulate air pollution each year. The tables listed below detail those findings.

Top 50 Metropolitan Statistical Areas

These tables consider MSA's ranked by average annual mean PM-10 concentration, by number of premature deaths attributable to particulate air pollution, and by number of premature deaths per 100,000 population attributable to particulate air pollution. Each table identifies the top 50 MSA's of the 239 MSA's for which we have data.

- [Ranked by PM-10 Concentration](#)
- [Ranked by Attributable Mortality](#)
- [Ranked by Attributable Mortality Rate](#)

Top 50 Hot Spots in Metropolitan Statistical Areas

These tables consider individual monitoring stations within MSA's ranked by annual average and 24-hour PM-10 concentration. Each table identifies the top 50 monitoring stations of the 943 stations for which data were available.

- [Annual Average PM-10 Concentrations](#)
- [24-Hour PM-10 Concentrations](#)

Particulate Air Pollution Attributable Mortality

These tables show PM-10 concentration and NRDC's estimate of air pollution attributable deaths within Metropolitan Statistical Areas in each state.

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Top 50 MSA's Ranked by PM-10 Concentration

This table considers Metropolitan Statistical Areas ranked by average annual mean PM-10 concentration and identifies the top 50 MSA's of the 239 MSA's for which we have data. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

The PM-10 concentration reported is the average of the annual mean concentration of PM-10 reported at all official monitoring stations within an MSA over the five year period, 1990 through 1994.

Rank	Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)
1	VISALIA-TULARE-PORTERVILLE, CA	60.4
2	BAKERSFIELD, CA	54.8
3	FRESNO, CA	51.7
4	RIVERSIDE-SAN BERNARDINO, CA	48.1
5	STOCKTON, CA	44.8
6	LOS ANGELES-LONG BEACH, CA	43.8
7	PHOENIX, AZ	39.5
8	SPOKANE, WA	38.7
9	RENO, NV	38.5
10	LAS VEGAS, NV	38.3
11	ANAHEIM-SANTA ANA, CA	38.1
12	MEDFORD, OR	37.9
13	ST. JOSEPH, MO	37.6

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14	<u>YUBA CITY, CA</u>	37.4
15	<u>STEUBENVILLE-WEIRTON, OH-WV</u>	36.6
16	<u>PROVO-OREM, UT</u>	36.5
17	<u>CLEVELAND, OH</u>	35.6
18	<u>OMAHA, NE-IA</u>	35.5
19	<u>ATLANTA, GA</u>	35.1
20	<u>CHATTANOOGA, TN-GA</u>	34.9
21	<u>PATERSON-CLIFTON-PASSIAC, NJ</u>	34.8
22	<u>SAN DIEGO, CA</u>	34.8
23	<u>BOISE CITY, ID</u>	34.0
24	<u>CHICAGO, IL</u>	33.7
25	<u>ROANOKE, VA</u>	33.7
26	<u>PHILADELPHIA, PA-NJ</u>	33.5
27	<u>DETROIT, MI</u>	33.2
28	<u>SALT LAKE CITY-OGDEN, UT</u>	33.2
29	<u>YAKIMA, WA</u>	33.1
30	<u>CHICO, CA</u>	33.1
31	<u>DECATUR, IL</u>	33.0
32	<u>WATERLOO-CEDAR FALLS, IA</u>	33.0
33	<u>SAN JOSE, CA</u>	32.8
34	<u>KNOXVILLE, TN</u>	32.6
35	<u>NASHVILLE-DAVIDSON, TN</u>	32.4
36	<u>ATLANTIC CITY, NJ</u>	32.4
37	<u>LAREDO, TX</u>	32.4
38	<u>HOUSTON, TX</u>	31.9
39	<u>SACRAMENTO, CA</u>	31.9
40	<u>ST. LOUIS, MO-IL</u>	31.8
41	<u>LAS CRUCES, NM</u>	31.7
42	<u>GADSDEN, AL</u>	31.7
43	<u>MOBILE, AL</u>	31.4
44	<u>NEWARK, NJ</u>	31.4
45	<u>PROVIDENCE-WARWICK-PAWTUCKET, RI</u>	31.4
46	<u>HUNTINGTON-ASHLAND, WV-KY-OH</u>	31.4
47	<u>HAMILTON-MIDDLETOWN, OH</u>	31.3
48	<u>PITTSBURGH, PA</u>	31.0
49	<u>LANCASTER, PA</u>	31.0
50	<u>INDIANAPOLIS, IN</u>	31.0

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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VISALIA-TULARE-PORTERVILLE, CA

This table provides summary information for Metropolitan Statistical Area 8780, VISALIA-TULARE-PORTERVILLE, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	60.4
Rank by PM-10 Concentration:	1 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.31
Adult Cardiopulmonary Attributable Deaths:	302 (186-402)
Attributable Deaths per 100,000 Population:	123
Rank by Number of Attributable Deaths:	47 of 239
Rank Attributable Death Rate:	1 of 239

Mortality (1989 data)

Total Mortality:	2,294
Adult Cardiopulmonary Deaths:	1,277
Auto Accident Deaths:	167

Population (1980 data)

Total Population:	246,000
-------------------	---------

Counties Assigned to MSA

Tulare Co, CA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA Tulare Co VISALIA 310 N CHURCH ST, VISALIA	60.4	207	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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BAKERSFIELD, CA

This table provides summary information for Metropolitan Statistical Area 0680, BAKERSFIELD, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	54.8
Rank by PM-10 Concentration:	2 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.30
Adult Cardiopulmonary Attributable Deaths:	464 (284-618)
Attributable Deaths per 100,000 Population:	115
Rank by Number of Attributable Deaths:	32 of 239
Rank Attributable Death Rate:	3 of 239

Mortality (1989 data)

Total Mortality:	3,725
Adult Cardiopulmonary Deaths:	2,005
Auto Accident Deaths:	163

Population (1980 data)

Total Population:	403,000
-------------------	---------

Counties Assigned to MSA

Kern Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Kern Co				
1128 GOLDEN STATE HIGHWAY, BAKERSFIELD	55.0	86	1994	1
5558 CALIFORNIA AVE, BAKERSFIELD	49.3	91	1994	1
BAKERSFIELD				
225 CHESTER AVE, BAKERSFIELD	69.9	197	1990	4
MOJAVE				
AIRPORT-BLDG 58,MOJAVE	27.4	92	1990	3
OILDALE				
3311 MANOR ST., OILDALE	55.6	<i>169</i>	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FRESNO, CA

This table provides summary information for Metropolitan Statistical Area 2840, FRESNO, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	51.7
Rank by PM-10 Concentration:	3 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.27
Adult Cardiopulmonary Attributable Deaths:	488 (298-653)
Attributable Deaths per 100,000 Population:	95
Rank by Number of Attributable Deaths:	30 of 239
Rank Attributable Death Rate:	4 of 239

Mortality (1989 data)

Total Mortality:	4,436
Adult Cardiopulmonary Deaths:	2,265
Auto Accident Deaths:	212

Population (1980 data)

Total Population:	515,000
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Counties Assigned to MSA

Fresno Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Fresno Co				
CLOVIS				
908 N VILLA AVE, CLOVIS	42.4	105	1993	3
FIVE POINTS				
OAKLAND & LASSEN, FIVE POINTS	49.2	227	1990	3
FRESNO				
3425 N FIRST ST, FRESNO	52.3	238	1990	5
4706 E. DRUMMOND ST., FRESNO	56.5	192	1990	5
CAL STATE #2-SHAW & MAPLE, FRESNO	70.3	128	1990	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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RIVERSIDE-SAN BERNARDINO, CA

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A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	48.1
Rank by PM-10 Concentration:	4 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.24
Adult Cardiopulmonary Attributable Deaths:	1,905 (1,158-2,560)
Attributable Deaths per 100,000 Population:	122
Rank by Number of Attributable Deaths:	6 of 239
Rank Attributable Death Rate:	2 of 239

Mortality (1989 data)

Total Mortality:	17,789
Adult Cardiopulmonary Deaths:	9,685
Auto Accident Deaths:	748

Population (1980 data)

Total Population:	1,557,000
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Counties Assigned to MSA

Riverside Co, CA
San Bernardino Co, CA

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA				
Riverside Co				
BANNING				
135 N. ALLESANDRO, BANNING	35.8	86	1993	3
PALM SPRINGS				
FS-590 RACQUET CLUB AVE, PALM SPRINGS	32.4	124	1991	5
PERRIS				
237 1/2 N. "D" ST., PERRIS	49.3	180	1990	5
RUBIDOUX				
5888 MISSION BLVD., RUBIDOUX	71.0	<i>196</i>	1990	5
San Bernardino Co				
83732 TRONA ROAD, TRONA, CA 93563	28.0	43	1993	1
BARSTOW				
200 E. BUENA VISTA, BARSTOW	31.6	85	1991	3
FONTANA				
14360 ARROW BLVD., FONTANA	59.7	<i>189</i>	1990	5
LUCERNE VALLEY				
MIDDLE SCH-8560 ALIENTO, LUCERNE VALLEY	27.5	117	1991	3
ONTARIO				
AIRPORT, ONTARIO	64.4	176	1990	5
SAN BERNARDINO				
24302 4TH ST., SAN BERNARDINO, CA.	55.7	167	1990	5
TRONA				
13207 MARKET ST, TRONA	39.9	147	1990	4
VICTORVILLE				
14029 AMARGOSA ROAD, VICTORVILLE, CA	33.7	61	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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STOCKTON, CA

This table provides summary information for Metropolitan Statistical Area 8120, STOCKTON, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	44.8
Rank by PM-10 Concentration:	5 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.22
Adult Cardiopulmonary Attributable Deaths:	321 (194-433)
Attributable Deaths per 100,000 Population:	93
Rank by Number of Attributable Deaths:	43 of 239
Rank Attributable Death Rate:	5 of 239

Mortality (1989 data)

Total Mortality:	3,519
Adult Cardiopulmonary Deaths:	1,794
Auto Accident Deaths:	125

Population (1980 data)

Total Population:	347,000
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Counties Assigned to MSA

San Joaquin Co, CA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA San Joaquin Co STOCKTON HAZELTON-HD, STOCKTON	44.8	138	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LOS ANGELES-LONG BEACH, CA

This table provides summary information for Metropolitan Statistical Area 4480, LOS ANGELES-LONG BEACH, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	43.8
Rank by PM-10 Concentration:	6 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.21
Adult Cardiopulmonary Attributable Deaths:	5,873 (3,550-7,933)
Attributable Deaths per 100,000 Population:	79
Rank by Number of Attributable Deaths:	1 of 239
Rank Attributable Death Rate:	6 of 239

Mortality (1989 data)

Total Mortality:	60,906
Adult Cardiopulmonary Deaths:	33,825
Auto Accident Deaths:	1,458

Population (1980 data)

Total Population:	7,478,000
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Counties Assigned to MSA

Los Angeles Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Los Angeles Co				
AZUSA				
803 N. LOREN AVE., AZUSA	51.0	134	1991	5
BURBANK				
228 W. PALM AVE., BURBANK	47.9	176	1992	5
HAWTHORNE				
5234 W. 120TH ST., HAWTHORNE	36.9	82	1993	5
LANCASTER				
315 W. PONDERA ST., LANCASTER, CA	39.6	175	1990	5
LONG BEACH				
3648 N. LONG BEACH BLVD., LONG BEACH	40.0	101	1990	4
LOS ANGELES				
1630 N MAIN ST, LOS ANGELES	50.4	132	1990	5
SANTA CLARITA				
SAN FERNANDO RD, SANTA CLARITA (NEWHALL)	38.8	89	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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PHOENIX, AZ

This table provides summary information for Metropolitan Statistical Area 6200, PHOENIX, AZ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	39.5
Rank by PM-10 Concentration:	7 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.18
Adult Cardiopulmonary Attributable Deaths:	1,110 (667-1,507)
Attributable Deaths per 100,000 Population:	74
Rank by Number of Attributable Deaths:	11 of 239
Rank Attributable Death Rate:	10 of 239

Mortality (1989 data)

Total Mortality:	14,780
Adult Cardiopulmonary Deaths:	7,420
Auto Accident Deaths:	411

Population (1980 data)

Total Population:	1,508,000
-------------------	-----------

Counties Assigned to MSA

Maricopa Co, AZ

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AZ				
Maricopa Co				
CHANDLER				
1475 E PECOS RD, CHANDLER	50.4	<i>126</i>	1992	4
GLENDALE				
6000 W OLIVE, GLENDALE	36.0	85	1991	4
MESA				
BROADWAY & BROOKS, MESA	33.5	75	1993	3
PHOENIX				
1845 E ROOSEVELT, PHOENIX	43.7	87	1991	3
3847 W EARLL, PHOENIX	45.7	102	1992	5
4732 S CENTRAL, PHOENIX	44.5	158	1992	5
8521 N 6TH ST, PHOENIX	38.6	111	1991	5
SCOTTSDALE				
13665 N SCOTTSDALE RD, SCOTTSDALE	30.9	112	1991	4
24301 N ALMA SCH RD, SCOTTSDALE	19.7	34	1990	1
2857 N MILLER, SCOTTSDALE	35.9	69	1994	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SPOKANE, WA

This table provides summary information for Metropolitan Statistical Area 7840, SPOKANE, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	38.7
Rank by PM-10 Concentration:	8 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.17
Adult Cardiopulmonary Attributable Deaths:	220 (132-299)
Attributable Deaths per 100,000 Population:	64
Rank by Number of Attributable Deaths:	61 of 239
Rank Attributable Death Rate:	14 of 239

Mortality (1989 data)

Total Mortality:	2,925
Adult Cardiopulmonary Deaths:	1,516
Auto Accident Deaths:	57

Population (1980 data)

Total Population:	342,000
-------------------	---------

Counties Assigned to MSA

Spokane Co, WA

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WA				
Spokane Co				
CITY HALL/E 9103 FREDERICK, MILLWOOD	37.5	109	1990	4
COUNTRY HOMES/N 8217 WALL ST	31.4	251	1990	3
NAZARENE/NORTH 9004 COUNTRY HOMES BLVD	33.0	268	1993	2
SPOKANE				
AUTO GLASS/S 214 POST	36.9	148	1990	5
CROWN ZELLERBACH/E 3530 FERRY	44.3	321	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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RENO, NV

This table provides summary information for Metropolitan Statistical Area 6720, RENO, NV. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	38.5
Rank by PM-10 Concentration:	9 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.17
Adult Cardiopulmonary Attributable Deaths:	118 (71-161)
Attributable Deaths per 100,000 Population:	61
Rank by Number of Attributable Deaths:	110 of 239
Rank Attributable Death Rate:	20 of 239

Mortality (1989 data)

Total Mortality:	1,698
Adult Cardiopulmonary Deaths:	822
Auto Accident Deaths:	52

Population (1980 data)

Total Population:	194,000
-------------------	---------

Counties Assigned to MSA

Washoe Co, NV

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NV				
Washoe Co				
RENO				
250 N LAKE ST, RENO	41.9	<i>164</i>	1990	5
305 GALLETTI WAY RENO	53.3	<i>181</i>	1991	5
4110 DE LUCCI LANE, RENO	25.7	95	1990	5
SPARKS				
5399 SUN VALLEY DR, SPARKS	35.9	119	1990	5
750 4TH ST, SPARKS	37.1	136	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LAS VEGAS, NV

This table provides summary information for Metropolitan Statistical Area 4120, LAS VEGAS, NV. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	38.3
Rank by PM-10 Concentration:	10 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.17
Adult Cardiopulmonary Attributable Deaths:	350 (210-476)
Attributable Deaths per 100,000 Population:	76
Rank by Number of Attributable Deaths:	41 of 239
Rank Attributable Death Rate:	8 of 239

Mortality (1989 data)

Total Mortality:	5,038
Adult Cardiopulmonary Deaths:	2,444
Auto Accident Deaths:	154

Population (1980 data)

Total Population:	462,000
-------------------	---------

Counties Assigned to MSA

Clark Co, NV

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NV				
Clark Co				
EAST LAS VEGAS				
2001 WINTERWOOD BLVD, EAST LAS VEGAS	51.6	155	1990	5
HENDERSON				
BURKHOLDER JHS- PACIFIC AVE, HENDERSON	26.7	143	1991	5
LAS VEGAS				
280 E. BONANZA	33.3	96	1990	5
FRAIS & SCHUSTER, LAS VEGAS	21.1	89	1991	4
NORTH LAS VEGAS				
1301 E LAKE MEAD DR, NORTH LAS VEGAS	52.9	162	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ANAHEIM-SANTA ANA, CA

This table provides summary information for Metropolitan Statistical Area 0360, ANAHEIM-SANTA ANA, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	38.1
Rank by PM-10 Concentration:	11 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.17
Adult Cardiopulmonary Attributable Deaths:	1,053 (632-1,433)
Attributable Deaths per 100,000 Population:	55
Rank by Number of Attributable Deaths:	12 of 239
Rank Attributable Death Rate:	25 of 239

Mortality (1989 data)

Total Mortality:	14,064
Adult Cardiopulmonary Deaths:	7,429
Auto Accident Deaths:	369

Population (1980 data)

Total Population:	1,932,000
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Counties Assigned to MSA

Orange Co, CA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Orange Co				
ANAHEIM				
1610 S. HARBOR BLVD., ANAHEIM	42.0	116	1991	5
EL TORO				
23022 EL TORO RD., EL TORO	36.4	82	1990	5
NEWPORT BEACH				
2300 UNIVERSITY DRIVE, NEWPORT BEACH,	31.4	68	1992	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MEDFORD, OR

This table provides summary information for Metropolitan Statistical Area 4890, MEDFORD, OR. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	37.9
Rank by PM-10 Concentration:	12 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.16
Adult Cardiopulmonary Attributable Deaths:	96 (58-131)
Attributable Deaths per 100,000 Population:	73
Rank by Number of Attributable Deaths:	126 of 239
Rank Attributable Death Rate:	11 of 239

Mortality (1989 data)

Total Mortality:	1,385
Adult Cardiopulmonary Deaths:	684
Auto Accident Deaths:	40

Population (1980 data)

Total Population:	132,000
-------------------	---------

Counties Assigned to MSA

Jackson Co, OR

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
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OR

Jackson Co

MEDFORD

711 WELCH ST	33.0	113	1992	3
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MEDFORD CO

COURTHOUSE/MAIN & OAKDALE	36.0	119	1991	2
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WHITE CITY

POST OFFICE/751 CRATER LAKE HWY	41.6	166	1991	5
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Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ST. JOSEPH, MO

This table provides summary information for Metropolitan Statistical Area 7000, ST. JOSEPH, MO. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	37.6
Rank by PM-10 Concentration:	13 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.16
Adult Cardiopulmonary Attributable Deaths:	78 (47-106)
Attributable Deaths per 100,000 Population:	76
Rank by Number of Attributable Deaths:	137 of 239
Rank Attributable Death Rate:	8 of 239

Mortality (1989 data)

Total Mortality:	1,085
Adult Cardiopulmonary Deaths:	562
Auto Accident Deaths:	23

Population (1980 data)

Total Population:	102,000
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Counties Assigned to MSA

Andrew Co, MO
Buchanan Co, MO

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MO Buchanan Co ST JOSEPH SOUTH 759 HIGHWAY, PUMP STATION, ST.JOE	37.6	120	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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YUBA CITY, CA

This table provides summary information for Metropolitan Statistical Area 9340, YUBA CITY, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	37.4
Rank by PM-10 Concentration:	14 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.16
Adult Cardiopulmonary Attributable Deaths:	65 (39-89)
Attributable Deaths per 100,000 Population:	64
Rank by Number of Attributable Deaths:	148 of 239
Rank Attributable Death Rate:	14 of 239

Mortality (1989 data)

Total Mortality:	962
Adult Cardiopulmonary Deaths:	472
Auto Accident Deaths:	37

Population (1980 data)

Total Population:	102,000
-------------------	---------

Counties Assigned to MSA

Sutter Co, CA

Yuba Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA Yuba Co SMARTVILLE CDF, SMARTVILLE RD., SMARTVILLE	37.4	101	1991	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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STEUBENVILLE-WEIRTON, OH-WV

This table provides summary information for Metropolitan Statistical Area 8080, STEUBENVILLE-WEIRTON, OH-WV. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	36.6
Rank by PM-10 Concentration:	15 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.15
Adult Cardiopulmonary Attributable Deaths:	127 (76-173)
Attributable Deaths per 100,000 Population:	78
Rank by Number of Attributable Deaths:	99 of 239
Rank Attributable Death Rate:	7 of 239

Mortality (1989 data)

Total Mortality:	1,662
Adult Cardiopulmonary Deaths:	953
Auto Accident Deaths:	24

Population (1980 data)

Total Population:	163,000
-------------------	---------

Counties Assigned to MSA

Jefferson Co, OH
Brooke Co, WV

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Hancock Co, WV

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading	Number of Years of Data
OH				
Jefferson Co				
1004 THIRD ST.	33.3	<i>106</i>	1994	5
2ND. AVE., STRATTON	32.7	85	1993	5
MINGO JUNCTION				
MINGO CITY HALL 501 COMMERICAL ST	39.7	<i>130</i>	1991	5
STEUBENVILLE				
COUNTY SERVICES BUILDING 814 ADAMS STREE	36.8	94	1990	5
WV				
Brooke Co				
FOLLANSBEE				
MAHAN LANE FOLLANSBEE W VA	35.5	101	1990	4
Hancock Co				
WEIRTON				
OAK ST AND OWINGS ST-BETWEEN DEAD ENDS	40.1	<i>187</i>	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PROVO-OREM, UT

This table provides summary information for Metropolitan Statistical Area 6520, PROVO-OREM, UT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	36.5
Rank by PM-10 Concentration:	16 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.15
Adult Cardiopulmonary Attributable Deaths:	64 (38-87)
Attributable Deaths per 100,000 Population:	29
Rank by Number of Attributable Deaths:	150 of 239
Rank Attributable Death Rate:	132 of 239

Mortality (1989 data)

Total Mortality:	980
Adult Cardiopulmonary Deaths:	484
Auto Accident Deaths:	41

Population (1980 data)

Total Population:	218,000
-------------------	---------

Counties Assigned to MSA

Utah Co, UT

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
UT				
Utah Co				
LINDON				
30 NORTH MAIN STREET, LINDON, UTAH	40.5	238	1991	5
PROVO				
1355 NORTH 200 WEST PROVO UT	32.5	182	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CLEVELAND, OH

This table provides summary information for Metropolitan Statistical Area 1680, CLEVELAND, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	35.6
Rank by PM-10 Concentration:	17 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.15
Adult Cardiopulmonary Attributable Deaths:	1,161 (694-1,585)
Attributable Deaths per 100,000 Population:	61
Rank by Number of Attributable Deaths:	10 of 239
Rank Attributable Death Rate:	20 of 239

Mortality (1989 data)

Total Mortality:	17,809
Adult Cardiopulmonary Deaths:	9,099
Auto Accident Deaths:	216

Population (1980 data)

Total Population:	1,899,000
-------------------	-----------

Counties Assigned to MSA

Cuyahoga Co, OH

Geauga Co, OH

Lake Co, OH
 Medina Co, OH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OH				
Cuyahoga Co				
EAST 14TH AND ORANGE, CLEVELAND	43.4	<i>120</i>	1994	2
BROOK PARK				
16900 HOLLAND ROAD	24.8	60	1990	5
5111 WEST 164TH STREET	32.7	58	1990	1
5220 WEST 164TH, BROOK PARK	33.3	72	1991	4
CLEVELAND				
2200 W 28TH STREET	30.0	82	1994	5
2547 ST TIKHON ST	35.5	<i>111</i>	1994	4
2785 BROADWAY	50.2	<i>133</i>	1994	5
4150 EAST 49TH ST	49.5	<i>143</i>	1994	4
4950 BROADWAY AVE.	39.7	122	1990	5
E. 22ND & WOODLAND	38.4	107	1992	3
Lake Co				
FAIRPORT HARBOR				
IQ 325 VINE STREET, FAIRPORT HS	21.5	56	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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OMAHA, NE-IA

This table provides summary information for Metropolitan Statistical Area 5920, OMAHA, NE-IA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	35.5
Rank by PM-10 Concentration:	18 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.15
Adult Cardiopulmonary Attributable Deaths:	288 (172-393)
Attributable Deaths per 100,000 Population:	51
Rank by Number of Attributable Deaths:	50 of 239
Rank Attributable Death Rate:	34 of 239

Mortality (1989 data)

Total Mortality:	4,277
Adult Cardiopulmonary Deaths:	2,268
Auto Accident Deaths:	75

Population (1980 data)

Total Population:	570,000
-------------------	---------

Counties Assigned to MSA

Pottawattamie Co, IA
Douglas Co, NE

Sarpy Co, NE

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NE				
Douglas Co				
132ND & Q STREETS OMAHA, NEBRASKA	30.5	63	1993	2
46TH & FARNAM OMAHA, NE	35.4	74	1994	2
OMAHA				
2411 O ST.	30.1	86	1990	3
63RD & FREDRICK UTIL DIST BLDG	34.5	95	1990	3
7717 DODGE	40.6	109	1990	5
PUBLIC WORKS BLDG 11TH & NICHOLAS	36.4	<i>114</i>	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ATLANTA, GA

This table provides summary information for Metropolitan Statistical Area 0520, ATLANTA, GA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	35.1
Rank by PM-10 Concentration:	19 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.14
Adult Cardiopulmonary Attributable Deaths:	946 (565-1,292)
Attributable Deaths per 100,000 Population:	47
Rank by Number of Attributable Deaths:	14 of 239
Rank Attributable Death Rate:	44 of 239

Mortality (1989 data)

Total Mortality:	16,368
Adult Cardiopulmonary Deaths:	7,608
Auto Accident Deaths:	572

Population (1980 data)

Total Population:	2,030,000
-------------------	-----------

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- Butts Co, GA
- Cherokee Co, GA

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Clayton Co, GA
 Cobb Co, GA
 De Kalb Co, GA
 Douglas Co, GA
 Fayette Co, GA
 Forsyth Co, GA
 Fulton Co, GA
 Gwinnett Co, GA
 Henry Co, GA
 Newton Co, GA
 Paulding Co, GA
 Rockdale Co, GA
 Walton Co, GA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
GA				
De Kalb Co				
DORAVILLE				
DORAVILLE HEALTH CTR 3760 PARK ST	33.8	110	1990	5
Fulton Co				
FULTON CO HEALTH DEPT 99 BUTLER ST SE	32.5	77	1993	2
ATLANTA				
FIRE STA. 8 ,1711 MARIETTA BLVD	35.8	83	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CHATTANOOGA, TN-GA

This table provides summary information for Metropolitan Statistical Area 1560, CHATTANOOGA, TN-GA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	34.9
Rank by PM-10 Concentration:	20 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.14
Adult Cardiopulmonary Attributable Deaths:	270 (161-368)
Attributable Deaths per 100,000 Population:	63
Rank by Number of Attributable Deaths:	51 of 239
Rank Attributable Death Rate:	16 of 239

Mortality (1989 data)

Total Mortality:	4,056
Adult Cardiopulmonary Deaths:	2,190
Auto Accident Deaths:	103

Population (1980 data)

Total Population:	427,000
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Counties Assigned to MSA

Catoosa Co, GA
Dade Co, GA

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Walker Co, GA
 Hamilton Co, TN
 Marion Co, TN
 Sequatchie Co, TN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TN				
Hamilton Co				
CHATTANOOGA				
33RD AND BROAD ST	35.4	83	1991	5
3511 ROSSVILLE BLVD CHCAPCB	34.3	76	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PATERSON-CLIFTON-PASSIAC, NJ

This table provides summary information for Metropolitan Statistical Area 6040, PATERSON-CLIFTON-PASSIAC, NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	34.8
Rank by PM-10 Concentration:	21 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.14
Adult Cardiopulmonary Attributable Deaths:	251 (150-343)
Attributable Deaths per 100,000 Population:	56
Rank by Number of Attributable Deaths:	56 of 239
Rank Attributable Death Rate:	23 of 239

Mortality (1989 data)

Total Mortality:	4,190
Adult Cardiopulmonary Deaths:	2,041
Auto Accident Deaths:	45

Population (1980 data)

Total Population:	448,000
-------------------	---------

Counties Assigned to MSA

Passaic Co, NJ

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NJ Passaic Co CLIFTON NJ ROUTE 3, 340 KINGSLAND RD	34.8	101	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SAN DIEGO, CA

This table provides summary information for Metropolitan Statistical Area 7320, SAN DIEGO, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	34.8
Rank by PM-10 Concentration:	22 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.14
Adult Cardiopulmonary Attributable Deaths:	999 (597-1,365)
Attributable Deaths per 100,000 Population:	54
Rank by Number of Attributable Deaths:	13 of 239
Rank Attributable Death Rate:	28 of 239

Mortality (1989 data)

Total Mortality:	16,060
Adult Cardiopulmonary Deaths:	8,147
Auto Accident Deaths:	412

Population (1980 data)

Total Population:	1,862,000
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Counties Assigned to MSA

San Diego Co, CA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
San Diego Co				
1100 PASEO INTERNATIONAL, OTAY MESA, CA	48.4	<i>125</i>	1993	2
330A 12TH AVE., SAN DIEGO, CA. 92112	33.7	67	1993	2
5555 OVERLAND AVE., SAN DIEGO	29.5	70	1993	2
600 E. VALLEY PKWY., ESCONDIDO	33.5	75	1993	2
CHULA VISTA				
80 E. "J" ST., CHULA VISTA	30.0	72	1991	5
EL CAJON				
1155 REDWOOD AVE., EL CAJON	36.8	73	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BOISE CITY, ID

This table provides summary information for Metropolitan Statistical Area 1080, BOISE CITY, ID. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	34.0
Rank by PM-10 Concentration:	23 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	73 (44-100)
Attributable Deaths per 100,000 Population:	42
Rank by Number of Attributable Deaths:	139 of 239
Rank Attributable Death Rate:	58 of 239

Mortality (1989 data)

Total Mortality:	1,251
Adult Cardiopulmonary Deaths:	618
Auto Accident Deaths:	32

Population (1980 data)

Total Population:	173,000
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Counties Assigned to MSA

Ada Co, ID

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
ID				
Ada Co				
BOISE CITY				
1740 E BERGESON	30.0	54	1992	1
FIRE STATION #5/16TH & FRONT	39.0	<i>151</i>	1991	5
FIRE STATION - FAIRVIEW @ LIBERTY	34.0	84	1991	5
MTN VIEW SCHOOL/3500 CARBARTON LANE	30.9	152	1991	4
MERIDIAN				
1516 1ST ST BCDC ST LUKES	31.1	82	1994	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CHICAGO, IL

This table provides summary information for Metropolitan Statistical Area 1600, CHICAGO, IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.7
Rank by PM-10 Concentration:	24 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	3,479 (2,075-4,759)
Attributable Deaths per 100,000 Population:	49
Rank by Number of Attributable Deaths:	3 of 239
Rank Attributable Death Rate:	37 of 239

Mortality (1989 data)

Total Mortality:	58,666
Adult Cardiopulmonary Deaths:	29,873
Auto Accident Deaths:	1,073

Population (1980 data)

Total Population:	7,102,000
-------------------	-----------

Counties Assigned to MSA

Cook Co, IL
Du Page Co, IL

Kane Co, IL
 Lake Co, IL
 McHenry Co, IL
 Will Co, IL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IL				
Cook Co				
MARSH SCHOOL, 9810 S. EXCHANGE	34.1	77	1993	2
BLUE ISLAND				
EISENHOWER HI SCH 12700 SACRAMENTO AVE	33.3	96	1990	5
CHICAGO				
13100 S DOTY	34.7	84	1994	5
3535 E. 114TH ST.	35.0	143	1990	5
CHICAGO AVE. PUMP. STA., 805 N. MICHIGAN	35.3	93	1990	5
FARR DORMITORY 3300 S MICHIGAN AVE	33.6	103	1990	5
MAYFAIR PUMP STA., 4850 WILSON AVE.	42.3	134	1993	5
ST. FRANCIS SCH., 10155 S. EWING ST.	43.3	149	1990	3
CICERO				
ROOSEVELT H.S., 15TH ST. & 50TH AVE.	35.8	86	1990	5
LYONS				
4043 JOLIET AVE.	32.6	134	1990	5
MCCOOK				
50TH ST. AND GLENCOE	44.4	147	1993	4
SOUTH HOLLAND				
170TH ST. & S. PARK AVE.	30.8	94	1994	5
SUMMIT				
GRAVES ELEM. SCHOOL 60TH ST. & 74TH AVE.	37.4	118	1994	5
Du Page Co				
BENSENVILLE				

711 E. JEFFERSON	22.8	60	1993	4
NAPERVILLE				
CITY HALL, 400 S. EAGLE ST.	23.0	51	1992	3
FIRE STATION 175 JACKSON ST	26.3	96	1990	2
Will Co				
ROUTE 6 & YOUNG RD., WATER PLANT WEST	20.1	40	1994	1
JOLIET				
PERSHING SCHOOL MIDLAND & CAMPBELL STS	28.0	89	1990	5
ROCKDALE				
MIDLAND & OTIS, ROCKDALE	32.0	<i>122</i>	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ROANOKE, VA

This table provides summary information for Metropolitan Statistical Area 6800, ROANOKE, VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.7
Rank by PM-10 Concentration:	25 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	141 (84-193)
Attributable Deaths per 100,000 Population:	63
Rank by Number of Attributable Deaths:	95 of 239
Rank Attributable Death Rate:	16 of 239

Mortality (1989 data)

Total Mortality:	2,313
Adult Cardiopulmonary Deaths:	1,213
Auto Accident Deaths:	26

Population (1980 data)

Total Population:	225,000
-------------------	---------

Counties Assigned to MSA

Botetourt Co, VA
Craig Co, VA

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Roanoke, VA
 Roanoke Co, VA
 Salem, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
VA				
Roanoke				
ROANOKE				
101 CHERRY HILL CIRCLE	37.0	83	1994	4
ROANOKE MUNICIPAL BLDG. CHURCH AVE & 3RD	31.4	67	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PHILADELPHIA, PA-NJ

This table provides summary information for Metropolitan Statistical Area 6160, PHILADELPHIA, PA-NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.5
Rank by PM-10 Concentration:	26 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	2,599 (1,550-3,556)
Attributable Deaths per 100,000 Population:	55
Rank by Number of Attributable Deaths:	4 of 239
Rank Attributable Death Rate:	25 of 239

Mortality (1989 data)

Total Mortality:	46,417
Adult Cardiopulmonary Deaths:	22,531
Auto Accident Deaths:	637

Population (1980 data)

Total Population:	4,717,000
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Counties Assigned to MSA

Burlington Co, NJ
Camden Co, NJ

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Gloucester Co, NJ
 Bucks Co, PA
 Chester Co, PA
 Delaware Co, PA
 Montgomery Co, PA
 Philadelphia Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NJ				
Camden Co				
PENNSAUKEN TWP; MORRIS-DELAIR WTP	32.1	83	1991	5
CAMDEN				
COPEWOOD E. DAVIS STS; TRAILER	27.6	63	1994	5
LIBRARY, RUTGERS UNIV., NORTH FOURTH ST.	28.8	71	1994	3
Gloucester Co				
WESTVILLE				
HIGH AND DUNCAN STREETS	22.9	59	1991	5
PA				
Bucks Co				
BRISTOL (BOROUGH)				
ROCKVIEW LANE	25.7	71	1993	4
Chester Co				
MODENA RD & PENN AVENUE	32.0	91	1991	4
Delaware Co				
CHESTER				
FRONT ST & NORRIS ST	26.0	60	1993	4
Montgomery Co				
NORRISTOWN				
STATE ARMORY - 1046 BELVOIR RD	25.3	75	1994	5
Philadelphia Co				
CASTOR AND DELAWARE AVENUES	55.0	146	1994	2

RICHMOND ST. AND WHEATSHEAF LANE	47.2	99	1994	2
PHILADELPHIA				
13TH STREET AND MONTGOMERY AVENUE	34.2	77	1994	5
1501 E LYCOMING AVE AMS LAB	31.8	83	1994	5
4415 ALMOND (NEAR ORTHODOX STREET)	36.8	93	1991	5
500 SOUTH BROAD STREET - PARKING LOT(CHS	37.8	83	1990	5
CASTOR AND CARBON STS ON PGW PROPERTY	91.6	<i>371</i>	1994	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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DETROIT, MI

This table provides summary information for Metropolitan Statistical Area 2160, DETROIT, MI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.2
Rank by PM-10 Concentration:	27 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	2,123 (1,265-2,906)
Attributable Deaths per 100,000 Population:	49
Rank by Number of Attributable Deaths:	5 of 239
Rank Attributable Death Rate:	37 of 239

Mortality (1989 data)

Total Mortality:	35,973
Adult Cardiopulmonary Deaths:	18,695
Auto Accident Deaths:	626

Population (1980 data)

Total Population:	4,353,000
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Counties Assigned to MSA

Lapeer Co, MI
Livingston Co, MI

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Macomb Co, MI
 Oakland Co, MI
 St. Clair Co, MI
 Wayne Co, MI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MI				
Wayne Co				
ALLEN PARK				
14700 GODDARD	30.1	91	1993	5
DEARBORN				
2842 WYOMING	42.5	129	1994	4
DETROIT				
6921 WEST FORT	39.2	107	1994	5
NAT'L CHEMICAL SERVICES 312 WEST END	30.1	66	1994	5
LIVONIA				
36600 SCHOOLCRAFT	25.0	53	1990	2
38707 SEVEN MILE ROAD	24.4	52	1994	2
RIVER ROUGE				
315 GENESEE	33.7	93	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SALT LAKE CITY-OGDEN, UT

This table provides summary information for Metropolitan Statistical Area 7160, SALT LAKE CITY-OGDEN, UT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.2
Rank by PM-10 Concentration:	28 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	295 (176-404)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	49 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	5,534
Adult Cardiopulmonary Deaths:	2,606
Auto Accident Deaths:	168

Population (1980 data)

Total Population:	936,000
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Counties Assigned to MSA

Davis Co, UT
Salt Lake Co, UT

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Tooele Co, UT

Weber Co, UT

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
UT				
Davis Co				
BOUNTIFUL				
65W 300S BOUNTIFUL UTAH	28.7	114	1991	5
Salt Lake Co				
12100 W 1200 S, LAKEPOINT, UTAH	25.3	81	1994	2
12100 W 1282 S, LAKEPOINT, UTAH	32.3	115	1992	1
5715 S. 1400 E., SALT LAKE CITY	33.4	141	1992	3
MAGNA				
2935 SOUTH 8560 WEST MAGNA,UTAH	27.2	<i>134</i>	1991	4
SALT LAKE CITY				
1795 NORTH 1000 WEST SALT LAKE CITY UT	50.5	175	1991	4
500 SOUTH 261 WEST SALT LAKE CITY	42.0	<i>221</i>	1991	5
HEALTH DEPT BLDG 610 SOUTH 2ND EAST	35.0	171	1991	5
Tooele Co				
90 S PARK ST., GRANTSVILLE, UTAH	25.9	98	1994	2
Weber Co				
4601 S. 300 W., WASHINGTON TERRACE, UTAH	22.4	53	1994	1
OGDEN				
HEALTH DEPT BLDG, 2570 GRANT AVE	32.2	<i>179</i>	1992	5
ROY				
5320 S. 2100 W., ROY UTAH	24.2	85	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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YAKIMA, WA

This table provides summary information for Metropolitan Statistical Area 9260, YAKIMA, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.1
Rank by PM-10 Concentration:	29 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	94 (56-129)
Attributable Deaths per 100,000 Population:	54
Rank by Number of Attributable Deaths:	127 of 239
Rank Attributable Death Rate:	28 of 239

Mortality (1989 data)

Total Mortality:	1,575
Adult Cardiopulmonary Deaths:	833
Auto Accident Deaths:	56

Population (1980 data)

Total Population:	173,000
-------------------	---------

Counties Assigned to MSA

Yakima Co, WA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
WA				
Yakima Co				
SUNNYSIDE				
SUNNYSIDE SCHOOL/16TH ST & FACTORY RD	34.8	87	1993	3
YAKIMA				
YVCC- SUNDQUIST/KNOB HILL & 16TH	32.2	167	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CHICO, CA

This table provides summary information for Metropolitan Statistical Area 1620, CHICO, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.1
Rank by PM-10 Concentration:	30 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	104 (62-143)
Attributable Deaths per 100,000 Population:	72
Rank by Number of Attributable Deaths:	116 of 239
Rank Attributable Death Rate:	12 of 239

Mortality (1989 data)

Total Mortality:	1,785
Adult Cardiopulmonary Deaths:	924
Auto Accident Deaths:	59

Population (1980 data)

Total Population:	144,000
-------------------	---------

Counties Assigned to MSA

Butte Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Butte Co				
468 MANZANITA AVE, CHICO	30.3	81	1994	2
CHICO				
101 SALEM ST, CHICO	35.0	95	1991	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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DECATUR, IL

This table provides summary information for Metropolitan Statistical Area 2040, DECATUR, IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.0
Rank by PM-10 Concentration:	31 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	72 (43-99)
Attributable Deaths per 100,000 Population:	55
Rank by Number of Attributable Deaths:	142 of 239
Rank Attributable Death Rate:	25 of 239

Mortality (1989 data)

Total Mortality:	1,149
Adult Cardiopulmonary Deaths:	642
Auto Accident Deaths:	27

Population (1980 data)

Total Population:	131,000
-------------------	---------

Counties Assigned to MSA

Macon Co, IL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
--	---	---	------------------------------------	--------------------

IL

Macon Co

DECATUR

GRANT ELEM. SCH.,
2300 GEDDES

33.0

101

1990

5

Notes

*Annual Mean
PM-10 Concentration*

*24-Hour
PM-10 Concentration*

*National Ambient Air
Quality Standards:*

50

150

*California Ambient Air
Quality Standards:*

30

50

*NRDC Recommended
Standards:*

17

33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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WATERLOO-CEDAR FALLS, IA

This table provides summary information for Metropolitan Statistical Area 8920, WATERLOO-CEDAR FALLS, IA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	33.0
Rank by PM-10 Concentration:	32 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	61 (37-84)
Attributable Deaths per 100,000 Population:	44
Rank by Number of Attributable Deaths:	153 of 239
Rank Attributable Death Rate:	53 of 239

Mortality (1989 data)

Total Mortality:	1,036
Adult Cardiopulmonary Deaths:	548
Auto Accident Deaths:	16

Population (1980 data)

Total Population:	138,000
-------------------	---------

Counties Assigned to MSA

Black Hawk Co, IA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
--	---	---	------------------------------------	--------------------

IA

**Black Hawk Co
WATERLOO**

GROUT MUSEUM, W. PARK ST. & SOUTH ST.	33.0	73	1991	2
--	------	----	------	---

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SAN JOSE, CA

This table provides summary information for Metropolitan Statistical Area 7400, SAN JOSE, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	32.8
Rank by PM-10 Concentration:	33 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.13
Adult Cardiopulmonary Attributable Deaths:	447 (266-612)
Attributable Deaths per 100,000 Population:	35
Rank by Number of Attributable Deaths:	34 of 239
Rank Attributable Death Rate:	96 of 239

Mortality (1989 data)

Total Mortality:	8,023
Adult Cardiopulmonary Deaths:	4,015
Auto Accident Deaths:	179

Population (1980 data)

Total Population:	1,295,000
-------------------	-----------

Counties Assigned to MSA

Santa Clara Co, CA

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA				
Santa Clara Co				
SAN JOSE				
120B N 4TH ST, SAN JOSE	33.2	138	1990	3
1866 W SAN CARLOS ST, SAN JOSE	35.1	105	1990	4
528 TULLY RD., SAN JOSE, CA. 95111	33.8	124	1990	4
HLTH CTR-2220 MOORPARK AVE, SAN JOSE	30.4	108	1991	4

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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KNOXVILLE, TN

This table provides summary information for Metropolitan Statistical Area 3840, KNOXVILLE, TN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	32.6
Rank by PM-10 Concentration:	34 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	214 (127-293)
Attributable Deaths per 100,000 Population:	45
Rank by Number of Attributable Deaths:	63 of 239
Rank Attributable Death Rate:	48 of 239

Mortality (1989 data)

Total Mortality:	3,858
Adult Cardiopulmonary Deaths:	1,950
Auto Accident Deaths:	88

Population (1980 data)

Total Population:	477,000
-------------------	---------

Counties Assigned to MSA

Anderson Co, TN
Blount Co, TN

Knox Co, TN

Union Co, TN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TN				
Blount Co				
MARYVILLE				
FIELD BETWEEN FIRE HALL#2 AND SEVIER SCH	24.9	64	1990	5
Knox Co				
KNOXVILLE				
1919 VERMONT AVENUE	38.9	80	1993	5
3323 DIVISION STREET NEAR LIBERTY ST.	34.5	72	1991	5
800 TOWNVIEW PLACE/GREEN ELEMENTARY SCH.	31.9	63	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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NASHVILLE-DAVIDSON, TN

This table provides summary information for Metropolitan Statistical Area 5360, NASHVILLE-DAVIDSON, TN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	32.4
Rank by PM-10 Concentration:	35 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	419 (249-574)
Attributable Deaths per 100,000 Population:	49
Rank by Number of Attributable Deaths:	35 of 239
Rank Attributable Death Rate:	37 of 239

Mortality (1989 data)

Total Mortality:	7,595
Adult Cardiopulmonary Deaths:	3,852
Auto Accident Deaths:	191

Population (1980 data)

Total Population:	851,000
-------------------	---------

Counties Assigned to MSA

Cheatham Co, TN
Davidson Co, TN

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Dickson Co, TN
 Robertson Co, TN
 Rutherford Co, TN
 Sumner Co, TN
 Williamson Co, TN
 Wilson Co, TN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
TN				
Davidson Co				
NASHVILLE-DAVIDSON				
1015 TRINITY LANE	30.2	67	1990	5
105 SOUTH 17TH ST @ LOCKELAND SCHOOL	29.3	71	1990	5
56TH AVE AND LOUISIANA ST	36.6	81	1990	5
8TH AVE N ON ROOF OF HOUSING AUTH BLDG	32.5	136	1993	5
LESTER & HART STS	34.4	75	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ATLANTIC CITY, NJ

This table provides summary information for Metropolitan Statistical Area 0560, ATLANTIC CITY, NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	32.4
Rank by PM-10 Concentration:	36 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	120 (72-165)
Attributable Deaths per 100,000 Population:	62
Rank by Number of Attributable Deaths:	108 of 239
Rank Attributable Death Rate:	18 of 239

Mortality (1989 data)

Total Mortality:	2,242
Adult Cardiopulmonary Deaths:	1,106
Auto Accident Deaths:	44

Population (1980 data)

Total Population:	194,000
-------------------	---------

Counties Assigned to MSA

Atlantic Co, NJ

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NJ				
Atlantic Co				
ATLANTIC CITY				
CORNER NORTH MISSOURI AND BALTIC AVENUES	32.4	71	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LAREDO, TX

This table provides summary information for Metropolitan Statistical Area 4080, LAREDO, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	32.4
Rank by PM-10 Concentration:	37 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	32 (19-44)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	200 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	659
Adult Cardiopulmonary Deaths:	296
Auto Accident Deaths:	20

Population (1980 data)

Total Population:	99,000
-------------------	--------

Counties Assigned to MSA

Webb Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX				
Webb Co				
LAREDO				
LAREDO JUNIOR COLLEGE	32.4	73	1994	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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HOUSTON, TX

This table provides summary information for Metropolitan Statistical Area 3360, HOUSTON, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.9
Rank by PM-10 Concentration:	38 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	939 (558-1,287)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	15 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	19,398
Adult Cardiopulmonary Deaths:	8,864
Auto Accident Deaths:	716

Population (1980 data)

Total Population:	2,905,000
-------------------	-----------

Counties Assigned to MSA

Brazoria Co, TX
Fort Bend Co, TX

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Harris Co, TX
 Liberty Co, TX
 Montgomery Co, TX
 Waller Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
TX				
Harris Co				
115 N. MACGREGOR ST., CITY HEALTH DEPT.	28.8	53	1994	1
HAMBRICK JR HIGH 4510 ALDINE MAIL RD	28.1	85	1993	2
HOUSTON				
1307 CRAWFORD AT POLK	29.1	77	1992	5
4420 BINGLE	25.7	55	1992	5
702 KRESS	34.2	68	1991	4
9525 CLINTON DR	42.8	108	1991	5
HARRIS ELEM SCH 1262 MAE DRIVE	29.5	56	1991	2
PASADENA				
208 W. SHAW	30.0	78	1992	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

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SACRAMENTO, CA

This table provides summary information for Metropolitan Statistical Area 6920, SACRAMENTO, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.9
Rank by PM-10 Concentration:	39 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	488 (290-669)
Attributable Deaths per 100,000 Population:	48
Rank by Number of Attributable Deaths:	30 of 239
Rank Attributable Death Rate:	41 of 239

Mortality (1989 data)

Total Mortality:	9,301
Adult Cardiopulmonary Deaths:	4,625
Auto Accident Deaths:	260

Population (1980 data)

Total Population:	1,014,000
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Counties Assigned to MSA

Placer Co, CA
Sacramento Co, CA

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Yolo Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading	Number of Years of Data
CA				
Placer Co				
151 NO SUNRISE BLVD, ROSEVILLE, CA	24.3	65	1994	2
AUBURN				
DEWITT-108 "C" AVE, AUBURN	22.8	50	1990	4
COLFAX				
CITY HALL-33 S MAIN ST, COLFAX	22.0	44	1992	3
LINCOLN				
204 'L' ST., LINCOLN, CA. 95648	30.2	84	1990	4
ROCKLIN				
SIERRA COLLEGE, ROCKLIN	26.1	51	1990	1
Sacramento Co				
CITRUS HEIGHTS				
7400 SUNRISE BLVD., CITRUS HEIGHTS	34.5	116	1990	4
SACRAMENTO				
1309 T ST., SACRAMENTO, CA. 95814	33.0	130	1991	4
DEL PASO-2701 AVALON DR, SACRAMENTO	30.6	135	1990	4
HLTH CTR-2221 STOCKTON BLVD, SACRAMENTO	31.9	143	1990	5
Yolo Co				
40 SUTTER STREET, WOODLAND, CA 95695	34.7	84	1992	3
WEST SACRAMENTO				
132 15TH ST., WEST SACRAMENTO	35.0	121	1991	4
WOODLAND				
117 W MAIN ST, WOODLAND	43.5	101	1991	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ST. LOUIS, MO-IL

This table provides summary information for Metropolitan Statistical Area 7040, ST. LOUIS, MO-IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.8
Rank by PM-10 Concentration:	40 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	1,195 (711-1,639)
Attributable Deaths per 100,000 Population:	51
Rank by Number of Attributable Deaths:	9 of 239
Rank Attributable Death Rate:	34 of 239

Mortality (1989 data)

Total Mortality:	21,638
Adult Cardiopulmonary Deaths:	11,368
Auto Accident Deaths:	386

Population (1980 data)

Total Population:	2,355,000
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Counties Assigned to MSA

Clinton Co, IL

Madison Co, IL

Monroe Co, IL
 St. Clair Co, IL
 Franklin Co, MO
 Jefferson Co, MO
 St. Charles Co, MO
 St. Louis, MO
 St. Louis Co, MO

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IL				
Madison Co				
VFW BUILDING, 2044 WASHINGTON AVE	41.3	<i>107</i>	1994	2
ALTON				
409 MAIN ST., CLARA BARTON SCHOOL	32.6	94	1990	5
GRANITE CITY				
15TH & MADISON	47.2	103	1991	5
2001 E 20TH ST	82.3	164	1990	1
23RD & MADISON	38.3	96	1990	5
2420 NAMEOKI RD, PLAZA FURNITURE	35.9	90	1994	5
SOUTH ROXANNA				
211 SINCLAIR, CITY HALL	35.0	85	1992	5
WOOD RIVER				
54 N. WALCOTT	33.2	96	1990	5
St. Clair Co				
EAST ST LOUIS				
13TH & TUDOR RAPS SITE	36.9	84	1991	5
MO				
Jefferson Co				
DUNKLIN HIGH SCHOOL, HERCULANEUM	23.7	70	1993	5
St. Charles Co				
GENERAL ELECTRIC STORE HIWAY 94 W ALTON	23.3	78	1990	4

St. Louis**ST LOUIS**

14TH & MARKET	29.3	79	1990	5
8227 SOUTH BROADWAY	27.6	74	1990	5
CHAIN OF ROCKS WATER DEPARTMENT	25.6	75	1990	5
NEWSTEAD & COTEBRILLIANT	25.5	67	1990	5

St. Louis Co**CLAYTON**

77 HUNTER AVE	25.4	64	1990	5
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FERGUSON

3400 PERSHALL ROAD	19.0	55	1992	5
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Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LAS CRUCES, NM

This table provides summary information for Metropolitan Statistical Area 4100, LAS CRUCES, NM. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.7
Rank by PM-10 Concentration:	41 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	31 (19-43)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	201 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	673
Adult Cardiopulmonary Deaths:	299
Auto Accident Deaths:	35

Population (1980 data)

Total Population:	96,000
-------------------	--------

Counties Assigned to MSA

Dona Ana Co, NM

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NM				
Dona Ana Co				
SUNLAND PARK CITY YARD	32.7	109	1992	4
ANTHONY				
SE CORNER OF ANTHONY ELEM. SCHOOL YARD	40.0	<i>130</i>	1990	5
LAS CRUCES				
1001 NORTH SOLANO	22.8	53	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GADSDEN, AL

This table provides summary information for Metropolitan Statistical Area 2880, GADSDEN, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.7
Rank by PM-10 Concentration:	42 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.12
Adult Cardiopulmonary Attributable Deaths:	73 (43-100)
Attributable Deaths per 100,000 Population:	71
Rank by Number of Attributable Deaths:	139 of 239
Rank Attributable Death Rate:	13 of 239

Mortality (1989 data)

Total Mortality:	1,169
Adult Cardiopulmonary Deaths:	694
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	103,000
-------------------	---------

Counties Assigned to MSA

Etowah Co, AL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
--	---	---	------------------------------------	-------------------------------

AL

Etowah Co

GADSDEN

3200 WALNUT ST

31.7

84

1993

5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
--	--	--

*National Ambient Air
Quality Standards:*

50

150

*California Ambient Air
Quality Standards:*

30

50

*NRDC Recommended
Standards:*

17

33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MOBILE, AL

This table provides summary information for Metropolitan Statistical Area 5160, MOBILE, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.4
Rank by PM-10 Concentration:	43 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	202 (120-278)
Attributable Deaths per 100,000 Population:	46
Rank by Number of Attributable Deaths:	69 of 239
Rank Attributable Death Rate:	47 of 239

Mortality (1989 data)

Total Mortality:	4,101
Adult Cardiopulmonary Deaths:	1,967
Auto Accident Deaths:	106

Population (1980 data)

Total Population:	443,000
-------------------	---------

Counties Assigned to MSA

- Baldwin Co, AL
- Mobile Co, AL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AL				
Mobile Co				
CHICKASAW				
IROQUOIS AT AZALEA, CHICKASAW, MOBILE CY	27.8	61	1993	4
MOBILE				
248 COX STREET, MOBILE , AL.	26.7	63	1993	3
406 JOACHIM STREET, MYRICK	29.6	72	1992	5
WKRG XMITTING STN, TELEGRAPH RD.	35.2	86	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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NEWARK, NJ

This table provides summary information for Metropolitan Statistical Area 5640, NEWARK, NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.4
Rank by PM-10 Concentration:	44 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	819 (487-1,124)
Attributable Deaths per 100,000 Population:	42
Rank by Number of Attributable Deaths:	18 of 239
Rank Attributable Death Rate:	58 of 239

Mortality (1989 data)

Total Mortality:	17,451
Adult Cardiopulmonary Deaths:	7,975
Auto Accident Deaths:	240

Population (1980 data)

Total Population:	1,965,000
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Counties Assigned to MSA

Essex Co, NJ
Morris Co, NJ

Sussex Co, NJ

Union Co, NJ

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NJ				
Essex Co				
SE CORNER BROAD & MARKET, NEWARK	39.8	80	1994	2
NEWARK				
165 MARKET STREET, NEWARK	32.9	94	1990	4
ST. CHARLES BETWEEN KOSSUTH & KAMERON ST	34.1	<i>107</i>	1994	4
Union Co				
ELIZABETH				
MITCHELL BUILDING,600 NORTH BROAD STREET	27.9	72	1990	5
NEW JERSEY TURNPIKE INTERCHANGE 13	32.0	96	1994	5
LINDEN				
LINDEN ROSELLE SA,5001 SOUTH WOOD STREET	27.4	81	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PROVIDENCE-WARWICK-PAWTUCKET, RI

This table provides summary information for Metropolitan Statistical Area 6483, PROVIDENCE-WARWICK-PAWTUCKET, RI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.4
Rank by PM-10 Concentration:	45 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	448 (267-615)
Attributable Deaths per 100,000 Population:	52
Rank by Number of Attributable Deaths:	33 of 239
Rank Attributable Death Rate:	32 of 239

Mortality (1989 data)

Total Mortality:	8,581
Adult Cardiopulmonary Deaths:	4,367
Auto Accident Deaths:	109

Population (1980 data)

Total Population:	866,000
-------------------	---------

Counties Assigned to MSA

Bristol Co, RI

Kent Co, RI

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Providence Co, RI

Washington Co, RI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
RI				
Providence Co				
111 FOUNTAIN ST	28.6	60	1994	1
EAST PROV FIRE STATION NORTH BROADWAY	27.7	61	1994	1
PAWTUCKET				
SUMMIT STREET SAMPLING SITE.	28.4	85	1991	5
PROVIDENCE				
ALLENS AVE, PROVIDENCE	35.3	78	1990	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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HUNTINGTON-ASHLAND, WV-KY-OH

This table provides summary information for Metropolitan Statistical Area 3400, HUNTINGTON-ASHLAND, WV-KY-OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.4
Rank by PM-10 Concentration:	46 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	166 (99-228)
Attributable Deaths per 100,000 Population:	53
Rank by Number of Attributable Deaths:	84 of 239
Rank Attributable Death Rate:	31 of 239

Mortality (1989 data)

Total Mortality:	2,993
Adult Cardiopulmonary Deaths:	1,617
Auto Accident Deaths:	52

Population (1980 data)

Total Population:	311,000
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Counties Assigned to MSA

Boyd Co, KY
Greenup Co, KY

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Lawrence Co, OH
 Cabell Co, WV
 Wayne Co, WV

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
KY				
Boyd Co				
ASHLAND				
ASHLAND OIL & REFINING CO	35.6	73	1994	5
ECONOMIC SECURITY BLDG 19TH & CARTER	29.8	109	1994	4
CATLETTSBURG				
COUNTY COURT HOUSE	31.2	81	1990	5
OH				
Lawrence Co				
COAL GROVE				
MARION PIKE COAL GROVE OH.	30.3	64	1990	5
IRONTON				
2128 S. 9TH ST., IRONTON	29.3	63	1990	5
WV				
Wayne Co				
KENOVA				
CENTENNIAL DRIVE KENOVA WVA	30.7	51	1991	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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HAMILTON-MIDDLETOWN, OH

This table provides summary information for Metropolitan Statistical Area 3200, HAMILTON-MIDDLETOWN, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.3
Rank by PM-10 Concentration:	47 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	116 (69-160)
Attributable Deaths per 100,000 Population:	45
Rank by Number of Attributable Deaths:	112 of 239
Rank Attributable Death Rate:	48 of 239

Mortality (1989 data)

Total Mortality:	2,139
Adult Cardiopulmonary Deaths:	1,137
Auto Accident Deaths:	51

Population (1980 data)

Total Population:	259,000
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Counties Assigned to MSA

Butler Co, OH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OH				
Butler Co				
MIDDLETOWN				
1830 YANKEE RD., MIDDLETOWN, OHIO 45044	29.6	70	1993	3
2901 YANKEE RD., MIDDLETOWN, OHIO 45044	35.4	84	1991	4
3901 LEFFERSON, MIDDLETOWN	32.0	87	1991	4
BONITA & ST JOHN	27.6	76	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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PITTSBURGH, PA

This table provides summary information for Metropolitan Statistical Area 6280, PITTSBURGH, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.0
Rank by PM-10 Concentration:	48 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	1,216 (723-1,670)
Attributable Deaths per 100,000 Population:	54
Rank by Number of Attributable Deaths:	8 of 239
Rank Attributable Death Rate:	28 of 239

Mortality (1989 data)

Total Mortality:	23,089
Adult Cardiopulmonary Deaths:	12,083
Auto Accident Deaths:	241

Population (1980 data)

Total Population:	2,264,000
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Counties Assigned to MSA

Allegheny Co, PA
Beaver Co, PA

Washington Co, PA
 Westmoreland Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
PA				
Allegheny Co				
1000 BEAVER GRADE RD CORAOPOLIS PA	26.7	68	1991	5
30 SPRUCE ST NATRONA BEAVER ROAD LEETSDALE	35.3	83	1993	4
BOX 258 PINE STREET, BUNOLA, PA 15020	25.5	64	1993	5
BOX 76 RD #4, LINCOLN BORO, PA 15037	26.3	71	1993	2
MANCHESTER ELEM SCHOOL MANCHESTER PA	33.0	86	1993	2
OLD OAKDALE ROAD SOUTH FAYETTE	29.7	74	1991	3
PEARCE MILL ROAD NORTH PARK	25.1	74	1992	5
SYCAMORE ST, NATRONA	24.2	59	1991	3
	44.6	75	1990	1
AVALON				
520 ORCHARD ST PGH., PA 15202	35.3	84	1991	4
BRACKENRIDGE				
BRACKENRIDGE WATER WORKS	16.9	31	1990	1
BRADDOCK				
ST THOMAS SCHOOL 1025 BRADDOCK AVE	38.9	111	1990	5
CLAIRTON				
575 COAL VALLEY ROAD, CLAIRTON	27.1	68	1991	2
773 MILLER AVENUE CLAIRTON PA 15025	28.0	66	1991	3
CLAIRTON ED CTR 501 WADDEL CLAIRTON PA	28.7	91	1994	3

GREENWAY ALLEY, CLAIRTON	33.5	<i>113</i>	1992	4
DUQUESNE				
S. THIRD STREET, DUQUESNE	32.4	83	1990	2
GLASSPORT				
HIGH STREET WATER TOWER, GLASSPORT, PA	36.0	<i>124</i>	1993	4
LIBERTY				
2743 WASHINGTON BLVD (MCKEESPORT)	37.2	<i>191</i>	1990	5
NORTH BRADDOCK				
600 ANDERSON ST	35.9	100	1990	5
PITTSBURGH				
1275 BEDFORD AVE PGH., PA 15222	34.1	84	1994	5
2201 SALSURY	28.5	63	1990	3
3333 FORBES AVE PGH 15213	29.6	90	1991	2
FORBES AVE AND COLTART ST PITTSBURGH	34.8	81	1990	3
GLADSTONE HIGH SCHOOL	35.0	93	1991	5
SPRINGDALE				
SPRINGDALE JR HIGH, COLFAX & BUTLER	23.4	67	1993	5
STOWE TOWNSHIP				
405 WHEELER AVE, MCKEES ROCKS, PA 15132	30.5	66	1991	1
SWISSVALE				
2220 PALMER ST PO BOX 8348	36.9	93	1990	2
Beaver Co				
BADEN				
FRONT STREET	23.4	64	1993	4
Westmoreland Co				
MONESSEN				
3ND ST & DONNER AVE.	30.4	98	1994	5

Notes

Annual Mean
PM-10 Concentration

24-Hour
PM-10 Concentration

<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LANCASTER, PA

This table provides summary information for Metropolitan Statistical Area 4000, LANCASTER, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.0
Rank by PM-10 Concentration:	49 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	173 (103-237)
Attributable Deaths per 100,000 Population:	48
Rank by Number of Attributable Deaths:	80 of 239
Rank Attributable Death Rate:	41 of 239

Mortality (1989 data)

Total Mortality:	3,258
Adult Cardiopulmonary Deaths:	1,715
Auto Accident Deaths:	61

Population (1980 data)

Total Population:	362,000
-------------------	---------

Counties Assigned to MSA

Lancaster Co, PA

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
PA Lancaster Co LANCASTER CITY MANHEIM PIKE	31.0	<i>117</i>	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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INDIANAPOLIS, IN

This table provides summary information for Metropolitan Statistical Area 3480, INDIANAPOLIS, IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	31.0
Rank by PM-10 Concentration:	50 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	494 (294-678)
Attributable Deaths per 100,000 Population:	42
Rank by Number of Attributable Deaths:	29 of 239
Rank Attributable Death Rate:	58 of 239

Mortality (1989 data)

Total Mortality:	9,897
Adult Cardiopulmonary Deaths:	4,919
Auto Accident Deaths:	177

Population (1980 data)

Total Population:	1,167,000
-------------------	-----------

Counties Assigned to MSA

Boone Co, IN
Hamilton Co, IN

Hancock Co, IN
 Hendricks Co, IN
 Johnson Co, IN
 Marion Co, IN
 Morgan Co, IN
 Shelby Co, IN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IN				
Marion Co				
INDIANAPOLIS				
1415 DROVER, NATIONAL PRINTING PLATE	35.2	91	1993	5
1426 WEST 29TH STREET	28.5	65	1990	5
17 SOUTH SHERIDAN ST	28.5	74	1990	5
1735 SOUTH WEST STREET	34.5	85	1990	5
1802 S. HOLT	34.5	76	1990	5
2451 NORTH KEYSTONE	23.5	37	1990	1
2451 NORTH KEYSTONE	32.3	85	1990	4
3302 ENGLIST AVE., SEAL PRODUCTS BLDG.	37.1	83	1993	5
35 SOUTH STATE STREET	29.2	78	1990	5
8327 MANN ROAD	24.6	66	1990	5
NAVAL AVIONICS CENTER, 6125 E. 16TH ST.	30.5	79	1991	5
SPEEDWAY				
1450 N LYNHURST DRIVE	28.2	74	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Top 50 MSA's Ranked by Attributable Mortality

This table considers Metropolitan Statistical Areas ranked by the number of premature deaths attributable to particulate air pollution. The table identifies the top 50 MSA's of the 239 MSA's for which we have data.

Rank	Metropolitan Statistical Area	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution
1	LOS ANGELES-LONG BEACH, CA	5,873
2	NEW YORK, NY-NJ	4,024
3	CHICAGO, IL	3,479
4	PHILADELPHIA, PA-NJ	2,599
5	DETROIT, MI	2,123
6	RIVERSIDE-SAN BERNARDINO, CA	1,905
7	SAN FRANCISCO-OAKLAND, CA	1,270
8	PITTSBURGH, PA	1,216
9	ST. LOUIS, MO-IL	1,195
10	CLEVELAND, OH	1,161
11	PHOENIX, AZ	1,110
12	ANAHEIM-SANTA ANA, CA	1,053
13	SAN DIEGO, CA	999
14	ATLANTA, GA	946
15	HOUSTON, TX	939
16	TAMPA-ST. PETERSBURG, FL	938

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17	<u>BALTIMORE, MD</u>	861
18	<u>NEWARK, NJ</u>	819
19	<u>BOSTON-LOWELL-BROCKTON-LAWRENCE-HAVERHILL, MA</u>	792
20	<u>DALLAS-FORT WORTH, TX</u>	743
21	<u>MIAMI, FL</u>	645
22	<u>CINCINNATI-HAMILTON, OH-KY-IN</u>	617
23	<u>NASSAU-SUFFOLK, NY</u>	605
24	<u>WASHINGTON, DC-MD-VA</u>	588
25	<u>MILWAUKEE, WI</u>	518
26	<u>KANSAS CITY, MO-KS</u>	507
27	<u>SEATTLE-EVERETT, WA</u>	501
28	<u>MINNEAPOLIS-ST. PAUL, MN-WI</u>	495
29	<u>INDIANAPOLIS, IN</u>	494
30	<u>FRESNO, CA</u>	488
30	<u>SACRAMENTO, CA</u>	488
32	<u>BAKERSFIELD, CA</u>	464
33	<u>PROVIDENCE-WARWICK-PAWTUCKET, RI</u>	448
34	<u>SAN JOSE, CA</u>	447
35	<u>NASHVILLE-DAVIDSON, TN</u>	419
36	<u>LOUISVILLE, KY-IN</u>	392
37	<u>BIRMINGHAM, AL</u>	379
38	<u>DENVER-BOULDER, CO</u>	375
39	<u>NEW ORLEANS, LA</u>	369
40	<u>COLUMBUS, OH</u>	360
41	<u>LAS VEGAS, NV</u>	350
42	<u>MEMPHIS, TN-AR-MS</u>	345
43	<u>STOCKTON, CA</u>	321
44	<u>NORTHEAST, PA (SCRANTON)</u>	314
45	<u>PORTLAND, OR-WA</u>	307
46	<u>GREENSBORO-WINSTON SALEM-HIGH POINT, NC</u>	304
47	<u>VISALIA-TULARE-PORTERVILLE, CA</u>	302
48	<u>JACKSONVILLE, FL</u>	297
49	<u>SALT LAKE CITY-OGDEN, UT</u>	295
50	<u>OMAHA, NE-IA</u>	288

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NEW YORK, NY-NJ

This table provides summary information for Metropolitan Statistical Area 5600, NEW YORK, NY-NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.8
Rank by PM-10 Concentration:	76 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	4,024 (2,384-5,540)
Attributable Deaths per 100,000 Population:	44
Rank by Number of Attributable Deaths:	2 of 239
Rank Attributable Death Rate:	53 of 239

Mortality (1989 data)

Total Mortality:	90,149
Adult Cardiopulmonary Deaths:	46,227
Auto Accident Deaths:	973

Population (1980 data)

Total Population:	9,120,000
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Counties Assigned to MSA

Bergen Co, NJ

Bronx Co, NY

Kings Co, NY
 New York Co, NY
 Putnam Co, NY
 Queens Co, NY
 Richmond Co, NY
 Rockland Co, NY
 Westchester Co, NY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NJ				
Bergen Co				
FORT LEE				
FORT LEE LIBRARY,CENTER AVENUE	29.2	78	1994	5
G.WASHINGTON BR.OVERPASS,LEMOINE AVE.	41.3	95	1994	5
NY				
Bronx Co				
NEW YORK CITY				
IS 155, 470 JACKSON AV.	25.3	65	1994	5
MORRISANIA CENTER, 1225-57 GERARD AVE.	28.3	76	1994	5
Kings Co				
NEW YORK CITY				
301 GREENPOINT AVENUE	27.8	72	1994	5
PS 314, 60TH STREET & GAWANUS EXPRESSWAY	30.1	94	1990	4
PS 321 180 7TH AV,	24.0	59	1994	5
New York Co				
NEW YORK CITY				
HOME SAVINGS BANK, 34TH ST. & 7TH AVE.	37.1	65	1990	1
MABEL DEAN HIGH SCH.ANNEX, 240 2ND AVE.	28.8	72	1991	3

MADISON AVE.STREET CANYON,47TH-48TH STS.	48.1	<i>130</i>	1994	3
PS 59, 288 E. 57TH STREET, MANHATTAN	30.7	62	1993	2
Richmond Co				
NEW YORK CITY				
POST OFFICE, 364 PORT RICHMOND AVE.	23.4	61	1994	4
PS 26, 4108 VICTORY BLVD., TRAVIS	25.4	67	1994	4
SUSAN WAGNER HS, BRIELLE AVE.& MANOR RD,	20.7	48	1994	3
Westchester Co				
OSSINING				
HIGH SCHOOL, ROUTE 9, HIGHLANDS AVENUE	21.7	53	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SAN FRANCISCO-OAKLAND, CA

This table provides summary information for Metropolitan Statistical Area 7360, SAN FRANCISCO-OAKLAND, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.7
Rank by PM-10 Concentration:	78 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	1,270 (752-1,748)
Attributable Deaths per 100,000 Population:	39
Rank by Number of Attributable Deaths:	7 of 239
Rank Attributable Death Rate:	74 of 239

Mortality (1989 data)

Total Mortality:	30,031
Adult Cardiopulmonary Deaths:	14,694
Auto Accident Deaths:	414

Population (1980 data)

Total Population:	3,253,000
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Counties Assigned to MSA

Alameda Co, CA

Contra Costa Co, CA

Marin Co, CA
 San Francisco Co, CA
 San Mateo Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA				
Alameda Co				
FREMONT				
40733 CHAPEL WAY., FREMONT	29.4	91	1990	4
LIVERMORE				
2614 OLD 1ST ST., LIVERMORE	30.5	96	1991	4
SAN LEANDRO				
HOSPITAL-15400 FOOTHILL BLVD,SAN LEANDRO	28.0	91	1990	4
Contra Costa Co				
BETHEL ISLAND				
5551 BETHEL ISLAND RD, BETHEL ISLAND	28.1	118	1991	4
CONCORD				
2975 TREAT BLVD, CONCORD	28.0	118	1990	4
RICHMOND				
1144 13TH ST., RICHMOND	26.7	82	1991	4
Marin Co				
SAN RAFAEL				
534 4TH ST., SAN RAFAEL	25.9	85	1991	4
San Francisco Co				
SAN FRANCISCO				
10 ARKANSAS ST., SAN FRANCISCO	32.5	91	1990	4
San Mateo Co				
REDWOOD CITY				
897 BARRON AVE., REDWOOD CITY	28.9	93	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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TAMPA-ST. PETERSBURG, FL

This table provides summary information for Metropolitan Statistical Area 8280, TAMPA-ST. PETERSBURG, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.5
Rank by PM-10 Concentration:	97 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	938 (555-1,293)
Attributable Deaths per 100,000 Population:	60
Rank by Number of Attributable Deaths:	16 of 239
Rank Attributable Death Rate:	22 of 239

Mortality (1989 data)

Total Mortality:	22,693
Adult Cardiopulmonary Deaths:	11,803
Auto Accident Deaths:	396

Population (1980 data)

Total Population:	1,569,000
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Counties Assigned to MSA

Hillsborough Co, FL
Pasco Co, FL

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Pinellas Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading	Number of Years of Data
FL				
Hillsborough Co				
900 HARBOUR ISLAND BLVD. (ATHLETIC CLUB)	26.8	62	1994	2
RUSKIN				
HWY 41 (GIBSONTON)	30.3	79	1993	4
TAMPA				
1105 E KENNEDY BLVD	28.2	62	1993	5
5012 CAUSEWAY BLVD TAMPA FLORIDA	29.0	62	1993	3
6201 CENTRAL AVE, SEMINOLE SCH	29.0	51	1992	3
COAST GUARD STATION DAVIS ISLAND	27.4	61	1994	5
Pinellas Co				
LARGO				
1301 ULMERTON ROAD (COUNTY MOTOR POOL)	26.5	59	1994	5
ST PETERSBURG				
7200-22 AVENUE NORTH	22.9	57	1993	3
N E CORNER OF 13TH AVE N AND 19TH ST N	25.4	55	1994	2
TARPON SPRINGS				
COUNTY ROAD 77 BOOKER CK. PARK	22.0	51	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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BALTIMORE, MD

This table provides summary information for Metropolitan Statistical Area 0720, BALTIMORE, MD. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.6
Rank by PM-10 Concentration:	66 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	861 (511-1,184)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	17 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	20,457
Adult Cardiopulmonary Deaths:	9,339
Auto Accident Deaths:	318

Population (1980 data)

Total Population:	2,174,000
-------------------	-----------

Counties Assigned to MSA

Anne Arundel Co, MD

Baltimore, MD

Baltimore Co, MD

Carroll Co, MD

Harford Co, MD

Howard Co, MD

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MD				
Anne Arundel Co				
ANNAPOLIS				
ST JOHNS COLLEGE, ANNAPOLIS MD	23.2	60	1993	3
GLEN BURNIE				
ANNE ARUNDEL CO. PUBLIC WORKS BLDG.	27.7	64	1994	5
Baltimore				
HAWKINS PT. LANDFILL ROAD,BALTO. MD.	32.5	72	1994	3
BALTIMORE				
1200 SOUTH EAST AVENUE BALTIMORE MD	29.8	47	1990	1
1900 E PATAPSCO AVE BALTIMORE	32.8	88	1991	5
FORT MCHENRY VISTORS CENTER	27.7	61	1993	4
FT HOLABIRD ELEM SCHOOL	32.2	81	1991	5
N E POLICE STA, 1900 ARGONNE DR, BALTO M	25.8	66	1994	3
N W POLICE STA, 5700 REISTERSTOWN RD	27.2	65	1994	3
OLD TOWN FIRE DEPT ST 34 BALTIMORE MD	31.8	75	1994	3
S E POLICE STA, 5700 EASTERN AVE, BALTO.	33.6	90	1991	4
WESTPORT ELEMENTARY SCHOOL	31.4	74	1994	5
Baltimore Co				
LODGE FARM ROAD AND BAY FRONT ROAD	22.0	44	1990	1

WOODWARD & DORSEY RDS ,ESSEX MD	26.5	54	1994	2
COCKEYSVILLE				
GREENSIDE DRIVE COCKEYSVILLE MD	25.6	58	1993	4
DUNDALK				
PENINSULA EXPRESSWAY; DUNDALK	27.7	60	1991	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BOSTON-LOWELL-BROCKTON-LAWRENCE-HAVERHILL, MA

This table provides summary information for Metropolitan Statistical Area 1123, BOSTON-LOWELL-BROCKTON-LAWRENCE-HAVERHILL, MA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.9
Rank by PM-10 Concentration:	180 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	792 (466-1,099)
Attributable Deaths per 100,000 Population:	22
Rank by Number of Attributable Deaths:	19 of 239
Rank Attributable Death Rate:	179 of 239

Mortality (1989 data)

Total Mortality:	31,775
Adult Cardiopulmonary Deaths:	15,492
Auto Accident Deaths:	410

Population (1980 data)

Total Population:	3,663,000
-------------------	-----------

Counties Assigned to MSA

Essex Co, MA

Middlesex Co, MA

Norfolk Co, MA

Plymouth Co, MA

Suffolk Co, MA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MA				
Essex Co				
LAWRENCE				
HIGH STREET, STORROW PARK	17.8	48	1992	3
Middlesex Co				
MEDFORD				
100 TO 120 MAIN STREET	20.2	51	1990	5
SUDBURY				
WATER ROW RD GREAT MEADOWS NAT WILDLIFE	15.5	61	1992	5
Norfolk Co				
QUINCY				
HANCOCK STREET	17.1	48	1994	3
Suffolk Co				
BOSTON				
115 SOUTHAMPTON STREET	22.1	51	1991	4
200 COLUMBUS AVENUE	25.8	73	1990	5
340 BREMAN STREET, EAST BOSTON	22.8	53	1991	5
KENMORE SQUARE, 590 COMMONWEALTH AVENUE	27.8	86	1993	5
ONE CITY SQUARE, CHARLESTOWN	31.4	69	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150

<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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DALLAS-FORT WORTH, TX

This table provides summary information for Metropolitan Statistical Area 1920, DALLAS-FORT WORTH, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.7
Rank by PM-10 Concentration:	147 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	743 (438-1,028)
Attributable Deaths per 100,000 Population:	25
Rank by Number of Attributable Deaths:	20 of 239
Rank Attributable Death Rate:	157 of 239

Mortality (1989 data)

Total Mortality:	23,649
Adult Cardiopulmonary Deaths:	11,906
Auto Accident Deaths:	666

Population (1980 data)

Total Population:	2,975,000
-------------------	-----------

Counties Assigned to MSA

- Collin Co, TX
- Dallas Co, TX

Denton Co, TX
 Ellis Co, TX
 Johnson Co, TX
 Kaufman Co, TX
 Parker Co, TX
 Rockwall Co, TX
 Tarrant Co, TX
 Wise Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
TX				
Dallas Co				
DALLAS				
12200 COIT ROAD DALLAS TEXAS	25.3	62	1993	5
3049 MORRELL 4607 SOUTH LANCASTER DALLAS, TEXAS	31.0	88	1990	5
717 SOUTH AKARD	22.9	56	1993	5
27.3	74	1993	5	
Tarrant Co				
FORT WORTH				
13800 FAA ROAD	20.2	60	1993	4
5933 GEDDES	21.4	54	1993	5
WORTH HTS ELEM SCHOOL	24.1	64	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MIAMI, FL

This table provides summary information for Metropolitan Statistical Area 5000, MIAMI, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.4
Rank by PM-10 Concentration:	119 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	645 (381-890)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	21 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	17,942
Adult Cardiopulmonary Deaths:	8,881
Auto Accident Deaths:	421

Population (1980 data)

Total Population:	1,626,000
-------------------	-----------

Counties Assigned to MSA

Dade Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
FL				
Dade Co				
MIAMI				
6400 NW 27TH AVE.	24.6	87	1993	5
7100 NW 36TH ST.	26.4	87	1993	5
FIRE STATION 325 NW 2ND ST	24.7	90	1993	3
NW 20 ST AND 12 AVE,FIRE STATION	28.9	86	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CINCINNATI-HAMILTON, OH-KY-IN

This table provides summary information for Metropolitan Statistical Area 1640, CINCINNATI-HAMILTON, OH-KY-IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.2
Rank by PM-10 Concentration:	58 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	617 (366-848)
Attributable Deaths per 100,000 Population:	44
Rank by Number of Attributable Deaths:	22 of 239
Rank Attributable Death Rate:	53 of 239

Mortality (1989 data)

Total Mortality:	12,459
Adult Cardiopulmonary Deaths:	6,438
Auto Accident Deaths:	213

Population (1980 data)

Total Population:	1,401,000
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Counties Assigned to MSA

Dearborn Co, IN

Boone Co, KY

Campbell Co, KY
 Kenton Co, KY
 Clermont Co, OH
 Hamilton Co, OH
 Warren Co, OH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
KY				
Campbell Co				
NEWPORT				
US POST OFFICE, NEWPORT, KY	29.7	91	1990	5
Kenton Co				
1401 DIXIE HIGHWAY	24.6	87	1994	2
ERLANGER				
505 COMMONWEALTH AVE.	28.8	94	1990	5
OH				
Hamilton Co				
CINCINNATI				
1632 CENTRAL PARKWAY	30.9	82	1994	4
AIR POLLUTION CONTROL LAB 1675 GEST ST	30.3	76	1990	1
CARTHAGE FIRE HOUSE SEYMOUR AND VINE	32.9	103	1990	5
LOCKLAND				
LOCKLAND MUN BLDG WYOMING AND COOPER	29.7	70	1993	3
ST BERNARD				
300 MURRAY RD	31.6	74	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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NASSAU-SUFFOLK, NY

This table provides summary information for Metropolitan Statistical Area 5380, NASSAU-SUFFOLK, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.2
Rank by PM-10 Concentration:	177 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	605 (356-839)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	23 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	21,462
Adult Cardiopulmonary Deaths:	11,481
Auto Accident Deaths:	378

Population (1980 data)

Total Population:	2,606,000
-------------------	-----------

Counties Assigned to MSA

- Nassau Co, NY
- Suffolk Co, NY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NY				
Nassau Co				
EISENHOWER PARK, MERRICK AV & OLD COUNTRY R	22.3	65	1994	5
Suffolk Co				
BABYLON				
EAST FARMINGDALE WATER PLANT	24.1	74	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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WASHINGTON, DC-MD-VA

This table provides summary information for Metropolitan Statistical Area 8840, WASHINGTON, DC-MD-VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.5
Rank by PM-10 Concentration:	153 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	588 (346-814)
Attributable Deaths per 100,000 Population:	19
Rank by Number of Attributable Deaths:	24 of 239
Rank Attributable Death Rate:	198 of 239

Mortality (1989 data)

Total Mortality:	22,084
Adult Cardiopulmonary Deaths:	9,687
Auto Accident Deaths:	490

Population (1980 data)

Total Population:	3,060,000
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Counties Assigned to MSA

Washington, DC

Charles Co, MD

Montgomery Co, MD
 Prince George's Co, MD
 Alexandria, VA
 Arlington Co, VA
 Fairfax, VA
 Fairfax Co, VA
 Falls Church, VA
 Loudoun Co, VA
 Manassas, VA
 Manassas Park, VA
 Prince William Co, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
DC				
Washington				
34TH. AND DIX STREETS, N.E.	28.4	64	1994	2
WASHINGTON				
CONNECTICUT AVE & NORTHAMPTON ST. NW	24.6	60	1992	5
WEST END LIBRARY 24 & L STS. NW	27.5	66	1990	5
MD				
Montgomery Co				
ROCKVILLE				
STONEMILL ELEMENTARY	25.2	66	1993	4
Prince George's Co				
NEW CARROLLTON				
AMES STORE, RTE.450, NEW CARROLLTON MD.	23.1	49	1992	2
SUITLAND-SILVER HILL				
FED CENTER, SUITLAND PKY, SUITLAND MD	23.0	53	1993	3
VA				
Alexandria				
ALEXANDRIA				

4900 DUKE STREET, CAMERON STATION	24.7	56	1990	5
Arlington Co				
S 18TH AND HAYES ST	22.0	53	1990	4
Fairfax				
FAIRFAX				
3525 CHAIN BRIDGE RD	26.8	63	1990	4
MASSEY 10600 PAGE AVE.	26.0	75	1990	3
Fairfax Co				
MT.VERNON 2675 SHERWOOD HALL LANE	25.8	56	1991	4
CUB RUN LEE RD CHANT.(CUBRUN TREAT PLANT	20.6	50	1993	2
MC LEAN				
LEWINSVILLE 1437 BALLS HILL RD	24.3	53	1993	5
SEVEN CORNERS				
6100 ARLINGTON BLVD MONTG WARD	24.5	51	1993	5
SPRINGFIELD				
6120 BRANDON AVE	25.8	59	1990	5
Loudoun Co				
138-H BRISCOE ROAD, XEROX TRAING CENTER	19.4	57	1993	5
Prince William Co				
COUNTY HEALTH DEPARTMENT 9301 LEE AVENUE	21.7	56	1993	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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MILWAUKEE, WI

This table provides summary information for Metropolitan Statistical Area 5080, MILWAUKEE, WI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.4
Rank by PM-10 Concentration:	83 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	518 (307-714)
Attributable Deaths per 100,000 Population:	37
Rank by Number of Attributable Deaths:	25 of 239
Rank Attributable Death Rate:	85 of 239

Mortality (1989 data)

Total Mortality:	11,792
Adult Cardiopulmonary Deaths:	6,118
Auto Accident Deaths:	151

Population (1980 data)

Total Population:	1,397,000
-------------------	-----------

Counties Assigned to MSA

Milwaukee Co, WI

Ozaukee Co, WI

Washington Co, WI

Waukesha Co, WI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WI				
Milwaukee Co				
MILWAUKEE				
CTR FOR GT LAKES STD., 600 E. GREENFIELD	29.5	78	1991	5
FEDERAL AVIATION ADM, 4942 S 16TH ST	25.7	64	1990	5
Waukesha Co				
WAUKESHA				
1310 CLEVELAND AVE	27.7	79	1990	5
MELLENDEZ SITE, 1238 THE STRAND	30.6	94	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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KANSAS CITY, MO-KS

This table provides summary information for Metropolitan Statistical Area 3760, KANSAS CITY, MO-KS. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.5
Rank by PM-10 Concentration:	67 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	507 (300-697)
Attributable Deaths per 100,000 Population:	38
Rank by Number of Attributable Deaths:	26 of 239
Rank Attributable Death Rate:	79 of 239

Mortality (1989 data)

Total Mortality:	11,271
Adult Cardiopulmonary Deaths:	5,534
Auto Accident Deaths:	232

Population (1980 data)

Total Population:	1,327,000
-------------------	-----------

Counties Assigned to MSA

Johnson Co, KS

Wyandotte Co, KS

Cass Co, MO
 Clay Co, MO
 Jackson Co, MO
 Platte Co, MO
 Ray Co, MO

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
KS				
Wyandotte Co				
KANSAS CITY				
444 KINDELBERGER RD, FAIRFAX	39.3	101	1991	5
FIRE STA#3 ,420 KANSAS AVE	43.0	103	1990	5
MO				
Jackson Co				
INDEPENDENCE				
MOPAC RR RIGHT OF WAY AT 39TH STREET	20.4	43	1990	5
KANSAS CITY				
27TH AND VAN BRUNT	26.4	59	1990	4
724 TROOST (REAR)	26.9	56	1991	3
FIRE ACADEMY 5130 DURAMUS RD.	27.2	62	1994	4
FIRE STA#8 , 1517 LOCUST ST.	29.8	79	1993	4
RICHARDS-GEBAUR AFB, KANSAS CITY	20.8	59	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SEATTLE-EVERETT, WA

This table provides summary information for Metropolitan Statistical Area 7600, SEATTLE-EVERETT, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.7
Rank by PM-10 Concentration:	93 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	501 (296-690)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	27 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	12,837
Adult Cardiopulmonary Deaths:	6,237
Auto Accident Deaths:	281

Population (1980 data)

Total Population:	1,607,000
-------------------	-----------

Counties Assigned to MSA

King Co, WA
Snohomish Co, WA

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WA				
King Co				
BELLEVUE				
WEST & WHEELER BLDG/504 BELLEVUE WY	20.9	82	1991	5
KENT				
JAMES & CENTRAL/JAMES ST & CENTRAL AVE	29.4	115	1991	5
LAKE FOREST PARK				
17711 BALLINGER WY NE	25.9	131	1991	5
SEATTLE				
DUWAMISH PUMP STA/4752 E MARGINAL WY S	34.8	127	1991	5
HARBOR ISLAND/3400 13TH AVE SW	32.8	95	1990	5
SOUTH PARK/723 S CONCORD	26.6	74	1992	5
Snohomish Co				
EVERETT				
HOYT AVE & 26TH ST	23.1	56	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MINNEAPOLIS-ST. PAUL, MN-WI

This table provides summary information for Metropolitan Statistical Area 5120, MINNEAPOLIS-ST. PAUL, MN-WI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.8
Rank by PM-10 Concentration:	130 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	495 (292-685)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	28 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	15,285
Adult Cardiopulmonary Deaths:	7,186
Auto Accident Deaths:	299

Population (1980 data)

Total Population:	2,114,000
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Counties Assigned to MSA

Anoka Co, MN
Carver Co, MN

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Chisago Co, MN
 Dakota Co, MN
 Hennepin Co, MN
 Ramsey Co, MN
 Scott Co, MN
 Washington Co, MN
 Wright Co, MN
 St. Croix Co, WI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
MN				
Dakota Co				
12821 PINE BEND TRAIL	25.0	59	1992	3
Hennepin Co				
MINNEAPOLIS				
300 NICOLLET MALL	23.6	59	1992	5
4646 HUMBOLDT AVE. N.	21.6	64	1990	5
RICHFIELD				
135W & 70TH AVENUE SOUTH	29.1	67	1991	5
ST LOUIS PARK				
CITY HALL 5005 MINNTONKA BOULEVARD	18.4	44	1991	5
Ramsey Co				
ST PAUL				
1038 ROSS AVENUE	26.0	57	1993	4
1303 RED ROCK ROAD	34.3	155	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LOUISVILLE, KY-IN

This table provides summary information for Metropolitan Statistical Area 4520, LOUISVILLE, KY-IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.7
Rank by PM-10 Concentration:	65 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	392 (232-539)
Attributable Deaths per 100,000 Population:	43
Rank by Number of Attributable Deaths:	36 of 239
Rank Attributable Death Rate:	57 of 239

Mortality (1989 data)

Total Mortality:	8,342
Adult Cardiopulmonary Deaths:	4,230
Auto Accident Deaths:	129

Population (1980 data)

Total Population:	906,000
-------------------	---------

Counties Assigned to MSA

Clark Co, IN
Floyd Co, IN

Bullitt Co, KY
 Jefferson Co, KY
 Oldham Co, KY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IN				
Clark Co				
CHARLESTOWN				
ARMY AMMUNITION PLANT	21.2	44	1990	1
JEFFERSONVILLE				
225 SPRING ST.	34.6	73	1993	4
Floyd Co				
NEW ALBANY				
2230 GREEN VALLEY ROAD	21.5	41	1990	1
KY				
Bullitt Co				
SHEPHERDSVILLE				
MIDDLE SCHOOL, 2ND STREET	26.0	36	1994	1
SHEPHERDSVILLE				
BULLITT COUNTY COURTHOUSE ANNEX	27.8	64	1993	3
Jefferson Co				
LOUISVILLE				
WYANDOTTE PARK	29.3	56	1991	4
37TH STREET AND SOUTHERN AVENUE	32.9	68	1993	5
7201 WATSON LN, WATSON LN ELEMENTARY SCH	27.0	57	1994	3
850 BARRET AVENUE	28.9	64	1990	5
PORTLAND FIRE DEPT 2425 PORTLAND AVE	32.0	71	1990	5
OKOLONA				
CO POLICE STA OUTER LOOP & PRESTON HWY	28.0	58	1993	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BIRMINGHAM, AL

This table provides summary information for Metropolitan Statistical Area 1000, BIRMINGHAM, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.3
Rank by PM-10 Concentration:	57 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	379 (225-521)
Attributable Deaths per 100,000 Population:	45
Rank by Number of Attributable Deaths:	37 of 239
Rank Attributable Death Rate:	48 of 239

Mortality (1989 data)

Total Mortality:	8,338
Adult Cardiopulmonary Deaths:	3,940
Auto Accident Deaths:	226

Population (1980 data)

Total Population:	847,000
-------------------	---------

Counties Assigned to MSA

Jefferson Co, AL

Shelby Co, AL

St. Clair Co, AL

Walker Co, AL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
AL				
Jefferson Co				
BESSEMER				
1500 1ST AVE N., BESSEMER, AL	29.4	79	1991	5
BIRMINGHAM				
1242 JERSEY ST WYLAM AL	33.5	104	1990	4
2301 11TH AVE NORTH, BIRMINGHAM, AL.	32.9	80	1991	5
INGLENOOK, ELEM. SCH., 3937 44TH AVE. NO	29.0	75	1991	5
NO. B'HAM,SOU R.R., 3009 28TH ST. NO.	40.5	140	1990	4
LEEDS				
201 ASHVILLE ROAD	27.6	70	1991	5
TARRANT CITY				
TARRANT, ELEM. SCH., 1269 PORTLAND STREE	30.4	76	1991	5
Shelby Co				
152ND ARMORY BLDG, 8TH AVE AT 13TH ST	28.1	72	1991	4
Walker Co				
JASPER				
HIGHLAND AVE. AND 17TH ST. EAST	26.6	77	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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DENVER-BOULDER, CO

This table provides summary information for Metropolitan Statistical Area 2080, DENVER-BOULDER, CO. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.6
Rank by PM-10 Concentration:	116 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	375 (221-517)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	38 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	10,514
Adult Cardiopulmonary Deaths:	5,060
Auto Accident Deaths:	267

Population (1980 data)

Total Population:	1,620,000
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Counties Assigned to MSA

Adams Co, CO
Arapahoe Co, CO

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Boulder Co, CO
 Denver Co, CO
 Douglas Co, CO
 Gilpin Co, CO
 Jefferson Co, CO

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CO				
Adams Co				
4301 E 72ND AVE (ADAMS CITY)	37.8	146	1992	5
78TH AVE & STEELE ST - WELBY	25.3	77	1993	2
BRIGHTON				
22 S. 4TH AVE	26.1	79	1991	5
NORTHGLENN				
11701 COMMUNITY CENTER DRIVE	25.1	72	1993	4
Arapahoe Co				
ENGLEWOOD				
4857 S BROADWAY	22.6	98	1993	5
Boulder Co				
2440 PEARL ST - CHAMBER CENTER BLDG	23.8	24	1994	1
BOULDER				
14TH & SPRUCE ST (BOULDER)	21.4	72	1991	5
LONGMONT				
3RD & KIMBARK ST - LONGMONT	23.3	84	1990	5
Denver Co				
DENVER				
1050 S BROADWAY - GATES RUBBER MED BLDG	33.9	111	1993	5
2105 BROADWAY - CAMP	32.5	101	1993	5
225 W. COLFAX AVE.	27.4	119	1993	2
414 14TH ST. SCHL ADD	31.5	81	1990	2

Douglas Co**CASTLE ROCK**

310 3RD ST CASTLEROCK	18.2	94	1991	5
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Jefferson Co**ARVADA**

8101 RALSTON ROAD	26.2	69	1993	2
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GOLDEN

911 10TH ST - GOLDEN	23.0	68	1993	3
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Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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NEW ORLEANS, LA

This table provides summary information for Metropolitan Statistical Area 5560, NEW ORLEANS, LA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.9
Rank by PM-10 Concentration:	112 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	369 (218-509)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	39 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	10,330
Adult Cardiopulmonary Deaths:	4,894
Auto Accident Deaths:	167

Population (1980 data)

Total Population:	1,187,000
-------------------	-----------

Counties Assigned to MSA

Jefferson Par, LA

Orleans Par, LA

St. Bernard Par, LA
 St. Tammany Par, LA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
LA				
Jefferson Par				
METAIRIE				
3945 N.I-10 SERVICE ROAD	28.1	99	1992	5
Orleans Par				
CORNER OF FLORIDA AVE & ORLEANS AVE	23.3	41	1994	1
NEW ORLEANS				
8801 EAGLE STREET	26.0	54	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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COLUMBUS, OH

This table provides summary information for Metropolitan Statistical Area 1840, COLUMBUS, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.9
Rank by PM-10 Concentration:	75 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	360 (214-496)
Attributable Deaths per 100,000 Population:	33
Rank by Number of Attributable Deaths:	40 of 239
Rank Attributable Death Rate:	102 of 239

Mortality (1989 data)

Total Mortality:	8,572
Adult Cardiopulmonary Deaths:	4,107
Auto Accident Deaths:	166

Population (1980 data)

Total Population:	1,093,000
-------------------	-----------

Counties Assigned to MSA

Delaware Co, OH

Fairfield Co, OH

Franklin Co, OH
 Madison Co, OH
 Pickaway Co, OH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OH				
Franklin Co				
COLUMBUS				
1313 CHESAPEAKE AVENUE	27.8	78	1990	5
181 SO. WASHINGTON BLVD	30.7	84	1990	5
OHIO STATE FAIRGROUNDS ELEVATOR BLDG.	28.1	91	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MEMPHIS, TN-AR-MS

This table provides summary information for Metropolitan Statistical Area 4920, MEMPHIS, TN-AR-MS. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.6
Rank by PM-10 Concentration:	80 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	345 (205-476)
Attributable Deaths per 100,000 Population:	38
Rank by Number of Attributable Deaths:	42 of 239
Rank Attributable Death Rate:	79 of 239

Mortality (1989 data)

Total Mortality:	7,962
Adult Cardiopulmonary Deaths:	4,010
Auto Accident Deaths:	185

Population (1980 data)

Total Population:	913,000
-------------------	---------

Counties Assigned to MSA

Crittenden Co, AR
De Soto Co, MS

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Shelby Co, TN

Tipton Co, TN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AR				
Crittenden Co				
WEST MEMPHIS				
FIRE STATION NO 1 7TH & THOMPSON	25.8	61	1993	4
TN				
Shelby Co				
3065 FITE RD	25.8	56	1994	1
MEMPHIS				
232 BICKFORD AVE.	32.7	75	1993	1
GAS SERVICE CENTER MEAGHER STREET	29.9	71	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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NORTHEAST, PA (SCRANTON)

This table provides summary information for Metropolitan Statistical Area 5745, NORTHEAST, PA (SCRANTON). The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.7
Rank by PM-10 Concentration:	114 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	314 (185-433)
Attributable Deaths per 100,000 Population:	49
Rank by Number of Attributable Deaths:	44 of 239
Rank Attributable Death Rate:	37 of 239

Mortality (1989 data)

Total Mortality:	7,779
Adult Cardiopulmonary Deaths:	4,217
Auto Accident Deaths:	117

Population (1980 data)

Total Population:	640,000
-------------------	---------

Counties Assigned to MSA

Lackawanna Co, PA

Luzerne Co, PA

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Monroe Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
PA				
Lackawanna Co				
SCRANTON				
601 JEFFERSON AVE	26.2	72	1993	5
Luzerne Co				
PITTSTON				
BROAD ST.	28.5	71	1993	5
WILKES-BARRE				
71 NORTH FRANKLIN AVE.	25.5	66	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

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PORTLAND, OR-WA

This table provides summary information for Metropolitan Statistical Area 6440, PORTLAND, OR-WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.9
Rank by PM-10 Concentration:	162 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	307 (180-425)
Attributable Deaths per 100,000 Population:	25
Rank by Number of Attributable Deaths:	45 of 239
Rank Attributable Death Rate:	157 of 239

Mortality (1989 data)

Total Mortality:	10,691
Adult Cardiopulmonary Deaths:	5,388
Auto Accident Deaths:	225

Population (1980 data)

Total Population:	1,242,000
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Counties Assigned to MSA

Clackamas Co, OR
Multnomah Co, OR

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Washington Co, OR

Clark Co, WA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
OR				
Clackamas Co				
CANBY				
CARUS TRAILER/SPANGLER RD	15.0	46	1991	5
Multnomah Co				
PORTLAND				
CENTRAL FIRE STATION/55 SW ASH	27.1	72	1991	5
SE LAFAYETTE/5824 SE LAFAYETTE	23.1	159	1991	5
TRANSCON/3182 NW 26TH	33.1	74	1992	4
WA				
Clark Co				
VANCOUVER				
PORT OF VANCOUVER/3103 LOWER RIVER RD	22.1	60	1991	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GREENSBORO-WINSTON SALEM-HIGH POINT, NC

This table provides summary information for Metropolitan Statistical Area 3120, GREENSBORO-WINSTON SALEM-HIGH POINT, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.1
Rank by PM-10 Concentration:	89 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	304 (180-419)
Attributable Deaths per 100,000 Population:	37
Rank by Number of Attributable Deaths:	46 of 239
Rank Attributable Death Rate:	85 of 239

Mortality (1989 data)

Total Mortality:	7,490
Adult Cardiopulmonary Deaths:	3,673
Auto Accident Deaths:	187

Population (1980 data)

Total Population:	827,000
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Counties Assigned to MSA

Davidson Co, NC
Forsyth Co, NC

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Guilford Co, NC
 Randolph Co, NC
 Stokes Co, NC
 Yadkin Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NC				
Davidson Co				
S.SAILSBURY ST.LEXINGTON,N.C.	27.4	52	1993	2
THOMASVILLE				
400 SALEM STREET	26.4	53	1993	2
Forsyth Co				
KERNERSVILLE				
BODENHEIMER ST	27.6	59	1991	5
WINSTON-SALEM				
1401 CORPORATION PARKWAY	29.8	62	1993	3
INDIANA AV & AKRON DR HANES HOSIERY PK	28.2	59	1993	5
SILAS CREEK PKWY AT HAWTHORNE RD	27.9	56	1993	3
Guilford Co				
E GREEN & S CENTENNIAL ST	25.6	54	1993	2
GREENSBORO				
EDGEWORTH & BELLEMEADE STS	26.5	59	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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JACKSONVILLE, FL

This table provides summary information for Metropolitan Statistical Area 3600, JACKSONVILLE, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.5
Rank by PM-10 Concentration:	82 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	297 (176-409)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	48 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	7,135
Adult Cardiopulmonary Deaths:	3,471
Auto Accident Deaths:	224

Population (1980 data)

Total Population:	738,000
-------------------	---------

Counties Assigned to MSA

Baker Co, FL

Clay Co, FL

Duval Co, FL
 Nassau Co, FL
 St. Johns Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
FL				
Duval Co				
JACKSONVILLE				
1070 E ADAMS ST	27.6	59	1993	5
2221 BUCKMAN ST	29.2	61	1993	5
ROSSELLE AND COPELAND	30.1	61	1993	5
Nassau Co				
5TH ST.N.OF LIME AVE.	24.4	43	1993	2
FERNANDINA BEACH STP-NORTH 14TH PLACE	23.5	46	1994	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		
Bold <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)</i>		
<i>Italic</i> <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)</i>		
<i>Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.</i>		
<i>Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.</i>		



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Top 50 MSA's Ranked by Attributable Mortality Rate

This table considers Metropolitan Statistical Areas ranked by attributable death rate, the number of premature deaths attributable to particulate air pollution per 100,000 population. The table identifies the top 50 MSA's of the 239 MSA's for which we have data.

Rank	Metropolitan Statistical Area	Attributable Deaths per 100,000 Population
1	VISALIA-TULARE-PORTERVILLE, CA	123
2	RIVERSIDE-SAN BERNARDINO, CA	122
3	BAKERSFIELD, CA	115
4	FRESNO, CA	95
5	STOCKTON, CA	93
6	LOS ANGELES-LONG BEACH, CA	79
7	STEUBENVILLE-WEIRTON, OH-WV	78
8	LAS VEGAS, NV	76
8	ST. JOSEPH, MO	76
10	PHOENIX, AZ	74
11	MEDFORD, OR	73
12	CHICO, CA	72
13	GADSDEN, AL	71
14	SPOKANE, WA	64
14	YUBA CITY, CA	64
16	CHATTANOOGA, TN-GA	63
16	ROANOKE, VA	63
18	ATLANTIC CITY, NJ	62

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SARASOTA, FL

This table provides summary information for Metropolitan Statistical Area 7510, SARASOTA, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.9
Rank by PM-10 Concentration:	145 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	126 (74-175)
Attributable Deaths per 100,000 Population:	62
Rank by Number of Attributable Deaths:	101 of 239
Rank Attributable Death Rate:	18 of 239

Mortality (1989 data)

Total Mortality:	3,854
Adult Cardiopulmonary Deaths:	1,983
Auto Accident Deaths:	57

Population (1980 data)

Total Population:	202,000
-------------------	---------

Counties Assigned to MSA

Sarasota Co, FL

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
FL				
Sarasota Co				
SARASOTA				
1642 12TH ST., SARASOTA	27.8	101	1992	5
BEE RIDGE PARK- WILKENS ON & LOCKWOOD RIDGE	20.3	63	1993	5
VENICE				
448 EAST VENICE AVE., VENICE	27.5	100	1993	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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WHEELING, WV-OH

This table provides summary information for Metropolitan Statistical Area 9000, WHEELING, WV-OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.8
Rank by PM-10 Concentration:	63 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	104 (62-143)
Attributable Deaths per 100,000 Population:	56
Rank by Number of Attributable Deaths:	116 of 239
Rank Attributable Death Rate:	23 of 239

Mortality (1989 data)

Total Mortality:	1,954
Adult Cardiopulmonary Deaths:	1,114
Auto Accident Deaths:	23

Population (1980 data)

Total Population:	186,000
-------------------	---------

Counties Assigned to MSA

Belmont Co, OH
Marshall Co, WV

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Ohio Co, WV

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
OH				
Belmont Co				
MARTINS FERRY				
1ST STREET EXT., MARTINS FERRY	29.0	95	1990	5
SHADYSIDE				
EAST 40 STREET,SHADYSIDE TP	30.8	75	1993	3
WV				
Ohio Co				
WHEELING				
16TH ST AND CHAPLINE ST	30.1	67	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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EVANSVILLE, IN-KY

This table provides summary information for Metropolitan Statistical Area 2440, EVANSVILLE, IN-KY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.9
Rank by PM-10 Concentration:	51 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	162 (96-222)
Attributable Deaths per 100,000 Population:	52
Rank by Number of Attributable Deaths:	89 of 239
Rank Attributable Death Rate:	32 of 239

Mortality (1989 data)

Total Mortality:	3,025
Adult Cardiopulmonary Deaths:	1,627
Auto Accident Deaths:	46

Population (1980 data)

Total Population:	309,000
-------------------	---------

Counties Assigned to MSA

Gibson Co, IN

Posey Co, IN

Vanderburgh Co, IN
 Warrick Co, IN
 Henderson Co, KY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IN				
Vanderburgh Co				
EVANSVILLE				
2300 W ILLINOIS STREET	33.0	74	1990	5
CIVIC CENTER COURTS BLDG	31.9	90	1994	5
KY				
Henderson Co				
HENDERSON				
1131 5TH ST.	29.7	78	1990	5
GREEN STREET HENDERSON KY	28.9	<i>102</i>	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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REDDING, CA

This table provides summary information for Metropolitan Statistical Area 6690, REDDING, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.3
Rank by PM-10 Concentration:	84 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	58 (34-80)
Attributable Deaths per 100,000 Population:	50
Rank by Number of Attributable Deaths:	155 of 239
Rank Attributable Death Rate:	36 of 239

Mortality (1989 data)

Total Mortality:	1,313
Adult Cardiopulmonary Deaths:	683
Auto Accident Deaths:	60

Population (1980 data)

Total Population:	116,000
-------------------	---------

Counties Assigned to MSA

Shasta Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA				
Shasta Co				
2220 NORTH STREET, ANDERSON, CA 96007	36.1	63	1993	1
BURNEY				
1080 SISKIYOU ST., BURNEY, CA. 96013	35.5	77	1990	3
REDDING				
HLTH CTR-2630 HOSPITAL LN, REDDING	24.6	74	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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JOHNSTOWN, PA

This table provides summary information for Metropolitan Statistical Area 3680, JOHNSTOWN, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.9
Rank by PM-10 Concentration:	74 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	127 (75-175)
Attributable Deaths per 100,000 Population:	48
Rank by Number of Attributable Deaths:	99 of 239
Rank Attributable Death Rate:	41 of 239

Mortality (1989 data)

Total Mortality:	2,630
Adult Cardiopulmonary Deaths:	1,446
Auto Accident Deaths:	53

Population (1980 data)

Total Population:	265,000
-------------------	---------

Counties Assigned to MSA

Cambria Co, PA
Somerset Co, PA

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
PA Cambria Co JOHNSTOWN U.S. POST OFFICE FRANKLIN & LOCUST STS	28.9	70	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CHARLESTON, WV

This table provides summary information for Metropolitan Statistical Area 1480, CHARLESTON, WV. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.6
Rank by PM-10 Concentration:	53 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	126 (75-173)
Attributable Deaths per 100,000 Population:	47
Rank by Number of Attributable Deaths:	101 of 239
Rank Attributable Death Rate:	44 of 239

Mortality (1989 data)

Total Mortality:	2,560
Adult Cardiopulmonary Deaths:	1,284
Auto Accident Deaths:	69

Population (1980 data)

Total Population:	270,000
-------------------	---------

Counties Assigned to MSA

Kanawha Co, WV
Putnam Co, WV

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WV				
Kanawha Co				
SOUTH CHARLESTON				
PUBLIC LIBRARY 312 4TH AVE	30.5	72	1990	4
Putnam Co				
POCA HIGH SCHOOL (POCA)	29.8	62	1993	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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TERRE HAUTE, IN

This table provides summary information for Metropolitan Statistical Area 8320, TERRE HAUTE, IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.8
Rank by PM-10 Concentration:	91 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	83 (49-115)
Attributable Deaths per 100,000 Population:	47
Rank by Number of Attributable Deaths:	135 of 239
Rank Attributable Death Rate:	44 of 239

Mortality (1989 data)

Total Mortality:	1,819
Adult Cardiopulmonary Deaths:	1,027
Auto Accident Deaths:	26

Population (1980 data)

Total Population:	177,000
-------------------	---------

Counties Assigned to MSA

Clay Co, IN
Sullivan Co, IN

Vermillion Co, IN

Vigo Co, IN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IN				
Vigo Co				
COURTHOUSE ANNEX, 201 CHERRY ST.	28.3	60	1993	2
TERRE HAUTE				
1600 HULMAN ST	31.6	89	1991	4
2121 BOSTON AVE.TERRE TOWN SCHOOL	26.4	67	1990	5
961 N. LAFAYETTE AVE.	27.1	87	1990	5
FED BLDG SW 7TH & CHERRY ST	28.7	61	1990	3
SOUTH VIGO HIGH SCHOOL3737 SOUTH 7TH	26.6	93	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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JOHNSON CITY-KINGSPORT-BRISTOL, TN-VA

This table provides summary information for Metropolitan Statistical Area 3660, JOHNSON CITY-KINGSPORT-BRISTOL, TN-VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.1
Rank by PM-10 Concentration:	73 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	197 (117-271)
Attributable Deaths per 100,000 Population:	45
Rank by Number of Attributable Deaths:	70 of 239
Rank Attributable Death Rate:	48 of 239

Mortality (1989 data)

Total Mortality:	4,163
Adult Cardiopulmonary Deaths:	2,219
Auto Accident Deaths:	90

Population (1980 data)

Total Population:	434,000
-------------------	---------

Counties Assigned to MSA

Carter Co, TN
Hawkins Co, TN

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 Unicoi Co, TN
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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TN				
Sullivan Co				
225 W. CENTER STREET KINGSPORT, TN	32.2	54	1994	1
KINGSPORT				
YADKIN AT 1140 E.CENTER ST. STA.#4-95	30.9	60	1990	4
VA				
Bristol				
BRISTOL				
105 SUNCREST DR., FIRE STATION	27.0	59	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ROCK HILL, SC

This table provides summary information for Metropolitan Statistical Area 6885, ROCK HILL, SC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.1
Rank by PM-10 Concentration:	60 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	48 (29-66)
Attributable Deaths per 100,000 Population:	45
Rank by Number of Attributable Deaths:	168 of 239
Rank Attributable Death Rate:	48 of 239

Mortality (1989 data)

Total Mortality:	1,014
Adult Cardiopulmonary Deaths:	508
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	107,000
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Counties Assigned to MSA

York Co, SC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
SC York Co ROCK HILL ROCK HILL WATER FILTER PLANT	30.1	56	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Annual Average Concentrations - Top 50 PM-10 Hot Spots in MSA's

This table considers monitoring stations within Metropolitan Statistical Areas ranked by average annual mean PM-10 concentration and identifies as "hotspots" the top 50 monitoring stations of the 943 stations for which we have data. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

The PM-10 concentration reported is the average of the annual mean concentration of PM-10 reported at each official monitoring stations within an MSA over the five year period, 1990 through 1994.

Rank	Metropolitan Statistical Area	State	County	Address	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Years of Data
1	PHILADELPHIA, PA-NJ	PA	Philadelphia Co	CASTOR AND CARBON STS ON PGW PROPERTY	91.6	2
2	ST. LOUIS, MO-IL	IL	Madison Co	2001 E 20TH ST	82.3	1
3	RIVERSIDE-SAN BERNARDINO, CA	CA	Riverside Co	5888 MISSION BLVD., RUBIDOUX	71.0	5
4	FRESNO, CA	CA	Fresno Co	CAL STATE #2-SHAW & MAPLE, FRESNO	70.3	1

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5	<u>BAKERSFIELD, CA</u>	CA	Kern Co	<u>225 CHESTER AVE, BAKERSFIELD</u>	69.9	4
6	<u>RIVERSIDE-SAN BERNARDINO, CA</u>	CA	San Bernardino Co	<u>AIRPORT, ONTARIO</u>	64.4	5
7	<u>VISALIA-TULARE-PORTERVILLE, CA</u>	CA	Tulare Co	<u>310 N CHURCH ST, VISALIA</u>	60.4	5
8	<u>RIVERSIDE-SAN BERNARDINO, CA</u>	CA	San Bernardino Co	<u>14360 ARROW BLVD., FONTANA</u>	59.7	5
9	<u>FRESNO, CA</u>	CA	Fresno Co	<u>4706 E. DRUMMOND ST., FRESNO</u>	56.5	5
10	<u>RIVERSIDE-SAN BERNARDINO, CA</u>	CA	San Bernardino Co	<u>24302 4TH ST., SAN BERNARDINO, CA.</u>	55.7	5
11	<u>BAKERSFIELD, CA</u>	CA	Kern Co	<u>3311 MANOR ST., OILDALE</u>	55.6	5
12	<u>PHILADELPHIA, PA-NJ</u>	PA	Philadelphia Co	<u>CASTOR AND DELAWARE AVENUES</u>	55.0	2
13	<u>BAKERSFIELD, CA</u>	CA	Kern Co	<u>1128 GOLDEN STATE HIGHWAY, BAKERSFIELD</u>	55.0	1
14	<u>RENO, NV</u>	NV	Washoe Co	<u>305 GALLETTI WAY RENO</u>	53.3	5
15	<u>LAS VEGAS, NV</u>	NV	Clark Co	<u>1301 E LAKE MEAD DR, NORTH LAS VEGAS</u>	52.9	5
16	<u>FRESNO, CA</u>	CA	Fresno Co	<u>3425 N FIRST ST, FRESNO</u>	52.3	5
17	<u>LAS VEGAS, NV</u>	NV	Clark Co	<u>2001 WINTERWOOD BLVD, EAST LAS VEGAS</u>	51.6	5

18	LOS ANGELES- LONG BEACH, CA	CA	Los Angeles Co	803 N. LOREN AVE., AZUSA	51.0	5
19	SALT LAKE CITY-OGDEN, UT	UT	Salt Lake Co	1795 NORTH 1000 WEST SALT LAKE CITY UT	50.5	4
20	LOS ANGELES- LONG BEACH, CA	CA	Los Angeles Co	1630 N MAIN ST., LOS ANGELES	50.4	5
21	PHOENIX, AZ	AZ	Maricopa Co	1475 E PECOS RD., CHANDLER	50.4	4
22	CLEVELAND, OH	OH	Cuyahoga Co	2785 BROADWAY	50.2	5
23	CLEVELAND, OH	OH	Cuyahoga Co	4150 EAST 49TH ST	49.5	4
24	RIVERSIDE- SAN BERNARDINO, CA	CA	Riverside Co	237 1/2 N. "D" ST., PERRIS	49.3	5
25	BAKERSFIELD, CA	CA	Kern Co	5558 CALIFORNIA AVE, BAKERSFIELD	49.3	1
26	FRESNO, CA	CA	Fresno Co	OAKLAND & LASSEN, FIVE POINTS	49.2	3
27	SAN DIEGO, CA	CA	San Diego Co	1100 PASEO INTERNATIONAL, OTAY MESA, CA	48.4	2
28	NEW YORK, NY- NJ	NY	New York Co	MADISON AVE.STREET CANYON,47TH- 48TH STS.	48.1	3
29	LOS ANGELES- LONG BEACH, CA	CA	Los Angeles Co	228 W. PALM AVE., BURBANK	47.9	5
30	ST. LOUIS, MO- IL	IL	Madison Co	15TH & MADISON RICHMOND ST.	47.2	5
31	PHILADELPHIA, PA-NJ	PA	Philadelphia Co	AND WHEATSHEAF LANE	47.2	2
32	PHOENIX, AZ	AZ	Maricopa Co	3847 W EARLL, PHOENIX	45.7	5

33	STOCKTON, CA	CA	San Joaquin Co	HAZELTON-HD, STOCKTON	44.8	5
34	PITTSBURGH, PA	PA	Allegheny Co	SYCAMORE ST, NATRONA	44.6	1
35	PHOENIX, AZ	AZ	Maricopa Co	4732 S CENTRAL, PHOENIX	44.5	5
36	CHICAGO, IL	IL	Cook Co	50TH ST. AND GLENCOE CROWN	44.4	4
37	SPOKANE, WA	WA	Spokane Co	ZELLERBACH/E 3530 FERRY 1845 E	44.3	5
38	PHOENIX, AZ	AZ	Maricopa Co	ROOSEVELT, PHOENIX	43.7	3
39	EL PASO, TX	TX	El Paso Co	220 LAWTON ST	43.6	5
40	SACRAMENTO, CA	CA	Yolo Co	117 W MAIN ST, WOODLAND	43.5	1
41	CLEVELAND, OH	OH	Cuyahoga Co	EAST 14TH AND ORANGE, CLEVELAND	43.4	2
42	CHICAGO, IL	IL	Cook Co	ST. FRANCIS SCH., 10155 S. EWING ST.	43.3	3
43	KANSAS CITY, MO-KS	KS	Wyandotte Co	FIRE STA#3 ,420 KANSAS AVE	43.0	5
44	HOUSTON, TX	TX	Harris Co	9525 CLINTON DR	42.8	5
45	DETROIT, MI	MI	Wayne Co	2842 WYOMING	42.5	4
46	FRESNO, CA	CA	Fresno Co	908 N VILLA AVE, CLOVIS	42.4	3
47	CHICAGO, IL	IL	Cook Co	MAYFAIR PUMP STA., 4850 WILSON AVE.	42.3	5
48	SALT LAKE CITY-OGDEN, UT	UT	Salt Lake Co	500 SOUTH 261 WEST SALT LAKE CITY	42.0	5
49	ANAHEIM-SANTA ANA, CA	CA	Orange Co	1610 S. HARBOR BLVD., ANAHEIM	42.0	5
50	RENO, NV	NV	Washoe Co	250 N LAKE ST, RENO	41.9	5

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EL PASO, TX

This table provides summary information for Metropolitan Statistical Area 2320, EL PASO, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.5
Rank by PM-10 Concentration:	55 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	136 (81-186)
Attributable Deaths per 100,000 Population:	28
Rank by Number of Attributable Deaths:	97 of 239
Rank Attributable Death Rate:	138 of 239

Mortality (1989 data)

Total Mortality:	2,987
Adult Cardiopulmonary Deaths:	1,390
Auto Accident Deaths:	110

Population (1980 data)

Total Population:	480,000
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Counties Assigned to MSA

El Paso Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
TX				
El Paso Co				
EL PASO				
10834 IVANHOE, IVANHOE FIRE STATION	22.5	59	1994	4
220 LAWTON ST	43.6	150	1990	5
250 LINDBERGH AVE. LINDBERGH ELEM SCHOOL	22.1	67	1990	5
5587 TRANS MOUNTAIN J HAROLD TILLMAN	21.9	69	1990	5
HLT CT 222 S CAMPBELL S	40.6	179	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S.

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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24-Hour Concentrations - Top 50 PM-10 Hot Spots in MSA's

This table considers monitoring stations within Metropolitan Statistical Areas ranked by the second highest 24-hour PM-10 concentration reported in 1994. The table identifies as "hotspots" the top 50 monitoring stations of the 943 stations for which we have data. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

Rank	Metropolitan Statistical Area	State	County	Address	2nd Highest PM-10 24-Hour Concentration (ug/m ³)
1	PHILADELPHIA, PA-NJ	PA	Philadelphia Co	CASTOR AND CARBON STS ON PGW PROPERTY	371
2	STEUBENVILLE-WEIRTON, OH-WV	WV	Hancock Co	OAK ST AND OWINGS ST-BETWEEN DEAD ENDS	187
3	EL PASO, TX	TX	El Paso Co	J HAROLD TILLMAN HLT CT 222 S CAMPBELL S	169
4	MINNEAPOLIS-ST. PAUL, MN-WI	MN	Ramsey Co	1303 RED ROCK ROAD	155

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5	<u>RIVERSIDE-SAN BERNARDINO, CA</u>	CA	Riverside Co	<u>5888 MISSION BLVD., RUBIDOUX</u>	147
6	<u>PHILADELPHIA, PA-NJ</u>	PA	Philadelphia Co	<u>CASTOR AND DELAWARE AVENUES</u>	146
7	<u>ANCHORAGE, AK</u>	AK	Anchorage Borough	<u>GAMBELL RD/1820 GAMBELL</u>	145
8	<u>CLEVELAND, OH</u>	OH	Cuyahoga Co	<u>4150 EAST 49TH ST</u>	143
8	<u>EUGENE-SPRINGFIELD, OR</u>	OR	Lane Co	<u>47674 SCHOOL ST., OAKRIDGE</u>	143
10	<u>PITTSBURGH, PA</u>	PA	Allegheny Co	<u>2743 WASHINGTON BLVD (MCKEESPORT)</u>	142
11	<u>CHICAGO, IL</u>	IL	Cook Co	<u>50TH ST. AND GLENCOE</u>	140
11	<u>SALT LAKE CITY-OGDEN, UT</u>	UT	Salt Lake Co	<u>500 SOUTH 261 WEST SALT LAKE CITY</u>	140
13	<u>CLEVELAND, OH</u>	OH	Cuyahoga Co	<u>2785 BROADWAY</u>	133
14	<u>BAKERSFIELD, CA</u>	CA	Kern Co	<u>3311 MANOR ST., OILDALE</u>	131
15	<u>NEW YORK, NY-NJ</u>	NY	New York Co	<u>MADISON AVE.STREET CANYON,47TH-48TH STS.</u>	130
16	<u>DETROIT, MI</u>	MI	Wayne Co	<u>2842 WYOMING</u>	129
17	<u>LAS CRUCES, NM</u>	NM	Dona Ana Co	<u>SE CORNER OF ANTHONY ELEM. SCHOOL YARD</u>	126
18	<u>STEUBENVILLE-WEIRTON, OH-WV</u>	OH	Jefferson Co	<u>MINGO CITY HALL 501 COMMERICAL ST</u>	125
19	<u>FRESNO, CA</u>	CA	Fresno Co	<u>4706 E. DRUMMOND ST., FRESNO</u>	124
20	<u>CHICAGO, IL</u>	IL	Will Co	<u>MIDLAND & OTIS, ROCKDALE</u>	122

21	SAN DIEGO, CA	CA	San Diego Co	1100 PASEO INTERNATIONAL, OTAY MESA, CA	121
22	CLEVELAND, OH	OH	Cuyahoga Co	EAST 14TH AND ORANGE, CLEVELAND	120
22	RIVERSIDE-SAN BERNARDINO, CA	CA	San Bernardino Co	14360 ARROW BLVD., FONTANA	120
24	CHICAGO, IL	IL	Cook Co	GRAVES ELEM. SCHOOL 60TH ST. & 74TH AVE.	118
24	RENO, NV	NV	Washoe Co	250 N LAKE ST, RENO	118
26	FRESNO, CA	CA	Fresno Co	3425 N FIRST ST, FRESNO	117
26	LANCASTER, PA	PA	Lancaster Co	MANHEIM PIKE	117
28	SPOKANE, WA	WA	Spokane Co	CROWN ZELLERBACH/E 3530 FERRY	115
29	CHICAGO, IL	IL	Cook Co	MAYFAIR PUMP STA., 4850 WILSON AVE.	114
29	OMAHA, NE-IA	NE	Douglas Co	PUBLIC WORKS BLDG 11TH & NICHOLAS	114
29	PHOENIX, AZ	AZ	Maricopa Co	1475 E PECOS RD, CHANDLER	114
32	CLEVELAND, OH	OH	Cuyahoga Co	2547 ST TIKHON ST	111
32	PITTSBURGH, PA	PA	Allegheny Co	GREENWAY ALLEY, CLAIRTON	111
32	PITTSBURGH, PA	PA	Allegheny Co	HIGH STREET WATER TOWER, GLASSPORT, PA	111
35	RENO, NV	NV	Washoe Co	305 GALLETTI WAY RENO	110
36	HUNTINGTON-ASHLAND, WV-KY-OH	KY	Boyd Co	ECONOMIC SECURITY BLDG 19TH & CARTER	109
37	DENVER-BOULDER, CO	CO	Adams Co	4301 E 72ND AVE (ADAMS CITY)	107

37	<u>DETROIT, MI</u>	MI	Wayne Co	<u>6921 WEST FORT ST. CHARLES</u>	107
37	<u>NEWARK, NJ</u>	NJ	Essex Co	<u>BETWEEN KOSSUTH & KAMERON ST</u>	107
37	<u>ST. LOUIS, MO-IL</u>	IL	Madison Co	<u>VFW BUILDING, 2044 WASHINGTON AVE</u> <u>355 NEWARK</u>	107
41	<u>JERSEY CITY, NJ</u>	NJ	Hudson Co	<u>AVE,CONSOLIDATED FIRE HOUSE</u>	106
41	<u>STEUBENVILLE-WEIRTON, OH-WV</u>	OH	Jefferson Co	<u>1004 THIRD ST.</u>	106
43	<u>SALT LAKE CITY-OGDEN, UT</u>	UT	Salt Lake Co	<u>2935 SOUTH 8560 WEST MAGNA,UTAH</u>	105
44	<u>HOUSTON, TX</u>	TX	Harris Co	<u>9525 CLINTON DR</u>	104
44	<u>PROVO-OREM, UT</u>	UT	Utah Co	<u>30 NORTH MAIN STREET, LINDON, UTAH</u>	104
46	<u>RICHLAND-KENNEWICK-PASCO, WA</u>	WA	Benton Co	<u>COLUMBIA CENTER/556 COLUMBIA CENTER BLVD</u>	103
47	<u>BOISE CITY, ID</u>	ID	Ada Co	<u>FIRE STATION #5/16TH & FRONT</u>	102
47	<u>EUGENE-SPRINGFIELD, OR</u>	OR	Lane Co	<u>KEY BANK/450 PACIFIC HWY N</u>	102
47	<u>EVANSVILLE, IN-KY</u>	KY	Henderson Co	<u>GREEN STREET HENDERSON KY</u>	102
47	<u>SALT LAKE CITY-OGDEN, UT</u>	UT	Weber Co	<u>HEALTH DEPT BLDG, 2570 GRANT AVE</u>	102

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ANCHORAGE, AK

This table provides summary information for Metropolitan Statistical Area 0380, ANCHORAGE, AK. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.0
Rank by PM-10 Concentration:	110 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	19 (11-27)
Attributable Deaths per 100,000 Population:	11
Rank by Number of Attributable Deaths:	218 of 239
Rank Attributable Death Rate:	224 of 239

Mortality (1989 data)

Total Mortality:	636
Adult Cardiopulmonary Deaths:	254
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	173,000
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Counties Assigned to MSA

Anchorage Borough, AK

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AK				
Anchorage Borough				
18001 BARANOF ST EAGLE RIVER	18.3	121	1992	3
18216 BARONOF ST, EAGLE RIVER	24.8	148	1991	2
CITY FIRE STATION/7TH & C ST	26.7	94	1990	1
PARKGATE-EAGLE RIVER, EAGLE RIVER	25.9	107	1992	5
ANCHORAGE				
GAMBELL RD/1820 GAMBELL	38.1	<i>161</i>	1993	5
OCEAN VIEW ELEM/11911 JOHNS RD	23.6	133	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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EUGENE-SPRINGFIELD, OR

This table provides summary information for Metropolitan Statistical Area 2400, EUGENE-SPRINGFIELD, OR. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.0
Rank by PM-10 Concentration:	90 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	89 (53-123)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	129 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	2,224
Adult Cardiopulmonary Deaths:	1,079
Auto Accident Deaths:	69

Population (1980 data)

Total Population:	275,000
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Counties Assigned to MSA

Lane Co, OR

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
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OR

Lane Co

EUGENE

KEY BANK/450 PACIFIC HWY N	31.4	<i>121</i>	1991	5
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LANE COMM COLLEGE/1059 WILLAMETTE	24.4	73	1991	5
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OAKRIDGE

47674 SCHOOL ST., OAKRIDGE	30.1	<i>161</i>	1992	3
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SPRINGFIELD

CITY HALL/225 N 5TH	27.0	89	1991	5
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Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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JERSEY CITY, NJ

This table provides summary information for Metropolitan Statistical Area 3640, JERSEY CITY, NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.4
Rank by PM-10 Concentration:	69 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	222 (132-306)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	60 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	5,283
Adult Cardiopulmonary Deaths:	2,450
Auto Accident Deaths:	53

Population (1980 data)

Total Population:	557,000
-------------------	---------

Counties Assigned to MSA

Hudson Co, NJ

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NJ				
Hudson Co				
BAYONNE				
MUNICIPAL BUILDING; AVE.C	27.0	80	1994	5
JERSEY CITY				
355 NEWARK AVE,CONSOLIDATED FIRE HOUSE	34.8	<i>106</i>	1994	5
555 DUNCAN AVENUE	26.5	85	1994	5
UNION CITY				
HEALTH DEPARTMENT, 714 31ST STREET	29.2	88	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		
Bold <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)</i>		
Italic <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.</i>		
<i>Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.</i>		
<i>Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.</i>		



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RICHLAND-KENNEWICK-PASCO, WA

This table provides summary information for Metropolitan Statistical Area 6740, RICHLAND-KENNEWICK-PASCO, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.0
Rank by PM-10 Concentration:	62 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	45 (27-62)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	177 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	905
Adult Cardiopulmonary Deaths:	476
Auto Accident Deaths:	29

Population (1980 data)

Total Population:	144,000
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Counties Assigned to MSA

Benton Co, WA
Franklin Co, WA

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WA Benton Co KENNEWICK COLUMBIA CENTER/556 COLUMBIA CENTER BLVD	30.0	382	1990	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994.

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Alabama: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Alabama. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
ANNISTON, AL	26.1	38	22 - 52	32	535	40
BIRMINGHAM, AL	30.3	379	225 - 521	45	3,940	226
COLUMBUS, GA-AL	26.6	76	45 - 105	32	1,025	48

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<u>FLORENCE, AL</u>	22.2	30	17 - 41	22	631	30
<u>GADSDEN, AL</u>	31.7	73	43 - 100	71	694	30
<u>HUNTSVILLE, AL</u>	25.2	98	58 - 135	32	1,494	96
<u>MOBILE, AL</u>	31.4	202	120 - 278	46	1,967	106
<u>MONTGOMERY, AL</u>	23.8	71	42 - 99	26	1,262	53
<u>TUSCALOOSA, AL</u>	27.4	46	27 - 63	34	577	38

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ANNISTON, AL

This table provides summary information for Metropolitan Statistical Area 0450, ANNISTON, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.1
Rank by PM-10 Concentration:	126 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	38 (22-52)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	186 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	1,094
Adult Cardiopulmonary Deaths:	535
Auto Accident Deaths:	40

Population (1980 data)

Total Population:	117,000
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Counties Assigned to MSA

Calhoun Co, AL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
AL Calhoun Co ANNISTON 309 EAST 8TH STREET	26.1	78	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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COLUMBUS, GA-AL

This table provides summary information for Metropolitan Statistical Area 1800, COLUMBUS, GA-AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.6
Rank by PM-10 Concentration:	115 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	76 (45-105)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	138 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	1,953
Adult Cardiopulmonary Deaths:	1,025
Auto Accident Deaths:	48

Population (1980 data)

Total Population:	239,000
-------------------	---------

Counties Assigned to MSA

Russell Co, AL
Chattahoochee Co, GA

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Muscogee Co, GA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AL				
Russell Co				
PHENIX CITY				
COUNTY HEALTH DEPT 1320 BROAD STREET	26.6	75	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FLORENCE, AL

This table provides summary information for Metropolitan Statistical Area 2650, FLORENCE, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.2
Rank by PM-10 Concentration:	194 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	30 (17-41)
Attributable Deaths per 100,000 Population:	22
Rank by Number of Attributable Deaths:	203 of 239
Rank Attributable Death Rate:	179 of 239

Mortality (1989 data)

Total Mortality:	1,216
Adult Cardiopulmonary Deaths:	631
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	135,000
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Counties Assigned to MSA

Colbert Co, AL

Lauderdale Co, AL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AL Colbert Co MUSCLE SHOALS WILSON DAM RD AND 2ND ST.	22.2	57	1991	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

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HUNTSVILLE, AL

This table provides summary information for Metropolitan Statistical Area 3440, HUNTSVILLE, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.2
Rank by PM-10 Concentration:	137 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	98 (58-135)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	122 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	2,721
Adult Cardiopulmonary Deaths:	1,494
Auto Accident Deaths:	96

Population (1980 data)

Total Population:	309,000
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Counties Assigned to MSA

Limestone Co, AL

Madison Co, AL

Marshall Co, AL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
AL				
Madison Co				
HUNTSVILLE				
11525 SO PARKWAY	27.6	67	1991	4
5006 PULASKI PIKE	24.0	61	1991	3
HUNTSVILLE OLD AIRPORT ROAD.	26.5	65	1990	5
MADISON STREET	25.6	64	1991	5
NOAA STATION (JETPORT)	23.7	61	1991	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MONTGOMERY, AL

This table provides summary information for Metropolitan Statistical Area 5240, MONTGOMERY, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.8
Rank by PM-10 Concentration:	163 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	71 (42-99)
Attributable Deaths per 100,000 Population:	26
Rank by Number of Attributable Deaths:	143 of 239
Rank Attributable Death Rate:	150 of 239

Mortality (1989 data)

Total Mortality:	2,435
Adult Cardiopulmonary Deaths:	1,262
Auto Accident Deaths:	53

Population (1980 data)

Total Population:	273,000
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Counties Assigned to MSA

Elmore Co, AL
Montgomery Co, AL

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AL				
Montgomery Co				
1890 DICKENSON DRIVE, MONTGOMERY, AL.	24.8	44	1994	2
P.O. BOX 114, GRADY ALA. 36036	21.2	60	1990	3
MONTGOMERY				
CATHOLIC CHURCH CENTER 2815 FORBES DRIVE	24.9	60	1991	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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TUSCALOOSA, AL

This table provides summary information for Metropolitan Statistical Area 8600, TUSCALOOSA, AL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.4
Rank by PM-10 Concentration:	101 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	46 (27-63)
Attributable Deaths per 100,000 Population:	34
Rank by Number of Attributable Deaths:	172 of 239
Rank Attributable Death Rate:	98 of 239

Mortality (1989 data)

Total Mortality:	1,148
Adult Cardiopulmonary Deaths:	577
Auto Accident Deaths:	38

Population (1980 data)

Total Population:	137,000
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Counties Assigned to MSA

Tuscaloosa Co, AL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AL Tuscaloosa Co TUSCALOOSA AIR POLLUTION TRAILER BRYCE HOSPITAL	27.4	70	1990	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Kentucky: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Kentucky. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
CINCINNATI-HAMILTON, OH-KY-IN	30.2	617	366 - 848	44	6,438	213
EVANSVILLE, IN-KY	30.9	162	96 - 222	52	1,627	46

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<u>HUNTINGTON- ASHLAND, WV-KY-OH</u>	31.4	166	99 - 228	53	1,617	52
<u>LEXINGTON- FAYETTE, KY</u>	27.1	87	51 - 120	27	1,130	55
<u>LOUISVILLE, KY-IN</u>	29.7	392	232 - 539	43	4,230	129
<u>OWENSBORO, KY</u>	28.7	36	21 - 50	42	420	12

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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LEXINGTON-FAYETTE, KY

This table provides summary information for Metropolitan Statistical Area 4280, LEXINGTON-FAYETTE, KY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.1
Rank by PM-10 Concentration:	109 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	87 (51-120)
Attributable Deaths per 100,000 Population:	27
Rank by Number of Attributable Deaths:	132 of 239
Rank Attributable Death Rate:	143 of 239

Mortality (1989 data)

Total Mortality:	2,446
Adult Cardiopulmonary Deaths:	1,130
Auto Accident Deaths:	55

Population (1980 data)

Total Population:	318,000
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Counties Assigned to MSA

Bourbon Co, KY

Clark Co, KY

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Fayette Co, KY
 Jessamine Co, KY
 Scott Co, KY
 Woodford Co, KY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
KY				
Fayette Co				
LEXINGTON-FAYETTE				
650 NEWTOWN PIKE	25.9	80	1994	5
SO. LIMESTONE AND MONTMULLEN ST.	27.7	67	1994	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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OWENSBORO, KY

This table provides summary information for Metropolitan Statistical Area 5990, OWENSBORO, KY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.7
Rank by PM-10 Concentration:	79 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	36 (21-50)
Attributable Deaths per 100,000 Population:	42
Rank by Number of Attributable Deaths:	192 of 239
Rank Attributable Death Rate:	58 of 239

Mortality (1989 data)

Total Mortality:	804
Adult Cardiopulmonary Deaths:	420
Auto Accident Deaths:	12

Population (1980 data)

Total Population:	86,000
-------------------	--------

Counties Assigned to MSA

Daviess Co, KY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
--	---	---	------------------------------------	--------------------

KY

Daviess Co

OWENSBORO

COUNTY HEALTH DEPT 1316 W 4TH ST	30.5	71	1990	5
DAVIESS CO JR HIGH SCH 1415 E 4TH ST	27.8	90	1994	5
WYNDALL SHPG CTR US 60 & PLSNT VALLEY RD	27.7	93	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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North Dakota: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of North Dakota. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
BISMARK, ND	20.6	12	7 - 16	15	319	12
FARGO-MOORHEAD, ND-MN	19.3	14	8 - 19	10	496	15

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GRAND

FORKS, ND-

MN

19.4

11

7 - 16

11

400

12

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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BISMARK, ND

This table provides summary information for Metropolitan Statistical Area 1010, BISMARK, ND. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.6
Rank by PM-10 Concentration:	216 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	12 (7-16)
Attributable Deaths per 100,000 Population:	15
Rank by Number of Attributable Deaths:	234 of 239
Rank Attributable Death Rate:	212 of 239

Mortality (1989 data)

Total Mortality:	612
Adult Cardiopulmonary Deaths:	319
Auto Accident Deaths:	12

Population (1980 data)

Total Population:	80,000
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Counties Assigned to MSA

Burleigh Co, ND
Morton Co, ND

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
ND Burleigh Co BISMARCK MEMORIAL BUILDING 215 N 6TH ST	20.6	84	1990	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FARGO-MOORHEAD, ND-MN

This table provides summary information for Metropolitan Statistical Area 2520, FARGO-MOORHEAD, ND-MN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	19.3
Rank by PM-10 Concentration:	226 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	14 (8-19)
Attributable Deaths per 100,000 Population:	10
Rank by Number of Attributable Deaths:	230 of 239
Rank Attributable Death Rate:	227 of 239

Mortality (1989 data)

Total Mortality:	953
Adult Cardiopulmonary Deaths:	496
Auto Accident Deaths:	15

Population (1980 data)

Total Population:	138,000
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Counties Assigned to MSA

Clay Co, MN

Cass Co, ND

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
ND				
Cass Co				
FARGO				
FARGO COMMERCIAL	19.3	63	1990	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GRAND FORKS, ND-MN

This table provides summary information for Metropolitan Statistical Area 2985, GRAND FORKS, ND-MN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	19.4
Rank by PM-10 Concentration:	224 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	11 (7-16)
Attributable Deaths per 100,000 Population:	11
Rank by Number of Attributable Deaths:	235 of 239
Rank Attributable Death Rate:	224 of 239

Mortality (1989 data)

Total Mortality:	725
Adult Cardiopulmonary Deaths:	400
Auto Accident Deaths:	12

Population (1980 data)

Total Population:	101,000
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Counties Assigned to MSA

Polk Co, MN

Grand Forks Co, ND

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
ND Grand Forks Co GRAND FORKS GRAND FORKS COMMERCIAL	19.4	104	1990	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Alaska: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Alaska. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
ANCHORAGE, AK	27.0	19	11 - 27	11	254	30

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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Louisiana: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Louisiana. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
ALEXANDRIA, LA	22.8	35	21 - 48	23	697	45
BATON ROUGE, LA	26.2	122	72 - 168	25	1,705	97

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<u>LAKE CHARLES, LA</u>	22.8	38	22 - 52	23	744	41
<u>MONROE, LA</u>	29.1	53	32 - 73	38	598	31
<u>NEW ORLEANS, LA</u>	26.9	369	218 - 509	31	4,894	167
<u>SHREVEPORT, LA</u>	24.7	110	65 - 152	29	1,756	59

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ALEXANDRIA, LA

This table provides summary information for Metropolitan Statistical Area 0220, ALEXANDRIA, LA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.8
Rank by PM-10 Concentration:	184 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	35 (21-48)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	194 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	1,397
Adult Cardiopulmonary Deaths:	697
Auto Accident Deaths:	45

Population (1980 data)

Total Population:	152,000
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Counties Assigned to MSA

Grant Par, LA

Rapides Par, LA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
LA Rapides Par ALEXANDRIA 1200 TEXAS AVENUE	22.8	49	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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BATON ROUGE, LA

This table provides summary information for Metropolitan Statistical Area 0760, BATON ROUGE, LA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.2
Rank by PM-10 Concentration:	125 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	122 (72-168)
Attributable Deaths per 100,000 Population:	25
Rank by Number of Attributable Deaths:	106 of 239
Rank Attributable Death Rate:	157 of 239

Mortality (1989 data)

Total Mortality:	3,510
Adult Cardiopulmonary Deaths:	1,705
Auto Accident Deaths:	97

Population (1980 data)

Total Population:	494,000
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Counties Assigned to MSA

Ascension Par, LA
East Baton Rouge Par, LA

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Livingston Par, LA
 West Baton Rouge Par, LA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
LA				
East Baton Rouge Par				
BATON ROUGE				
3142 EVANGELINE STREET	28.1	66	1992	5
West Baton Rouge Par				
PORT ALLEN				
HIGHWAY 1	24.2	70	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LAKE CHARLES, LA

This table provides summary information for Metropolitan Statistical Area 3960, LAKE CHARLES, LA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.8
Rank by PM-10 Concentration:	183 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	38 (22-52)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	186 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	1,459
Adult Cardiopulmonary Deaths:	744
Auto Accident Deaths:	41

Population (1980 data)

Total Population:	167,000
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Counties Assigned to MSA

Calcasieu Par, LA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
LA Calcasieu Par LAKE CHARLES MCNEESE STATE COLLEGE RYAN & MCNEESE ST	22.8	75	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MONROE, LA

This table provides summary information for Metropolitan Statistical Area 5200, MONROE, LA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.1
Rank by PM-10 Concentration:	72 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	53 (32-73)
Attributable Deaths per 100,000 Population:	38
Rank by Number of Attributable Deaths:	162 of 239
Rank Attributable Death Rate:	79 of 239

Mortality (1989 data)

Total Mortality:	1,123
Adult Cardiopulmonary Deaths:	598
Auto Accident Deaths:	31

Population (1980 data)

Total Population:	139,000
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Counties Assigned to MSA

Ouachita Par, LA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
LA Ouachita Par MONROE 4709 CONSTRUCTION AVENUE	29.1	99	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SHREVEPORT, LA

This table provides summary information for Metropolitan Statistical Area 7680, SHREVEPORT, LA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.7
Rank by PM-10 Concentration:	149 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	110 (65-152)
Attributable Deaths per 100,000 Population:	29
Rank by Number of Attributable Deaths:	115 of 239
Rank Attributable Death Rate:	132 of 239

Mortality (1989 data)

Total Mortality:	3,415
Adult Cardiopulmonary Deaths:	1,756
Auto Accident Deaths:	59

Population (1980 data)

Total Population:	377,000
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Counties Assigned to MSA

Bossier Par, LA
Caddo Par, LA

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Webster Par, LA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
LA				
Bossier Par				
SHREVEPORT				
SHREVEPORT MUNICIPAL AIRPORT	24.2	100	1991	5
Caddo Par				
CLAIBORNE STREET	25.4	75	1993	2
SHREVEPORT				
HEALTH UNIT BUILDING 1866 KINGS HIGHWAY	25.2	55	1990	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Ohio: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Ohio. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Deaths (1989)	Deaths from Pulmonary Auto Accidents (1989)
		Point Estimate	Range			
AKRON, OH	27.5	206	122 - 284	31	2,600	34
CANTON, OH	27.2	152	90 - 210	38	1,959	57
CINCINNATI-HAMILTON, OH-KY-IN	30.2	617	366 - 848	44	6,438	213

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<u>CLEVELAND, OH</u>	35.6	1,161	694 - 1,585	61	9,099	216
<u>COLUMBUS, OH</u>	28.9	360	214 - 496	33	4,107	166
<u>DAYTON, OH</u>	25.1	220	129 - 304	27	3,408	113
<u>HAMILTON- MIDDLETOWN, OH</u>	31.3	116	69 - 160	45	1,137	51
<u>HUNTINGTON- ASHLAND, WV- KY-OH</u>	31.4	166	99 - 228	53	1,617	52
<u>LORAIN- ELYRIA, OH</u>	29.2	101	60 - 139	37	1,132	52
<u>MANSFIELD, OH</u>	27.8	46	27 - 63	35	565	13
<u>PARKERSBURG- MARIETTA, WV- OH</u>	27.2	60	36 - 83	37	779	30
<u>STEUBENVILLE- WEIRTON, OH- WV</u>	36.6	127	76 - 173	78	953	24
<u>TOLEDO, OH-MI</u>	26.3	257	152 - 355	32	3,569	191
<u>WHEELING, WV- OH</u>	29.8	104	62 - 143	56	1,114	23
<u>YOUNGSTOWN- WARREN, OH</u>	27.6	210	124 - 290	40	2,629	83

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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AKRON, OH

This table provides summary information for Metropolitan Statistical Area 0080, AKRON, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.5
Rank by PM-10 Concentration:	99 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	206 (122-284)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	66 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	5,301
Adult Cardiopulmonary Deaths:	2,600
Auto Accident Deaths:	34

Population (1980 data)

Total Population:	660,000
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Counties Assigned to MSA

Portage Co, OH
Summit Co, OH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
OH				
Summit Co				
AKRON				
177 S BROADWAY	28.3	64	1993	4
EAST HIGH SCHOOL 80 BRITTAIN ROAD	26.8	62	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CANTON, OH

This table provides summary information for Metropolitan Statistical Area 1320, CANTON, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.2
Rank by PM-10 Concentration:	106 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	152 (90-210)
Attributable Deaths per 100,000 Population:	38
Rank by Number of Attributable Deaths:	91 of 239
Rank Attributable Death Rate:	79 of 239

Mortality (1989 data)

Total Mortality:	3,730
Adult Cardiopulmonary Deaths:	1,959
Auto Accident Deaths:	57

Population (1980 data)

Total Population:	404,000
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Counties Assigned to MSA

Carroll Co, OH
Stark Co, OH

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OH				
Stark Co				
420 MARKET AVE., NORTH, CANTON	23.1	61	1994	2
ALLIANCE				
1010 N. WALNUT ST., ALLIANCE	26.6	68	1990	4
CANTON				
1330 DUEBER AVENUE SW	31.3	71	1990	5
1901 MIDWAY NE., CANTON	25.9	61	1991	5
CITY HALL 218 S CLEVELAND AVE	25.9	72	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		
Bold <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)</i>		
<i>Italic</i> <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)</i>		
<i>Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.</i>		
<i>Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.</i>		



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DAYTON, OH

This table provides summary information for Metropolitan Statistical Area 2000, DAYTON, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.1
Rank by PM-10 Concentration:	139 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	220 (129-304)
Attributable Deaths per 100,000 Population:	27
Rank by Number of Attributable Deaths:	61 of 239
Rank Attributable Death Rate:	143 of 239

Mortality (1989 data)

Total Mortality:	6,683
Adult Cardiopulmonary Deaths:	3,408
Auto Accident Deaths:	113

Population (1980 data)

Total Population:	830,000
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Counties Assigned to MSA

Greene Co, OH
Miami Co, OH

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Montgomery Co, OH

Preble Co, OH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OH				
Greene Co				
FAIRBORN				
ROHNER ROAD	23.2	57	1990	5
Montgomery Co				
7056 MCEWEN RD., MONTGOMERY CTY	22.5	57	1990	5
DAYTON				
38 E. MONUMENT	28.1	72	1990	5
MORaine				
2728 VIKING LANE	26.5	70	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LORAIN-ELYRIA, OH

This table provides summary information for Metropolitan Statistical Area 4440, LORAIN-ELYRIA, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.2
Rank by PM-10 Concentration:	70 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	101 (60-139)
Attributable Deaths per 100,000 Population:	37
Rank by Number of Attributable Deaths:	120 of 239
Rank Attributable Death Rate:	85 of 239

Mortality (1989 data)

Total Mortality:	2,166
Adult Cardiopulmonary Deaths:	1,132
Auto Accident Deaths:	52

Population (1980 data)

Total Population:	275,000
-------------------	---------

Counties Assigned to MSA

Lorain Co, OH

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OH Lorain Co LORAIN 'G' STREET AND KANSAS AVE.	29.2	74	1992	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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MANSFIELD, OH

This table provides summary information for Metropolitan Statistical Area 4800, MANSFIELD, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.8
Rank by PM-10 Concentration:	92 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	46 (27-63)
Attributable Deaths per 100,000 Population:	35
Rank by Number of Attributable Deaths:	172 of 239
Rank Attributable Death Rate:	96 of 239

Mortality (1989 data)

Total Mortality:	1,036
Adult Cardiopulmonary Deaths:	565
Auto Accident Deaths:	13

Population (1980 data)

Total Population:	131,000
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Counties Assigned to MSA

Richland Co, OH

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OH Richland Co MANSFIELD 277 NORTH MAIN STREET	27.8	68	1992	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PARKERSBURG-MARIETTA, WV-OH

This table provides summary information for Metropolitan Statistical Area 6020, PARKERSBURG-MARIETTA, WV-OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.2
Rank by PM-10 Concentration:	107 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	60 (36-83)
Attributable Deaths per 100,000 Population:	37
Rank by Number of Attributable Deaths:	154 of 239
Rank Attributable Death Rate:	85 of 239

Mortality (1989 data)

Total Mortality:	1,527
Adult Cardiopulmonary Deaths:	779
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	163,000
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Counties Assigned to MSA

Washington Co, OH
Wirt Co, WV

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Wood Co, WV

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WV Wood Co VIENNA NEALE SCHOOL VIENNA WV	27.2	58	1992	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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TOLEDO, OH-MI

This table provides summary information for Metropolitan Statistical Area 8400, TOLEDO, OH-MI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.3
Rank by PM-10 Concentration:	121 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	257 (152-355)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	53 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	6,523
Adult Cardiopulmonary Deaths:	3,569
Auto Accident Deaths:	191

Population (1980 data)

Total Population:	792,000
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Counties Assigned to MSA

Monroe Co, MI
Fulton Co, OH

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Lucas Co, OH
 Ottawa Co, OH
 Wood Co, OH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MI				
Monroe Co				
MONROE				
FIRST ST. AND CONANT	26.0	62	1990	5
OH				
Lucas Co				
TOLEDO				
POLL. CONT. DIV. 26 MAIN ST.	26.2	66	1993	4
SEWAGE PUMPING STATION LEE & FRONT STS	26.9	63	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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YOUNGSTOWN-WARREN, OH

This table provides summary information for Metropolitan Statistical Area 9320, YOUNGSTOWN-WARREN, OH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.6
Rank by PM-10 Concentration:	94 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	210 (124-290)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	64 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	4,985
Adult Cardiopulmonary Deaths:	2,629
Auto Accident Deaths:	83

Population (1980 data)

Total Population:	531,000
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Counties Assigned to MSA

Mahoning Co, OH
Trumbull Co, OH

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
OH				
Mahoning Co				
YOUNGSTOWN				
FIRE STAION 5, SUPERIOR & OAKLAND	28.5	85	1990	5
FIRE STATION 7, ELM & MADISON	30.0	85	1991	5
Trumbull Co				
WARREN				
2323 MAIN AVE. SW	23.9	73	1992	4
540 LAIRD AVE., SE WARREN	26.8	83	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Arizona: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Arizona. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
PHOENIX, AZ	39.5	1,110	667 - 1,507	74	7,420	411
TUCSON, AZ	26.8	195	115 - 269	37	2,594	115

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived

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from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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TUCSON, AZ

This table provides summary information for Metropolitan Statistical Area 8520, TUCSON, AZ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.8
Rank by PM-10 Concentration:	113 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	195 (115-269)
Attributable Deaths per 100,000 Population:	37
Rank by Number of Attributable Deaths:	71 of 239
Rank Attributable Death Rate:	85 of 239

Mortality (1989 data)

Total Mortality:	5,138
Adult Cardiopulmonary Deaths:	2,594
Auto Accident Deaths:	115

Population (1980 data)

Total Population:	531,000
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Counties Assigned to MSA

Pima Co, AZ

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AZ				
Pima Co				
AJO				
AZ HWY DEPT YARD- WELL RD, AJO	23.1	45	1993	2
GREEN VALLEY				
245 W ESPERANZA, GREEN VALLEY	16.2	59	1990	5
RILLITO				
8820 W WATER ST, RILLITO	34.0	107	1991	5
SOUTH TUCSON				
1810 S 6TH AVE, SOUTH TUCSON	33.9	108	1990	5
TUCSON				
1016 W PRINCE RD, TUCSON	27.2	70	1991	4
2181 S HARRISON RD, TUCSON	20.5	61	1990	5
3401 W ORANGE GROVE RD, TUCSON	31.3	116	1990	5
4575 E BROADWAY, TUCSON	31.0	61	1990	1
4625 E BROADWAY AT SWAN, TUCSON	25.5	56	1992	5
7290 E TANQUE VERDE, TUCSON	22.3	58	1990	4
U OF AZ-2ND & PALM, TUCSON	29.7	72	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	<i>50</i>	<i>150</i>
<i>California Ambient Air Quality Standards:</i>	<i>30</i>	<i>50</i>
<i>NRDC Recommended Standards:</i>	<i>17</i>	<i>33</i>

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Maine: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Maine. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BANGOR, ME	19.5	17	10 - 24	12	594	21
LEWISTON-AUBURN, ME	24.3	33	19 - 46	33	550	20
PORTLAND, ME	22.7	57	33 - 79	23	1,147	29

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18.7 43 25 - 59 10 1,751 74

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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BANGOR, ME

This table provides summary information for Metropolitan Statistical Area 0730, BANGOR, ME. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	19.5
Rank by PM-10 Concentration:	223 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	17 (10-24)
Attributable Deaths per 100,000 Population:	12
Rank by Number of Attributable Deaths:	223 of 239
Rank Attributable Death Rate:	221 of 239

Mortality (1989 data)

Total Mortality:	1,164
Adult Cardiopulmonary Deaths:	594
Auto Accident Deaths:	21

Population (1980 data)

Total Population:	137,000
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Counties Assigned to MSA

Penobscot Co, ME

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
ME				
Penobscot Co				
BANGOR				
PUMP STATION- WASHINGTON ST.	22.3	70	1992	5
BREWER				
JUNIOR HIGH SCH- SOMERSET ST.	20.5	63	1993	3
LINCOLN				
THOMAS MOT. TRA. PRK.-BROADWAY	17.5	49	1990	4
MILLINOCKET				
YORK STREET- MILLINOCKET	17.2	66	1991	5
OLD TOWN				
MARSH ISLAND APTS-S. MAIN ST.	20.4	78	1992	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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LEWISTON-AUBURN, ME

This table provides summary information for Metropolitan Statistical Area 4240, LEWISTON-AUBURN, ME. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.3
Rank by PM-10 Concentration:	155 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	33 (19-46)
Attributable Deaths per 100,000 Population:	33
Rank by Number of Attributable Deaths:	197 of 239
Rank Attributable Death Rate:	102 of 239

Mortality (1989 data)

Total Mortality:	1,024
Adult Cardiopulmonary Deaths:	550
Auto Accident Deaths:	20

Population (1980 data)

Total Population:	100,000
-------------------	---------

Counties Assigned to MSA

Androscoggin Co, ME

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
ME Androscoggin Co LEWISTON COUNTRY KITCHEN LOT-CANAL ST	24.3	68	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PORTLAND, ME

This table provides summary information for Metropolitan Statistical Area 6400, PORTLAND, ME. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.7
Rank by PM-10 Concentration:	187 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	57 (33-79)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	157 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	2,267
Adult Cardiopulmonary Deaths:	1,147
Auto Accident Deaths:	29

Population (1980 data)

Total Population:	245,000
-------------------	---------

Counties Assigned to MSA

Cumberland Co, ME
Sagadahoc Co, ME

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
ME				
Cumberland Co				
PORTLAND				
SHELTER SITE-OXFORD & ELM ST	22.5	57	1992	5
TUKEY'S BRIDGE-BEAN POT RD.	26.8	91	1993	4
SOUTH PORTLAND				
130 WESCOTT ROAD, SOUTH PORTLAND	19.5	50	1994	2
WESTBROOK				
RESEARCH BUILDING- WARREN AVE	20.2	63	1992	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PORTSMOUTH-DOVER-ROCHESTER, NH-ME

This table provides summary information for Metropolitan Statistical Area 6450, PORTSMOUTH-DOVER-ROCHESTER, NH-ME. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	18.7
Rank by PM-10 Concentration:	232 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.02
Adult Cardiopulmonary Attributable Deaths:	43 (25-59)
Attributable Deaths per 100,000 Population:	10
Rank by Number of Attributable Deaths:	180 of 239
Rank Attributable Death Rate:	227 of 239

Mortality (1989 data)

Total Mortality:	3,498
Adult Cardiopulmonary Deaths:	1,751
Auto Accident Deaths:	74

Population (1980 data)

Total Population:	415,000
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Counties Assigned to MSA

York Co, ME
Rockingham Co, NH

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Strafford Co, NH

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
ME				
York Co				
57 BIRCH STREET EAGLES AERIE	18.6	41	1994	2
BIDDEFORD				
TREATMENT PLANT- WATER ST.	20.2	59	1991	4
NH				
Rockingham Co				
PORTSMOUTH				
VAUGHAN STREET	18.8	63	1992	5
Strafford Co				
DOVER				
CENTRAL AVE	17.4	50	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Oklahoma: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Oklahoma. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
FORT SMITH, AR-OK	24.5	73	43 - 100	36	1,189	52
LAWTON, OK	28.3	30	18 - 41	27	352	18

[FORT](#)

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<u>OKLAHOMA</u>	22.2	169	100 - 235	20	3,651	164
<u>CITY, OK</u>						
<u>TULSA, OK</u>	25.0	205	121 - 284	30	3,193	156

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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FORT SMITH, AR-OK

This table provides summary information for Metropolitan Statistical Area 2720, FORT SMITH, AR-OK. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.5
Rank by PM-10 Concentration:	151 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	73 (43-100)
Attributable Deaths per 100,000 Population:	36
Rank by Number of Attributable Deaths:	139 of 239
Rank Attributable Death Rate:	91 of 239

Mortality (1989 data)

Total Mortality:	2,099
Adult Cardiopulmonary Deaths:	1,189
Auto Accident Deaths:	52

Population (1980 data)

Total Population:	203,000
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Counties Assigned to MSA

Crawford Co, AR
Sebastian Co, AR

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Le Flore Co, OK
 Sequoyah Co, OK

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
AR				
Sebastian Co				
FORT SMITH				
MAIN FIRE STA 5TH & B STREETS	24.5	60	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LAWTON, OK

This table provides summary information for Metropolitan Statistical Area 4200, LAWTON, OK. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.3
Rank by PM-10 Concentration:	86 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	30 (18-41)
Attributable Deaths per 100,000 Population:	27
Rank by Number of Attributable Deaths:	203 of 239
Rank Attributable Death Rate:	143 of 239

Mortality (1989 data)

Total Mortality:	682
Adult Cardiopulmonary Deaths:	352
Auto Accident Deaths:	18

Population (1980 data)

Total Population:	112,000
-------------------	---------

Counties Assigned to MSA

Comanche Co, OK

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
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OK

Comanche Co

LAWTON

COUNTY HEALTH DEPT	28.3	73	1990	4
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Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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OKLAHOMA CITY, OK

This table provides summary information for Metropolitan Statistical Area 5880, OKLAHOMA CITY, OK. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.2
Rank by PM-10 Concentration:	195 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	169 (100-235)
Attributable Deaths per 100,000 Population:	20
Rank by Number of Attributable Deaths:	82 of 239
Rank Attributable Death Rate:	193 of 239

Mortality (1989 data)

Total Mortality:	7,057
Adult Cardiopulmonary Deaths:	3,651
Auto Accident Deaths:	164

Population (1980 data)

Total Population:	834,000
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Counties Assigned to MSA

Canadian Co, OK
Cleveland Co, OK

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McClain Co, OK
 Oklahoma Co, OK
 Pottawatomie Co, OK

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
OK				
Cleveland Co				
NORMAN				
HEALTH DEPT	23.3	53	1992	5
Oklahoma Co				
EDMOND				
14TH & SOUTH BROADWAY	23.2	59	1992	2
MIDWEST CITY				
300 MID AMERICA BLVD	20.7	54	1992	5
OKLAHOMA CITY				
N.W. 5TH AND SHARTEL, OKLAHOMA CITY	24.3	59	1990	5
SE 66TH AND SEARS	21.8	53	1992	5
SW 66TH & DENNING	20.3	57	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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TULSA, OK

This table provides summary information for Metropolitan Statistical Area 8560, TULSA, OK. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.0
Rank by PM-10 Concentration:	140 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	205 (121-284)
Attributable Deaths per 100,000 Population:	30
Rank by Number of Attributable Deaths:	68 of 239
Rank Attributable Death Rate:	126 of 239

Mortality (1989 data)

Total Mortality:	5,887
Adult Cardiopulmonary Deaths:	3,193
Auto Accident Deaths:	156

Population (1980 data)

Total Population:	690,000
-------------------	---------

Counties Assigned to MSA

Creek Co, OK
Mayes Co, OK

Osage Co, OK
 Rogers Co, OK
 Tulsa Co, OK
 Wagoner Co, OK

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
OK				
Mayes Co				
102 N ADAIR	26.4	54	1990	4
Tulsa Co				
TULSA				
1/2 MI S OF (LEONARD) BIXBY WATER DEPT	20.0	59	1993	5
11707 EAST 31ST STREET	24.7	58	1993	5
1413 S. CINCINNATI, TULSA, OK 74119	25.3	58	1993	5
200 SOUTH WALNUT	27.5	79	1990	5
4616 E 15TH STREET	26.4	73	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Arkansas: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Arkansas. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
FAYETTEVILLE-SPRINGDALE, AR	23.4	46	27 - 63	26	847	59
FORT SMITH, AR-OK	24.5	73	43 - 100	36	1,189	52

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<u>LITTLE ROCK- NORTH LITTLE ROCK, AR</u>	27.1	121	72 - 167	31	1,570	78
<u>MEMPHIS, TN- AR-MS</u>	28.6	345	205 - 476	38	4,010	185
<u>PINE BLUFF, AR</u>	22.0	20	12 - 28	22	450	32
<u>TEXARKANA, TX - TEXARKANA, AR</u>	23.0	33	19 - 46	26	645	40

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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FAYETTEVILLE-SPRINGDALE, AR

This table provides summary information for Metropolitan Statistical Area 2580, FAYETTEVILLE-SPRINGDALE, AR. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.4
Rank by PM-10 Concentration:	173 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	46 (27-63)
Attributable Deaths per 100,000 Population:	26
Rank by Number of Attributable Deaths:	172 of 239
Rank Attributable Death Rate:	150 of 239

Mortality (1989 data)

Total Mortality:	1,715
Adult Cardiopulmonary Deaths:	847
Auto Accident Deaths:	59

Population (1980 data)

Total Population:	178,000
-------------------	---------

Counties Assigned to MSA

Benton Co, AR

Washington Co, AR

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
AR Washington Co FAYETTEVILLE 104 W. ROCK ST.	23.4	59	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LITTLE ROCK-NORTH LITTLE ROCK, AR

This table provides summary information for Metropolitan Statistical Area 4400, LITTLE ROCK-NORTH LITTLE ROCK, AR. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.1
Rank by PM-10 Concentration:	108 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	121 (72-167)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	107 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	3,309
Adult Cardiopulmonary Deaths:	1,570
Auto Accident Deaths:	78

Population (1980 data)

Total Population:	393,000
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Counties Assigned to MSA

Pulaski Co, AR
Saline Co, AR

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AR				
Pulaski Co				
JACKSONVILLE				
1205 WEST MAIN	24.0	57	1990	5
LITTLE ROCK				
4300 BLOCK OF WEST 7TH ST	30.6	66	1992	5
ADAMS FIELD	28.3	79	1992	5
POLICE & COURTS BLDG 700 W MARKHAM	25.6	62	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PINE BLUFF, AR

This table provides summary information for Metropolitan Statistical Area 6240, PINE BLUFF, AR. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.0
Rank by PM-10 Concentration:	198 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	20 (12-28)
Attributable Deaths per 100,000 Population:	22
Rank by Number of Attributable Deaths:	216 of 239
Rank Attributable Death Rate:	179 of 239

Mortality (1989 data)

Total Mortality:	897
Adult Cardiopulmonary Deaths:	450
Auto Accident Deaths:	32

Population (1980 data)

Total Population:	91,000
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Counties Assigned to MSA

Jefferson Co, AR

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
AR Jefferson Co PINE BLUFF MUNICIPAL CENTER 9TH AND STATE STREETS	22.0	56	1994	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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TEXARKANA, TX - TEXARKANA, AR

This table provides summary information for Metropolitan Statistical Area 8360, TEXARKANA, TX - TEXARKANA, AR. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.0
Rank by PM-10 Concentration:	178 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	33 (19-46)
Attributable Deaths per 100,000 Population:	26
Rank by Number of Attributable Deaths:	197 of 239
Rank Attributable Death Rate:	150 of 239

Mortality (1989 data)

Total Mortality:	1,315
Adult Cardiopulmonary Deaths:	645
Auto Accident Deaths:	40

Population (1980 data)

Total Population:	127,000
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Counties Assigned to MSA

Little River Co, AR
Miller Co, AR

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Bowie Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
AR Miller Co TEXARKANA FEDERAL BUILDING POST OFFICE	23.0	52	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Maryland: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Maryland. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BALTIMORE, MD	29.6	861	511 - 1,184	40	9,339	318
CUMBERLAND, MD-WV	22.0	31	18 - 43	29	694	18

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<u>HAGERSTOWN, MD</u>	26.3	48	28 - 66	42	660	15
<u>WASHINGTON, DC-MD-VA</u>	24.5	588	346 - 814	19	9,687	490
<u>WILMINGTON, DE-NJ-MD</u>	28.6	190	113 - 262	36	2,221	113

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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CUMBERLAND, MD-WV

This table provides summary information for Metropolitan Statistical Area 1900, CUMBERLAND, MD-WV. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.0
Rank by PM-10 Concentration:	200 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	31 (18-43)
Attributable Deaths per 100,000 Population:	29
Rank by Number of Attributable Deaths:	201 of 239
Rank Attributable Death Rate:	132 of 239

Mortality (1989 data)

Total Mortality:	1,213
Adult Cardiopulmonary Deaths:	694
Auto Accident Deaths:	18

Population (1980 data)

Total Population:	108,000
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Counties Assigned to MSA

Allegany Co, MD
Mineral Co, WV

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading	Number of Years of Data
MD				
Allegany Co				
CUMBERLAND				
MEXICO FARMS,CUMBERLAND,MARYLAND	22.0	49	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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HAGERSTOWN, MD

This table provides summary information for Metropolitan Statistical Area 3180, HAGERSTOWN, MD. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.3
Rank by PM-10 Concentration:	122 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	48 (28-66)
Attributable Deaths per 100,000 Population:	42
Rank by Number of Attributable Deaths:	168 of 239
Rank Attributable Death Rate:	58 of 239

Mortality (1989 data)

Total Mortality:	1,073
Adult Cardiopulmonary Deaths:	660
Auto Accident Deaths:	15

Population (1980 data)

Total Population:	113,000
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Counties Assigned to MSA

Washington Co, MD

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MD Washington Co HAGERSTOWN E.RUSSELL HICKS M.S.,1321 S.POTOMAC ST.	26.3	66	1994	3

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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WILMINGTON, DE-NJ-MD

This table provides summary information for Metropolitan Statistical Area 9160, WILMINGTON, DE-NJ-MD. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.6
Rank by PM-10 Concentration:	81 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	190 (113-262)
Attributable Deaths per 100,000 Population:	36
Rank by Number of Attributable Deaths:	74 of 239
Rank Attributable Death Rate:	91 of 239

Mortality (1989 data)

Total Mortality:	4,643
Adult Cardiopulmonary Deaths:	2,221
Auto Accident Deaths:	113

Population (1980 data)

Total Population:	524,000
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Counties Assigned to MSA

New Castle Co, DE
Cecil Co, MD

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
DE				
New Castle Co				
GOV BACON HEALTH CENTER (DELAWARE CITY)	25.8	68	1990	3
WOODS HAVEN-KRUSE SCHOOL (CLAYMONT)	30.6	68	1990	4
WILMINGTON				
3RD AND UNION STS	33.2	66	1990	2
UITH & KING STREETS WILMINGTON DEL	33.2	91	1990	5
MD				
Cecil Co				
ELKTON				
COUNTY COURT HOUSE	21.3	45	1994	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Oregon: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Oregon. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
EUGENE-SPRINGFIELD, OR	28.0	89	53 - 123	32	1,079	69
MEDFORD, OR	37.9	96	58 - 131	73	684	40

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<u>PORTLAND,</u> <u>OR-WA</u>	23.9	307	180 - 425	25	5,388	225
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Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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California: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of California. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
ANAHEIM-SANTA ANA, CA	38.1	1,053	632 - 1,433	55	7,429	369
BAKERSFIELD, CA	54.8	464	284 - 618	115	2,005	163

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<u>CHICO, CA</u>	33.1	104	62 - 143	72	924	59
<u>FRESNO, CA</u>	51.7	488	298 - 653	95	2,265	212
<u>LOS ANGELES- LONG BEACH, CA</u>	43.8	5,873	3,550 - 7,933	79	33,825	1,458
<u>OXNARD-SIMI VALLEY- VENTURA, CA</u>	30.6	182	108 - 251	34	1,864	110
<u>REDDING, CA</u>	28.3	58	34 - 80	50	683	60
<u>RIVERSIDE- SAN BERNARDINO, CA</u>	48.1	1,905	1,158 - 2,560	122	9,685	748
<u>SACRAMENTO, CA</u>	31.9	488	290 - 669	48	4,625	260
<u>SALINAS- SEASIDE- MONTEREY, CA</u>	19.4	29	17 - 40	10	1,019	62
<u>SAN DIEGO, CA</u>	34.8	999	597 - 1,365	54	8,147	412
<u>SAN FRANCISCO- OAKLAND, CA</u>	28.7	1,270	752 - 1,748	39	14,694	414
<u>SAN JOSE, CA</u>	32.8	447	266 - 612	35	4,015	179
<u>SANTA BARBARA- SANTA MARIA- LOMPOC, CA</u>	30.5	124	74 - 171	41	1,278	53
<u>SANTA CRUZ, CA</u>	13.2	0	0 - 0	0	881	37
<u>SANTA ROSA, CA</u>	20.0	52	31 - 73	17	1,600	86
<u>STOCKTON, CA</u>	44.8	321	194 - 433	93	1,794	125
<u>VALLEJO- FAIRFIELD- NAPA, CA</u>	28.2	120	71 - 165	36	1,437	67
<u>VISALIA- TULARE- PORTERVILLE, CA</u>	60.4	302	186 - 402	123	1,277	167

YUBA CITY,
CA

37.4

65

39 - 89

64

472

37

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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OXNARD-SIMI VALLEY-VENTURA, CA

This table provides summary information for Metropolitan Statistical Area 6000, OXNARD-SIMI VALLEY-VENTURA, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.6
Rank by PM-10 Concentration:	54 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	182 (108-251)
Attributable Deaths per 100,000 Population:	34
Rank by Number of Attributable Deaths:	76 of 239
Rank Attributable Death Rate:	98 of 239

Mortality (1989 data)

Total Mortality:	3,698
Adult Cardiopulmonary Deaths:	1,864
Auto Accident Deaths:	110

Population (1980 data)

Total Population:	530,000
-------------------	---------

Counties Assigned to MSA

Ventura Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Ventura Co				
9 2323 MOORPARK ROAD, THOUSAND OAKS, CA	28.7	67	1994	3
EL RIO				
RIO MESA SCHOOL, EL RIO	30.8	96	1990	5
OJAI				
1768 MARICOPA HIWY., OJAI	28.7	59	1990	5
PIRU				
2SW, 2815 TELEGRAPH RD, PIRU	29.7	128	1990	5
SIMI VALLEY				
5400 COCHRAN STREET, SIMI VALLEY, CA.	33.5	85	1991	5
VENTURA				
535 E MAIN ST, VENTURA	27.6	56	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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SALINAS-SEASIDE-MONTEREY, CA

This table provides summary information for Metropolitan Statistical Area 7120, SALINAS-SEASIDE-MONTEREY, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	19.4
Rank by PM-10 Concentration:	225 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	29 (17-40)
Attributable Deaths per 100,000 Population:	10
Rank by Number of Attributable Deaths:	206 of 239
Rank Attributable Death Rate:	227 of 239

Mortality (1989 data)

Total Mortality:	2,057
Adult Cardiopulmonary Deaths:	1,019
Auto Accident Deaths:	62

Population (1980 data)

Total Population:	290,000
-------------------	---------

Counties Assigned to MSA

Monterey Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Monterey Co				
24580 SILVER CLOUD CT., MONTEREY, CA	12.8	26	1994	3
35 FORD RD-TULARCITO SCH, CARMEL VALLEY	17.2	35	1992	3
SALINAS				
II-1270 NATIVIDAD RD, SALINAS	21.8	55	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SANTA BARBARA-SANTA MARIA-LOMPOC, CA

This table provides summary information for Metropolitan Statistical Area 7480, SANTA BARBARA-SANTA MARIA-LOMPOC, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.5
Rank by PM-10 Concentration:	56 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	124 (74-171)
Attributable Deaths per 100,000 Population:	41
Rank by Number of Attributable Deaths:	104 of 239
Rank Attributable Death Rate:	64 of 239

Mortality (1989 data)

Total Mortality:	2,463
Adult Cardiopulmonary Deaths:	1,278
Auto Accident Deaths:	53

Population (1980 data)

Total Population:	299,000
-------------------	---------

Counties Assigned to MSA

Santa Barbara Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA				
Santa Barbara Co				
128 S 'H' ST, LOMPOC	23.1	45	1994	2
SANTA BARBARA				
3 W. CARRILLO ST., SANTA BARBARA, CA.	32.8	82	1990	5
SANTA MARIA				
LIBRARY-420 S BROADWAY, SANTA MARIA	27.4	55	1990	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		
Bold <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)</i>		
<i>Italic</i> <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)</i>		
<i>Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.</i>		
<i>Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.</i>		



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SANTA CRUZ, CA

This table provides summary information for Metropolitan Statistical Area 7485, SANTA CRUZ, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	13.2
Rank by PM-10 Concentration:	239 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.00
Adult Cardiopulmonary Attributable Deaths:	0 (0-0)
Attributable Deaths per 100,000 Population:	0
Rank by Number of Attributable Deaths:	239 of 239
Rank Attributable Death Rate:	239 of 239

Mortality (1989 data)

Total Mortality:	1,653
Adult Cardiopulmonary Deaths:	881
Auto Accident Deaths:	37

Population (1980 data)

Total Population:	188,000
-------------------	---------

Counties Assigned to MSA

Santa Cruz Co, CA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA Santa Cruz Co 127 VINE HILL SCHOOL RD, SCOTTS VALLEY	13.2	23	1994	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SANTA ROSA, CA

This table provides summary information for Metropolitan Statistical Area 7500, SANTA ROSA, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.0
Rank by PM-10 Concentration:	220 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	52 (31-73)
Attributable Deaths per 100,000 Population:	17
Rank by Number of Attributable Deaths:	164 of 239
Rank Attributable Death Rate:	205 of 239

Mortality (1989 data)

Total Mortality:	3,266
Adult Cardiopulmonary Deaths:	1,600
Auto Accident Deaths:	86

Population (1980 data)

Total Population:	300,000
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Counties Assigned to MSA

Sonoma Co, CA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CA				
Sonoma Co				
CLOVERDALE				
100 WASHINGTON ST., CLOVERDALE	20.3	77	1991	4
GUERNEVILLE				
CHURCH AND FIRST STREETS, GUERNEVILLE CA	20.0	62	1991	5
FS-14100 ARMSTRONG WOODS RD, GUERNEVILLE	22.4	62	1990	3
HEALDSBURG				
133 MATHESON ST., HEALDSBURG	18.9	68	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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VALLEJO-FAIRFIELD-NAPA, CA

This table provides summary information for Metropolitan Statistical Area 8720, VALLEJO-FAIRFIELD-NAPA, CA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.2
Rank by PM-10 Concentration:	88 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	120 (71-165)
Attributable Deaths per 100,000 Population:	36
Rank by Number of Attributable Deaths:	108 of 239
Rank Attributable Death Rate:	91 of 239

Mortality (1989 data)

Total Mortality:	2,993
Adult Cardiopulmonary Deaths:	1,437
Auto Accident Deaths:	67

Population (1980 data)

Total Population:	334,000
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Counties Assigned to MSA

Napa Co, CA
Solano Co, CA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CA				
Napa Co				
NAPA				
2552 JEFFERSON AVE., NAPA	29.7	104	1990	4
Solano Co				
VACAVILLE				
650 MERCHANT ST., VACAVILLE	27.2	98	1991	4

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Massachusetts: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Massachusetts. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Adult Cardio- Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range		
			Deaths per 100,000 Population		

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<u>BOSTON- LOWELL- BROCKTON- LAWRENCE- HAVERHILL, MA</u>	22.9	792	466 - 1,099	22	15,492	410
<u>NEW BEDFORD- FALL RIVER, MA</u>	19.3	64	38 - 90	13	2,319	83
<u>SPRINGFIELD- CHICOPEE- HOLYOKE, MA</u>	24.3	168	99 - 233	29	2,811	83
<u>WORCESTER- FITCHBURG- LEOMINSTER, MA</u>	20.7	112	66 - 156	17	3,024	96

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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NEW BEDFORD-FALL RIVER, MA

This table provides summary information for Metropolitan Statistical Area 5403, NEW BEDFORD-FALL RIVER, MA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	19.3
Rank by PM-10 Concentration:	227 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	64 (38-90)
Attributable Deaths per 100,000 Population:	13
Rank by Number of Attributable Deaths:	150 of 239
Rank Attributable Death Rate:	217 of 239

Mortality (1989 data)

Total Mortality:	4,432
Adult Cardiopulmonary Deaths:	2,319
Auto Accident Deaths:	83

Population (1980 data)

Total Population:	475,000
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Counties Assigned to MSA

Bristol Co, MA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
MA				
Bristol Co				
FALL RIVER				
CENTRAL FIRE STATION, 165 BEDFORD STREET	19.6	50	1991	5
NEW BEDFORD				
YMCA, 25 WATER STREET	17.8	49	1994	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SPRINGFIELD-CHICOPEE-HOLYOKE, MA

This table provides summary information for Metropolitan Statistical Area 8000, SPRINGFIELD-CHICOPEE-HOLYOKE, MA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.3
Rank by PM-10 Concentration:	156 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	168 (99-233)
Attributable Deaths per 100,000 Population:	29
Rank by Number of Attributable Deaths:	83 of 239
Rank Attributable Death Rate:	132 of 239

Mortality (1989 data)

Total Mortality:	5,396
Adult Cardiopulmonary Deaths:	2,811
Auto Accident Deaths:	83

Population (1980 data)

Total Population:	582,000
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Counties Assigned to MSA

Hampden Co, MA
Hampshire Co, MA

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
MA				
Hampden Co				
SPRINGFIELD				
59 HOWARD STREET	22.1	55	1994	4
EAST COLUMBUS AVENUE	29.5	74	1990	5
WEST SPRINGFIELD				
W. SPRINGFIELD FIRE DEPT., VAN DEENE ST.	21.1	75	1992	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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WORCESTER-FITCHBURG-LEOMINSTER, MA

This table provides summary information for Metropolitan Statistical Area 9243, WORCESTER-FITCHBURG-LEOMINSTER, MA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.7
Rank by PM-10 Concentration:	212 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	112 (66-156)
Attributable Deaths per 100,000 Population:	17
Rank by Number of Attributable Deaths:	114 of 239
Rank Attributable Death Rate:	205 of 239

Mortality (1989 data)

Total Mortality:	6,125
Adult Cardiopulmonary Deaths:	3,024
Auto Accident Deaths:	96

Population (1980 data)

Total Population:	646,000
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Counties Assigned to MSA

Worcester Co, MA

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
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MA

Worcester Co

WORCESTER

2 WASHINGTON STREET	21.2	47	1990	3
419 BELMONT STREET	20.4	49	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Pennsylvania: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Pennsylvania. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
ALLENTOWN-BETHLEHEM-EASTON, PA-NJ	25.0	207	122 - 287	32	3,234	132
ALTOONA, PA	23.4	46	27 - 64	34	860	21

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<u>BINGHAMTON, NY-PA</u>	21.0	63	37 - 87	21	1,613	46
<u>ERIE, PA</u>	25.6	91	53 - 125	33	1,341	45
<u>HARRISBURG, PA</u>	27.6	176	104 - 243	39	2,214	83
<u>JOHNSTOWN, PA</u>	28.9	127	75 - 175	48	1,446	53
<u>LANCASTER, PA</u>	31.0	173	103 - 237	48	1,715	61
<u>NORTHEAST, PA (SCRANTON)</u>	26.7	314	185 - 433	49	4,217	117
<u>PHILADELPHIA, PA-NJ</u>	33.5	2,599	1,550 - 3,556	55	22,531	637
<u>PITTSBURGH, PA</u>	31.0	1,216	723 - 1,670	54	12,083	241
<u>READING, PA</u>	26.2	131	77 - 181	42	1,834	72
<u>WILLIAMSPORT, PA</u>	26.4	45	26 - 62	38	618	30
<u>YORK, PA</u>	30.1	166	98 - 228	44	1,742	76

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ALLENTOWN-BETHLEHEM-EASTON, PA-NJ

This table provides summary information for Metropolitan Statistical Area 0240, ALLENTOWN-BETHLEHEM-EASTON, PA-NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.0
Rank by PM-10 Concentration:	141 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	207 (122-287)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	65 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	6,209
Adult Cardiopulmonary Deaths:	3,234
Auto Accident Deaths:	132

Population (1980 data)

Total Population:	637,000
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Counties Assigned to MSA

Warren Co, NJ
Carbon Co, PA

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Lehigh Co, PA
 Northampton Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NJ				
Warren Co				
PHILLIPSBURG				
MEYNER RD, WALTERS PARK, PHILLIPSBURG	27.5	71	1993	3
PA				
Lehigh Co				
ALLENTOWN				
STATE HOSPITAL REAR 1600 HANOVER AVE	23.0	61	1990	5
Northampton Co				
BETHLEHEM				
EAST MARKET & WOOD STS.	24.5	71	1990	5
NAZARETH				
LIBERTY AND BELVEDERE STREETS	25.2	91	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ALTOONA, PA

This table provides summary information for Metropolitan Statistical Area 0280, ALTOONA, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.4
Rank by PM-10 Concentration:	174 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	46 (27-64)
Attributable Deaths per 100,000 Population:	34
Rank by Number of Attributable Deaths:	172 of 239
Rank Attributable Death Rate:	98 of 239

Mortality (1989 data)

Total Mortality:	1,529
Adult Cardiopulmonary Deaths:	860
Auto Accident Deaths:	21

Population (1980 data)

Total Population:	137,000
-------------------	---------

Counties Assigned to MSA

Blair Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
PA Blair Co ALTOONA 2ND AVE & 7TH ST	23.4	74	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BINGHAMTON, NY-PA

This table provides summary information for Metropolitan Statistical Area 0960, BINGHAMTON, NY-PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.0
Rank by PM-10 Concentration:	208 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	63 (37-87)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	152 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	2,805
Adult Cardiopulmonary Deaths:	1,613
Auto Accident Deaths:	46

Population (1980 data)

Total Population:	301,000
-------------------	---------

Counties Assigned to MSA

Broome Co, NY

Tioga Co, NY

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Susquehanna Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NY				
Broome Co				
BINGHAMTON				
187 CLINTON STREET	22.4	52	1991	3
ENDICOTT				
1001 PARK ST.JOHNSON MEMORIAL LIBRARY	20.4	55	1993	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ERIE, PA

This table provides summary information for Metropolitan Statistical Area 2360, ERIE, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.6
Rank by PM-10 Concentration:	134 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	91 (53-125)
Attributable Deaths per 100,000 Population:	33
Rank by Number of Attributable Deaths:	128 of 239
Rank Attributable Death Rate:	102 of 239

Mortality (1989 data)

Total Mortality:	2,559
Adult Cardiopulmonary Deaths:	1,341
Auto Accident Deaths:	45

Population (1980 data)

Total Population:	280,000
-------------------	---------

Counties Assigned to MSA

Erie Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
PA Erie Co ERIE 10TH AND MARNE STREETS	25.6	71	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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HARRISBURG, PA

This table provides summary information for Metropolitan Statistical Area 3240, HARRISBURG, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.6
Rank by PM-10 Concentration:	96 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	176 (104-243)
Attributable Deaths per 100,000 Population:	39
Rank by Number of Attributable Deaths:	78 of 239
Rank Attributable Death Rate:	74 of 239

Mortality (1989 data)

Total Mortality:	4,202
Adult Cardiopulmonary Deaths:	2,214
Auto Accident Deaths:	83

Population (1980 data)

Total Population:	446,000
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Counties Assigned to MSA

Cumberland Co, PA
Dauphin Co, PA

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Perry Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
PA Dauphin Co HARRISBURG 1833 UPS DRIVE HARRISBURG PA	27.6	77	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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READING, PA

This table provides summary information for Metropolitan Statistical Area 6680, READING, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.2
Rank by PM-10 Concentration:	124 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	131 (77-181)
Attributable Deaths per 100,000 Population:	42
Rank by Number of Attributable Deaths:	98 of 239
Rank Attributable Death Rate:	58 of 239

Mortality (1989 data)

Total Mortality:	3,328
Adult Cardiopulmonary Deaths:	1,834
Auto Accident Deaths:	72

Population (1980 data)

Total Population:	313,000
-------------------	---------

Counties Assigned to MSA

Berks Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
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PA

Berks Co

READING

UGI CO MONGANTOWN RD AND PROSPECT ST	26.2	80	1994	5
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Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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WILLIAMSPORT, PA

This table provides summary information for Metropolitan Statistical Area 9140, WILLIAMSPORT, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.4
Rank by PM-10 Concentration:	120 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	45 (26-62)
Attributable Deaths per 100,000 Population:	38
Rank by Number of Attributable Deaths:	177 of 239
Rank Attributable Death Rate:	79 of 239

Mortality (1989 data)

Total Mortality:	1,111
Adult Cardiopulmonary Deaths:	618
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	118,000
-------------------	---------

Counties Assigned to MSA

Lycoming Co, PA

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
PA Lycoming Co WILLIAMSPORT 734 WEST FOURTH ST	26.4	67	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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YORK, PA

This table provides summary information for Metropolitan Statistical Area 9280, YORK, PA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.1
Rank by PM-10 Concentration:	59 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	166 (98-228)
Attributable Deaths per 100,000 Population:	44
Rank by Number of Attributable Deaths:	84 of 239
Rank Attributable Death Rate:	53 of 239

Mortality (1989 data)

Total Mortality:	3,363
Adult Cardiopulmonary Deaths:	1,742
Auto Accident Deaths:	76

Population (1980 data)

Total Population:	381,000
-------------------	---------

Counties Assigned to MSA

Adams Co, PA
York Co, PA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
PA York Co WEST YORK BORO BLDG 1700 W PHILADELPHIA ST	30.1	80	1994	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Colorado: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Colorado. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
COLORADO SPRINGS, CO	25.0	65	38 - 89	21	1,012	72

<u>DENVER- BOULDER, CO</u>	26.6	375	221 - 517	23	5,060	267
<u>FORT COLLINS, CO</u>	23.4	27	16 - 37	18	493	23
<u>GREELEY, CO</u>	25.6	27	16 - 37	22	399	31
<u>PUEBLO, CO</u>	27.6	42	25 - 58	33	524	27

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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COLORADO SPRINGS, CO

This table provides summary information for Metropolitan Statistical Area 1720, COLORADO SPRINGS, CO. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.0
Rank by PM-10 Concentration:	143 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	65 (38-89)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	148 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	2,062
Adult Cardiopulmonary Deaths:	1,012
Auto Accident Deaths:	72

Population (1980 data)

Total Population:	317,000
-------------------	---------

Counties Assigned to MSA

El Paso Co, CO
Teller Co, CO

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CO				
El Paso Co				
COLORADO SPRINGS				
101 W. COSTILLIA - RBD	27.9	59	1993	5
3730 MEADOWLANDS COLO SPRGS,CO	25.3	120	1992	5
701 N.CIRCLE(SERVICE CENTER)	21.8	67	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FORT COLLINS, CO

This table provides summary information for Metropolitan Statistical Area 2670, FORT COLLINS, CO. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.4
Rank by PM-10 Concentration:	175 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	27 (16-37)
Attributable Deaths per 100,000 Population:	18
Rank by Number of Attributable Deaths:	208 of 239
Rank Attributable Death Rate:	202 of 239

Mortality (1989 data)

Total Mortality:	992
Adult Cardiopulmonary Deaths:	493
Auto Accident Deaths:	23

Population (1980 data)

Total Population:	149,000
-------------------	---------

Counties Assigned to MSA

Larimer Co, CO

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CO Larimer Co FORT COLLINS 200 W. OAK - COURTHOUSE	23.4	58	1991	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GREELEY, CO

This table provides summary information for Metropolitan Statistical Area 3060, GREELEY, CO. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.6
Rank by PM-10 Concentration:	133 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	27 (16-37)
Attributable Deaths per 100,000 Population:	22
Rank by Number of Attributable Deaths:	208 of 239
Rank Attributable Death Rate:	179 of 239

Mortality (1989 data)

Total Mortality:	804
Adult Cardiopulmonary Deaths:	399
Auto Accident Deaths:	31

Population (1980 data)

Total Population:	123,000
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Counties Assigned to MSA

Weld Co, CO

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CO				
Weld Co				
411 GOODRICH AVE.	29.0	82	1993	2
GREELEY				
1516 HOSPITAL ROAD - GREELEY	24.1	99	1993	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PUEBLO, CO

This table provides summary information for Metropolitan Statistical Area 6560, PUEBLO, CO. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.6
Rank by PM-10 Concentration:	95 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	42 (25-58)
Attributable Deaths per 100,000 Population:	33
Rank by Number of Attributable Deaths:	181 of 239
Rank Attributable Death Rate:	102 of 239

Mortality (1989 data)

Total Mortality:	1,119
Adult Cardiopulmonary Deaths:	524
Auto Accident Deaths:	27

Population (1980 data)

Total Population:	126,000
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Counties Assigned to MSA

Pueblo Co, CO

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CO Pueblo Co PUEBLO 151 CENTRAL MAIN PUEBLO HEALTH DEPT.	27.6	57	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Michigan: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Michigan. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
DETROIT, MI	33.2	2,123	1,265 - 2,906	49	18,695	626
FLINT, MI	24.1	118	69 - 163	23	2,011	116
GRAND RAPIDS, MI	26.0	166	98 - 230	28	2,371	123

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<u>SAGINAW,</u> <u>MI</u>	25.6	66	39 - 91	29	971	89
<u>TOLEDO,</u> <u>OH-MI</u>	26.3	257	152 - 355	32	3,569	191

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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FLINT, MI

This table provides summary information for Metropolitan Statistical Area 2640, FLINT, MI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.1
Rank by PM-10 Concentration:	161 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	118 (69-163)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	110 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	3,762
Adult Cardiopulmonary Deaths:	2,011
Auto Accident Deaths:	116

Population (1980 data)

Total Population:	522,000
-------------------	---------

Counties Assigned to MSA

Genesee Co, MI

Shiawassee Co, MI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MI				
Genesee Co				
FLINT				
420 EAST BOULEVARD DRIVE	25.4	62	1990	2
WHALEY PARK, 3610 IOWA	23.2	127	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GRAND RAPIDS, MI

This table provides summary information for Metropolitan Statistical Area 3000, GRAND RAPIDS, MI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.0
Rank by PM-10 Concentration:	129 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	166 (98-230)
Attributable Deaths per 100,000 Population:	28
Rank by Number of Attributable Deaths:	84 of 239
Rank Attributable Death Rate:	138 of 239

Mortality (1989 data)

Total Mortality:	4,438
Adult Cardiopulmonary Deaths:	2,371
Auto Accident Deaths:	123

Population (1980 data)

Total Population:	602,000
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Counties Assigned to MSA

Kent Co, MI
Ottawa Co, MI

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MI				
Kent Co				
GRAND RAPIDS				
1179 MONROE NW	26.0	174	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SAGINAW, MI

This table provides summary information for Metropolitan Statistical Area 6960, SAGINAW, MI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.6
Rank by PM-10 Concentration:	132 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	66 (39-91)
Attributable Deaths per 100,000 Population:	29
Rank by Number of Attributable Deaths:	147 of 239
Rank Attributable Death Rate:	132 of 239

Mortality (1989 data)

Total Mortality:	1,800
Adult Cardiopulmonary Deaths:	971
Auto Accident Deaths:	89

Population (1980 data)

Total Population:	228,000
-------------------	---------

Counties Assigned to MSA

Saginaw Co, MI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MI Saginaw Co CARROLLTON CARROLLTON & RESERVE RDS., CARROLLTON	25.6	115	1992	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Rhode Island: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Rhode Island. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
PROVIDENCE-WARWICK-PAWTUCKET, RI	31.4	448	267 - 615	52	4,367	109

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived

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from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Connecticut: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Connecticut. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BRIDGEPORT-STAMFORD-NORWALK-DANBURY, CT	26.2	252	149 - 348	31	3,533	91

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<u>HARTFORD- NEW BRITAIN- BRISTOL, CT</u>	21.0	172	101 - 239	16	4,437	144
<u>NEW HAVEN- WATERBURY- MERIDEN, CT</u>	24.7	230	135 - 318	30	3,682	116
<u>NEW LONDON- NORWICH, CT</u>	20.1	35	21 - 49	15	1,051	27

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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BRIDGEPORT-STAMFORD-NORWALK-DANBURY, CT

This table provides summary information for Metropolitan Statistical Area 1163, BRIDGEPORT-STAMFORD-NORWALK-DANBURY, CT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.2
Rank by PM-10 Concentration:	123 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	252 (149-348)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	54 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	6,794
Adult Cardiopulmonary Deaths:	3,533
Auto Accident Deaths:	91

Population (1980 data)

Total Population:	807,000
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Counties Assigned to MSA

Fairfield Co, CT

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CT				
Fairfield Co				
BRIDGEPORT				
MYRTLE AVE	30.6	64	1991	5
ROOSEVELT SCHOOL PARK AVE.	24.4	62	1994	5
SHED CONGRESS STREET	24.5	49	1990	1
DANBURY				
TRAILER, W. CONNECTICUT STATE UNIVERSITY	22.2	53	1991	3
DARIEN				
I-95 AT BROOKSIDE DRIVE	28.0	65	1990	5
GREENWICH				
GREENWICH POINT PARK	20.1	56	1994	5
NORWALK				
I-95 AT WEST AVE	34.5	82	1990	5
STAMFORD				
653 MAIN STREET	23.3	59	1994	5
STRATFORD				
730 MAIN STREET	24.4	52	1990	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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HARTFORD-NEW BRITAIN-BRISTOL, CT

This table provides summary information for Metropolitan Statistical Area 3283, HARTFORD-NEW BRITAIN-BRISTOL, CT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.0
Rank by PM-10 Concentration:	209 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	172 (101-239)
Attributable Deaths per 100,000 Population:	16
Rank by Number of Attributable Deaths:	81 of 239
Rank Attributable Death Rate:	208 of 239

Mortality (1989 data)

Total Mortality:	8,967
Adult Cardiopulmonary Deaths:	4,437
Auto Accident Deaths:	144

Population (1980 data)

Total Population:	1,052,000
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Counties Assigned to MSA

Hartford Co, CT
Middlesex Co, CT

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Tolland Co, CT

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
CT				
Hartford Co				
BERLIN				
BERLIN HIGH SCHOOL, PATTERSON WAY	18.9	42	1990	1
BRISTOL				
CITY HALL 111 N. MAIN STREET	19.6	49	1991	5
EAST HARTFORD				
CITY HALL, 740 MAIN STREET	21.8	67	1994	5
ENFIELD				
SHAKER ROAD	17.7	51	1991	5
HARTFORD				
401 FLATBUSH AVENUE	20.0	62	1992	5
CORNER OF SHELDON ST. AND COLUMBUS BLVD	24.0	56	1990	1
FRANKLIN AVE. FIREHOUSE	22.1	51	1990	1
HELCO, 400 SHELDON STREET	25.3	61	1990	5
MANCHESTER				
TOWN HALL, 41 CENTER STREET	19.1	47	1990	1
NEW BRITAIN				
NORTHEAST UTILITIES CURTISS STREET	20.8	63	1992	5
Middlesex Co				
MIDDLETOWN				
CITY HALL, DEKOVEN DRIVE	21.5	58	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150

<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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NEW HAVEN-WATERBURY-MERIDEN, CT

This table provides summary information for Metropolitan Statistical Area 5483, NEW HAVEN-WATERBURY-MERIDEN, CT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.7
Rank by PM-10 Concentration:	148 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	230 (135-318)
Attributable Deaths per 100,000 Population:	30
Rank by Number of Attributable Deaths:	58 of 239
Rank Attributable Death Rate:	126 of 239

Mortality (1989 data)

Total Mortality:	7,187
Adult Cardiopulmonary Deaths:	3,682
Auto Accident Deaths:	116

Population (1980 data)

Total Population:	761,000
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Counties Assigned to MSA

New Haven Co, CT

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CT				
New Haven Co				
ANSONIA				
DIVISION STREET TREATMENT PLANT	19.5	38	1990	1
MERIDEN				
STODDARD BUILDING, 165 MILLER STREET	21.2	60	1992	5
MILFORD				
EGAN CENTER, MATHEW ST	19.3	54	1991	5
NAUGATUCK				
229 CHURCH STREET	23.5	47	1990	1
NEW HAVEN				
715 STATE STREET	25.7	71	1994	5
FIRE HEADQUARTERS, GRAND AVENUE	22.9	66	1991	5
HAMILTON AVE	26.0	62	1994	5
STILES STREET.	37.8	121	1990	5
WALLINGFORD				
45 SOUTH MAIN ST	20.4	57	1992	5
WATERBURY				
519 EAST MAIN ST	23.8	62	1991	5
SHED MEADOW AND BANK STREET	26.4	81	1990	5
WEST HAVEN				
OLEANDER ST AT I-95	25.9	47	1990	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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NEW LONDON-NORWICH, CT

This table provides summary information for Metropolitan Statistical Area 5523, NEW LONDON-NORWICH, CT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.1
Rank by PM-10 Concentration:	218 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	35 (21-49)
Attributable Deaths per 100,000 Population:	15
Rank by Number of Attributable Deaths:	194 of 239
Rank Attributable Death Rate:	212 of 239

Mortality (1989 data)

Total Mortality:	2,033
Adult Cardiopulmonary Deaths:	1,051
Auto Accident Deaths:	27

Population (1980 data)

Total Population:	238,000
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Counties Assigned to MSA

New London Co, CT
Windham Co, CT

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
CT				
New London Co				
GROTON				
GROTON HIGHWAY GARAGE OFF BRANDEGEE AVE	19.4	59	1991	5
NEW LONDON				
PERKINS ST TURN- AROUND	20.7	53	1994	5
NORWICH				
22 COURT HOUSE SQUARE	21.1	57	1992	5
WATERFORD				
NEW LONDON COUNTRY CLUB	19.0	46	1990	1
Windham Co				
PUTNAM				
115 CHURCH ST	19.0	45	1990	1
WILLIMANTIC				
108 VALLEY ST	19.6	48	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Minnesota: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Minnesota. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
DULUTH-SUPERIOR, MN-WI	21.2	55	32 - 76	21	1,357	38

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<u>FARGO- MOORHEAD, ND-MN</u>	19.3	14	8 - 19	10	496	15
<u>GRAND FORKS, ND- MN</u>	19.4	11	7 - 16	11	400	12
<u>MINNEAPOLIS- ST. PAUL, MN- WI</u>	25.8	495	292 - 685	23	7,186	299
<u>ROCHESTER, MN</u>	22.9	15	9 - 21	16	299	12
<u>ST. CLOUD, MN</u>	25.3	37	22 - 51	23	566	19

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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DULUTH-SUPERIOR, MN-WI

This table provides summary information for Metropolitan Statistical Area 2240, DULUTH-SUPERIOR, MN-WI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.2
Rank by PM-10 Concentration:	206 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	55 (32-76)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	160 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	2,567
Adult Cardiopulmonary Deaths:	1,357
Auto Accident Deaths:	38

Population (1980 data)

Total Population:	267,000
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Counties Assigned to MSA

St. Louis Co, MN
Douglas Co, WI

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MN				
St. Louis Co				
DULUTH				
425 WEST SUPERIOR ST KDAL BLDG	20.3	61	1992	5
ONEOTA ST. & 37TH AVE. W., 35 W FREEWAY	22.7	65	1990	5
VIRGINIA				
CITY HALL ROOF	16.7	37	1990	2
WI				
Douglas Co				
SUPERIOR				
4222 EAST 4TH STREET	20.1	62	1991	5
DULUTH-SUPERIOR, 700 WATER ST	22.7	60	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		
<i>Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)</i>		
<i>Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)</i>		
<i>Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.</i>		
<i>Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.</i>		



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ROCHESTER, MN

This table provides summary information for Metropolitan Statistical Area 6820, ROCHESTER, MN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.9
Rank by PM-10 Concentration:	181 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	15 (9-21)
Attributable Deaths per 100,000 Population:	16
Rank by Number of Attributable Deaths:	226 of 239
Rank Attributable Death Rate:	208 of 239

Mortality (1989 data)

Total Mortality:	608
Adult Cardiopulmonary Deaths:	299
Auto Accident Deaths:	12

Population (1980 data)

Total Population:	92,000
-------------------	--------

Counties Assigned to MSA

Olmsted Co, MN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
MN Olmsted Co ROCHESTER 7TH ST NE & 2ND AVENUE	22.9	89	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ST. CLOUD, MN

This table provides summary information for Metropolitan Statistical Area 6980, ST. CLOUD, MN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.3
Rank by PM-10 Concentration:	135 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	37 (22-51)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	191 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	1,098
Adult Cardiopulmonary Deaths:	566
Auto Accident Deaths:	19

Population (1980 data)

Total Population:	163,000
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Counties Assigned to MSA

- Benton Co, MN
- Sherburne Co, MN

Stearns Co, MN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
MN Stearns Co WAITE PARK 1ST STREET & 13TH AVENUE	25.3	98	1990	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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South Carolina: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of South Carolina. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
AUGUSTA, GA-SC	22.0	68	40 - 94	21	1,488	92

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<u>CHARLESTON- NORTH CHARLESTON, SC</u>	24.8	98	58 - 136	23	1,564	103
<u>COLUMBIA, SC</u>	27.4	114	67 - 157	28	1,450	84
<u>GREENVILLE- SPARTANBURG, SC</u>	29.1	224	133 - 308	39	2,515	169
<u>ROCK HILL, SC</u>	30.1	48	29 - 66	45	508	30

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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AUGUSTA, GA-SC

This table provides summary information for Metropolitan Statistical Area 0600, AUGUSTA, GA-SC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.0
Rank by PM-10 Concentration:	197 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	68 (40-94)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	145 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	3,010
Adult Cardiopulmonary Deaths:	1,488
Auto Accident Deaths:	92

Population (1980 data)

Total Population:	327,000
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Counties Assigned to MSA

Columbia Co, GA
Richmond Co, GA

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Aiken Co, SC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
SC Aiken Co JACKSON MIDDLE SCHOOL	22.0	53	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CHARLESTON-NORTH CHARLESTON, SC

This table provides summary information for Metropolitan Statistical Area 1440, CHARLESTON-NORTH CHARLESTON, SC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.8
Rank by PM-10 Concentration:	146 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	98 (58-136)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	122 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	3,257
Adult Cardiopulmonary Deaths:	1,564
Auto Accident Deaths:	103

Population (1980 data)

Total Population:	430,000
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Counties Assigned to MSA

Berkeley Co, SC
Charleston Co, SC

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Dorchester Co, SC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
SC				
Charleston Co				
NORTH CHARLESTON				
EXXON DOCK	23.3	57	1992	5
JENKINS ST. FIRE STATION	24.7	51	1990	5
U S NAVAL BASE (NAVAL BASE II)	26.4	83	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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COLUMBIA, SC

This table provides summary information for Metropolitan Statistical Area 1760, COLUMBIA, SC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.4
Rank by PM-10 Concentration:	105 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	114 (67-157)
Attributable Deaths per 100,000 Population:	28
Rank by Number of Attributable Deaths:	113 of 239
Rank Attributable Death Rate:	138 of 239

Mortality (1989 data)

Total Mortality:	3,185
Adult Cardiopulmonary Deaths:	1,450
Auto Accident Deaths:	84

Population (1980 data)

Total Population:	408,000
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Counties Assigned to MSA

Lexington Co, SC
Richland Co, SC

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
SC				
Richland Co				
COLUMBIA				
ENWRIGHT ATHLETIC CENTER (USC)	28.4	64	1990	5
PARKLANE - STATE PARK HEALTH CENTER	30.7	78	1991	2
SCDHEC PARKING LOT	25.8	53	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GREENVILLE-SPARTANBURG, SC

This table provides summary information for Metropolitan Statistical Area 3160, GREENVILLE-SPARTANBURG, SC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.1
Rank by PM-10 Concentration:	71 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	224 (133-308)
Attributable Deaths per 100,000 Population:	39
Rank by Number of Attributable Deaths:	59 of 239
Rank Attributable Death Rate:	74 of 239

Mortality (1989 data)

Total Mortality:	5,046
Adult Cardiopulmonary Deaths:	2,515
Auto Accident Deaths:	169

Population (1980 data)

Total Population:	569,000
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Counties Assigned to MSA

Greenville Co, SC
Pickens Co, SC

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Spartanburg Co, SC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
SC				
Greenville Co				
GREENVILLE				
PARKER FIRE STATION (SEWAGE AND WATER)	32.2	64	1990	3
Spartanburg Co				
SPARTANBURG				
SPARTANBURG CITY HALL	24.4	44	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Delaware: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Delaware. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
WILMINGTON, DE-NJ-MD	28.6	190	113 - 262	36	2,221	113

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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Mississippi: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Mississippi. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
JACKSON, MS	24.2	84	49 - 116	26	1,415	91
MEMPHIS, TN-AR-MS	28.6	345	205 - 476	38	4,010	185

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PASCAGOULA-
MOSS POINT,
MS

20.6

15

9 - 21

13

419

26

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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JACKSON, MS

This table provides summary information for Metropolitan Statistical Area 3560, JACKSON, MS. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.2
Rank by PM-10 Concentration:	159 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	84 (49-116)
Attributable Deaths per 100,000 Population:	26
Rank by Number of Attributable Deaths:	134 of 239
Rank Attributable Death Rate:	150 of 239

Mortality (1989 data)

Total Mortality:	2,749
Adult Cardiopulmonary Deaths:	1,415
Auto Accident Deaths:	91

Population (1980 data)

Total Population:	320,000
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Counties Assigned to MSA

Hinds Co, MS

Rankin Co, MS

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
MS				
Hinds Co				
JACKSON				
2802 KINGSWOOD AVE.	23.7	59	1993	3
505 JOHN HART STREET	25.9	54	1990	2
COURT AND FARRISH STREETS	23.1	61	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PASCAGOULA-MOSS POINT, MS

This table provides summary information for Metropolitan Statistical Area 6025, PASCAGOULA-MOSS POINT, MS. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.6
Rank by PM-10 Concentration:	213 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	15 (9-21)
Attributable Deaths per 100,000 Population:	13
Rank by Number of Attributable Deaths:	226 of 239
Rank Attributable Death Rate:	217 of 239

Mortality (1989 data)

Total Mortality:	785
Adult Cardiopulmonary Deaths:	419
Auto Accident Deaths:	26

Population (1980 data)

Total Population:	118,000
-------------------	---------

Counties Assigned to MSA

Jackson Co, MS

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
--	---	---	------------------------------------	--------------------

MS

Jackson Co

PASCAGOULA

HOSPITAL ROAD AT CO.
HEALTH DEPT.

20.6

50

1993

2

Notes

*Annual Mean
PM-10 Concentration*

*24-Hour
PM-10 Concentration*

*National Ambient Air
Quality Standards:*

50

150

*California Ambient Air
Quality Standards:*

30

50

*NRDC Recommended
Standards:*

17

33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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South Dakota: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of South Dakota. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)	
		Point Estimate	Range			
SIOUX FALLS, SD	21.2	18	10 - 25	15	443	13

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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SIOUX FALLS, SD

This table provides summary information for Metropolitan Statistical Area 7760, SIOUX FALLS, SD. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.2
Rank by PM-10 Concentration:	205 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	18 (10-25)
Attributable Deaths per 100,000 Population:	15
Rank by Number of Attributable Deaths:	219 of 239
Rank Attributable Death Rate:	212 of 239

Mortality (1989 data)

Total Mortality:	831
Adult Cardiopulmonary Deaths:	443
Auto Accident Deaths:	13

Population (1980 data)

Total Population:	117,000
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Counties Assigned to MSA

Minnehaha Co, SD

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
--	---	---	------------------------------------	-------------------------------

SD

Minnehaha Co

SIOUX FALLS

500 S. PHILLIPS SIOUX FALLS, SD 57102	24.1	57	1991	4
GILBERT SCIENCE CENTER - AUGUSTANA	19.1	48	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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District of Columbia: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the District of Columbia. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Deaths per 100,000 Population	
WASHINGTON, DC-MD-VA	24.5	588 346 - 814	19	9,687 490

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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Missouri: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Missouri. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
KANSAS CITY, MO-KS	29.5	507	300 - 697	38	5,534	232
SPRINGFIELD, MO	18.7	25	15 - 35	12	1,029	44

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<u>ST. JOSEPH, MO</u>	37.6	78	47 - 106	76	562	23
<u>ST. LOUIS, MO-IL</u>	31.8	1,195	711 - 1,639	51	11,368	386

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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SPRINGFIELD, MO

This table provides summary information for Metropolitan Statistical Area 7920, SPRINGFIELD, MO. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	18.7
Rank by PM-10 Concentration:	233 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.02
Adult Cardiopulmonary Attributable Deaths:	25 (15-35)
Attributable Deaths per 100,000 Population:	12
Rank by Number of Attributable Deaths:	212 of 239
Rank Attributable Death Rate:	221 of 239

Mortality (1989 data)

Total Mortality:	2,034
Adult Cardiopulmonary Deaths:	1,029
Auto Accident Deaths:	44

Population (1980 data)

Total Population:	208,000
-------------------	---------

Counties Assigned to MSA

Christian Co, MO
Greene Co, MO

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
MO				
Greene Co				
SPRINGFIELD				
5012 S. CHARLESTON SPRINGFIELD MO	18.5	44	1992	5
HILLCREST HIGH SCHOOL, 3319 N GRANT	19.2	44	1990	5
S.W.MISSOURI STATE UNIVERSITY	18.5	42	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Tennessee: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Tennessee. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
CHATTANOOGA, TN-GA	34.9	270	161 - 368	63	2,190	103
JOHNSON CITY-KINGSPORT-BRISTOL, TN-VA	29.1	197	117 - 271	45	2,219	90

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<u>KNOXVILLE, TN</u>	32.6	214	127 - 293	45	1,950	88
<u>MEMPHIS, TN- AR-MS</u>	28.6	345	205 - 476	38	4,010	185
<u>NASHVILLE- DAVIDSON, TN</u>	32.4	419	249 - 574	49	3,852	191

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Florida: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Florida. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BRADENTON, FL	21.3	58	34 - 80	39	1,429	33
DAYTONA BEACH, FL	20.4	80	47 - 112	31	2,280	75

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<u>FORT LAUDERDALE- HOLLYWOOD, FL</u>	18.8	176	103 - 245	17	7,159	243
<u>FORT WALTON BEACH, FL</u>	23.7	25	14 - 34	23	439	25
<u>GAINESVILLE, FL</u>	20.6	18	10 - 25	12	482	23
<u>JACKSONVILLE, FL</u>	28.5	297	176 - 409	40	3,471	224
<u>MELBOURNE- TITUSVILLE- COCOA, FL</u>	17.9	30	17 - 41	11	1,584	99
<u>MIAMI, FL</u>	26.4	645	381 - 890	40	8,881	421
<u>ORLANDO, FL</u>	23.5	195	115 - 270	28	3,585	208
<u>PANAMA CITY, FL</u>	26.4	33	19 - 45	34	451	32
<u>PENSACOLA, FL</u>	25.3	87	51 - 120	30	1,320	87
<u>SARASOTA, FL</u>	24.9	126	74 - 175	62	1,983	57
<u>TAMPA-ST. PETERSBURG, FL</u>	27.5	938	555 - 1,293	60	11,803	396
<u>WEST PALM BEACH-BOCA RATON, FL</u>	19.6	150	88 - 209	26	4,958	212

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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BRADENTON, FL

This table provides summary information for Metropolitan Statistical Area 1140, BRADENTON, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.3
Rank by PM-10 Concentration:	204 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	58 (34-80)
Attributable Deaths per 100,000 Population:	39
Rank by Number of Attributable Deaths:	155 of 239
Rank Attributable Death Rate:	74 of 239

Mortality (1989 data)

Total Mortality:	2,670
Adult Cardiopulmonary Deaths:	1,429
Auto Accident Deaths:	33

Population (1980 data)

Total Population:	148,000
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Counties Assigned to MSA

Manatee Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
FL				
Manatee Co				
13TH AVE W. & 10TH ST W. (POLICE STATION	21.9	64	1994	2
END OF PINEY POINT ROAD	20.6	46	1994	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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DAYTONA BEACH, FL

This table provides summary information for Metropolitan Statistical Area 2020, DAYTONA BEACH, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.4
Rank by PM-10 Concentration:	217 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	80 (47-112)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	136 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	4,375
Adult Cardiopulmonary Deaths:	2,280
Auto Accident Deaths:	75

Population (1980 data)

Total Population:	259,000
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Counties Assigned to MSA

Volusia Co, FL

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
FL				
Volusia Co				
WILLIAMSON BLVD & US HWY 92	25.8	63	1994	1
DAYTONA BEACH				
1185-A DUNN AVE., DAYTONA BEACH	19.7	50	1993	3
HOLLY HILL				
1200 CENTER AVE., HOLLY HILL	19.1	42	1994	3
SOUTH DAYTONA				
1672 SOUTH RIDGEWOOD AVE., SOUTH DAYTONA	20.9	34	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FORT LAUDERDALE-HOLLYWOOD, FL

This table provides summary information for Metropolitan Statistical Area 2680, FORT LAUDERDALE-HOLLYWOOD, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	18.8
Rank by PM-10 Concentration:	230 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	176 (103-245)
Attributable Deaths per 100,000 Population:	17
Rank by Number of Attributable Deaths:	78 of 239
Rank Attributable Death Rate:	205 of 239

Mortality (1989 data)

Total Mortality:	14,008
Adult Cardiopulmonary Deaths:	7,159
Auto Accident Deaths:	243

Population (1980 data)

Total Population:	1,014,000
-------------------	-----------

Counties Assigned to MSA

Broward Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
FL				
Broward Co				
LINCOLN PARK ELEMENTARY SCH. (NW CORNER)	18.3	28	1994	1
DAVIE				
3205 SW 70TH AVENUE	17.1	64	1993	3
FORT LAUDERDALE				
2101 NW SIXTH STREET	23.8	45	1990	2
500 SW 14TH CT	17.9	66	1993	4
HOLLYWOOD				
1000 E. SUNRISE BLVD, FT. LAUDERDALE	19.5	71	1993	2
2701 PLUNKETT STREET HOLLYWOOD	17.6	66	1993	3
MARGATE				
6300 NW 18 STREET MARGATE	16.5	55	1993	3
PEMBROKE PINES				
11251 TAFT STREET PEMBROKE PINES	17.2	67	1993	3
PLANTATION				
1200 NW 72 AVENUE PLANTATION	16.7	63	1993	3
POMPANO BEACH				
301 NE 12TH STREET	18.7	62	1993	3
TAMARAC				
7601 N UNIVERSITY DRIVE	16.9	58	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FORT WALTON BEACH, FL

This table provides summary information for Metropolitan Statistical Area 2750, FORT WALTON BEACH, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.7
Rank by PM-10 Concentration:	165 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	25 (14-34)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	212 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	845
Adult Cardiopulmonary Deaths:	439
Auto Accident Deaths:	25

Population (1980 data)

Total Population:	110,000
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Counties Assigned to MSA

Okaloosa Co, FL

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
FL Okaloosa Co FORT WALTON BEACH FIRST ST AND CHURCH AVE SE, FT WALTON B.	23.7	60	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GAINESVILLE, FL

This table provides summary information for Metropolitan Statistical Area 2900, GAINESVILLE, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.6
Rank by PM-10 Concentration:	213 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	18 (10-25)
Attributable Deaths per 100,000 Population:	12
Rank by Number of Attributable Deaths:	219 of 239
Rank Attributable Death Rate:	221 of 239

Mortality (1989 data)

Total Mortality:	1,126
Adult Cardiopulmonary Deaths:	482
Auto Accident Deaths:	23

Population (1980 data)

Total Population:	151,000
-------------------	---------

Counties Assigned to MSA

Alachua Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
FL				
Alachua Co				
721 N.W. SIXTH STREET	21.9	50	1993	2
NW 53RD AVE & NW 43RD ST	19.4	41	1994	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MELBOURNE-TITUSVILLE-COCOA, FL

This table provides summary information for Metropolitan Statistical Area 4900, MELBOURNE-TITUSVILLE-COCOA, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	17.9
Rank by PM-10 Concentration:	235 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.02
Adult Cardiopulmonary Attributable Deaths:	30 (17-41)
Attributable Deaths per 100,000 Population:	11
Rank by Number of Attributable Deaths:	203 of 239
Rank Attributable Death Rate:	224 of 239

Mortality (1989 data)

Total Mortality:	3,315
Adult Cardiopulmonary Deaths:	1,584
Auto Accident Deaths:	99

Population (1980 data)

Total Population:	273,000
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Counties Assigned to MSA

Brevard Co, FL

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
FL				
Brevard Co				
MELBOURNE				
50 NEIMAN AVE	18.2	43	1992	3
MERRITT ISLAND				
2575 N.COURTENAY PKY ,MERRIT ISLAND	17.8	41	1992	3
TITUSVILLE				
611 SINGLETON AVE	17.6	57	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ORLANDO, FL

This table provides summary information for Metropolitan Statistical Area 5960, ORLANDO, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.5
Rank by PM-10 Concentration:	171 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	195 (115-270)
Attributable Deaths per 100,000 Population:	28
Rank by Number of Attributable Deaths:	71 of 239
Rank Attributable Death Rate:	138 of 239

Mortality (1989 data)

Total Mortality:	7,200
Adult Cardiopulmonary Deaths:	3,585
Auto Accident Deaths:	208

Population (1980 data)

Total Population:	701,000
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Counties Assigned to MSA

Orange Co, FL

Osceola Co, FL

Seminole Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
FL				
Orange Co				
1006 FERNDALE RD ORLANDO FL 32808	20.3	47	1992	3
ORLANDO				
2002 EAST MICHIGAN ST., ORLANDO	19.5	48	1993	3
2401 W. 33RD ST. (SHERIFF'S DEPT.)	28.5	55	1990	5
595 N PRIMROSE AVE ORLANDO FLA	22.3	52	1992	4
E WASHINGTON ST ZELLWOOD FL 32748	19.1	45	1992	3
WEST CENTRAL AND PARRAMORE	23.9	47	1992	5
WINTER PARK				
MORRIS BLVD.	20.4	45	1992	4
Seminole Co				
ALTAMONTE SPRINGS				
2150 SAND LAKE ROAD	20.0	45	1992	3
SANFORD				
300 NORTH PARK AVE SANFORD FL	17.7	38	1992	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PANAMA CITY, FL

This table provides summary information for Metropolitan Statistical Area 6015, PANAMA CITY, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.4
Rank by PM-10 Concentration:	118 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	33 (19-45)
Attributable Deaths per 100,000 Population:	34
Rank by Number of Attributable Deaths:	197 of 239
Rank Attributable Death Rate:	98 of 239

Mortality (1989 data)

Total Mortality:	992
Adult Cardiopulmonary Deaths:	451
Auto Accident Deaths:	32

Population (1980 data)

Total Population:	98,000
-------------------	--------

Counties Assigned to MSA

Bay Co, FL

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
FL Bay Co PANAMA CITY CHERRY ST AND HENDERSON AVENUE	26.4	50	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PENSACOLA, FL

This table provides summary information for Metropolitan Statistical Area 6080, PENSACOLA, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.3
Rank by PM-10 Concentration:	136 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	87 (51-120)
Attributable Deaths per 100,000 Population:	30
Rank by Number of Attributable Deaths:	132 of 239
Rank Attributable Death Rate:	126 of 239

Mortality (1989 data)

Total Mortality:	2,633
Adult Cardiopulmonary Deaths:	1,320
Auto Accident Deaths:	87

Population (1980 data)

Total Population:	290,000
-------------------	---------

Counties Assigned to MSA

Escambia Co, FL
Santa Rosa Co, FL

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
FL				
Escambia Co				
PENSACOLA				
10 MILE RD & HOLS BERRY LANE	24.2	57	1993	2
300 S. MYRICK ST.	26.4	57	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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WEST PALM BEACH-BOCA RATON, FL

This table provides summary information for Metropolitan Statistical Area 8960, WEST PALM BEACH-BOCA RATON, FL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	19.6
Rank by PM-10 Concentration:	221 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	150 (88-209)
Attributable Deaths per 100,000 Population:	26
Rank by Number of Attributable Deaths:	93 of 239
Rank Attributable Death Rate:	150 of 239

Mortality (1989 data)

Total Mortality:	9,619
Adult Cardiopulmonary Deaths:	4,958
Auto Accident Deaths:	212

Population (1980 data)

Total Population:	573,000
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Counties Assigned to MSA

Palm Beach Co, FL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
FL				
Palm Beach Co				
STATE ROAD 80 AT TWENTY MILE BEND	19.6	40	1992	2
BELLE GLADE				
425 WEST CANAL STREET	20.4	40	1992	5
BOCA RATON				
MARYMOUNT COLLEGE S. MILITARY TRAIL	20.0	50	1993	2
DELRAY BEACH				
345 S. CONGRESS AVE, DELRAY BEACH	20.0	56	1994	5
PALM BEACH GARDENS				
3188 PGA BOULEVARD	17.7	56	1994	5
WEST PALM BEACH				
3700 BELEVEDERE ROAD	20.2	49	1994	3
901 EVERNIA STREET (HEALTH DEPT)	21.9	44	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		
Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)		
<i>Italic</i> designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)		
<i>Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.</i>		
<i>Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.</i>		

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Montana: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Montana. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BILLINGS, MT	24.3	22	13 - 30	20	367	17
GREAT FALLS, MT	22.1	15	9 - 21	19	329	16

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived

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from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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BILLINGS, MT

This table provides summary information for Metropolitan Statistical Area 0880, BILLINGS, MT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.3
Rank by PM-10 Concentration:	157 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	22 (13-30)
Attributable Deaths per 100,000 Population:	20
Rank by Number of Attributable Deaths:	214 of 239
Rank Attributable Death Rate:	193 of 239

Mortality (1989 data)

Total Mortality:	812
Adult Cardiopulmonary Deaths:	367
Auto Accident Deaths:	17

Population (1980 data)

Total Population:	108,000
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Counties Assigned to MSA

Yellowstone Co, MT

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MT				
Yellowstone Co				
MT OLIVE LUTHERAN CHURCH, 7-24TH ST W NORWEST, 130 NORTH 27TH STREET	23.9	46	1994	1
	25.6	46	1994	1
BILLINGS				
DIAMOND PARKING LOT, 315 N 27TH ST,BLGS	25.6	57	1993	1
FEDERAL CREDIT UNION,2522-4TH AVE NORTH	23.4	50	1991	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GREAT FALLS, MT

This table provides summary information for Metropolitan Statistical Area 3040, GREAT FALLS, MT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.1
Rank by PM-10 Concentration:	196 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	15 (9-21)
Attributable Deaths per 100,000 Population:	19
Rank by Number of Attributable Deaths:	226 of 239
Rank Attributable Death Rate:	198 of 239

Mortality (1989 data)

Total Mortality:	618
Adult Cardiopulmonary Deaths:	329
Auto Accident Deaths:	16

Population (1980 data)

Total Population:	81,000
-------------------	--------

Counties Assigned to MSA

Cascade Co, MT

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
MT Cascade Co GREAT FALLS FIRE STATION, 9TH ST & 1ST AVE SOUTH	22.1	69	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Texas: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Texas. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Deaths (1989)	Deaths from Pulmonary Auto Accidents (1989)
		Point Estimate	Range			
AMARILLO, TX	17.6	14	8 - 20	8	837	34
AUSTIN, TX	21.3	71	42 - 99	13	1,745	140
BEAUMONT-PORT ARTHUR-ORANGE, TX	23.6	89	52 - 123	24	1,604	82

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<u>BROWNSVILLE- HARLINGEN- SAN BENITO, TX</u>	27.5	48	29 - 67	23	612	65
<u>CORPUS CHRISTI, TX</u>	28.7	98	58 - 135	30	1,133	65
<u>DALLAS-FORT WORTH, TX</u>	24.7	743	438 - 1,028	25	11,906	666
<u>EL PASO, TX</u>	30.5	136	81 - 186	28	1,390	110
<u>GALVESTON- TEXAS CITY, TX</u>	22.8	39	23 - 54	20	775	44
<u>HOUSTON, TX</u>	31.9	939	558 - 1,287	32	8,864	716
<u>KILLEEN- TEMPLE, TX</u>	17.4	13	8 - 18	6	834	55
<u>LAREDO, TX</u>	32.4	32	19 - 44	32	296	20
<u>LUBBOCK, TX</u>	23.0	40	23 - 55	19	775	47
<u>ODESSA, TX</u>	20.1	11	6 - 15	10	317	30
<u>SAN ANTONIO, TX</u>	24.2	247	146 - 343	23	4,212	231
<u>TEXARKANA, TX - TEXARKANA, AR</u>	23.0	33	19 - 46	26	645	40
<u>TYLER, TX</u>	18.8	17	10 - 23	13	672	33
<u>WICHITA FALLS, TX</u>	25.8	47	28 - 64	36	678	41

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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AMARILLO, TX

This table provides summary information for Metropolitan Statistical Area 0320, AMARILLO, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	17.6
Rank by PM-10 Concentration:	236 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.02
Adult Cardiopulmonary Attributable Deaths:	14 (8-20)
Attributable Deaths per 100,000 Population:	8
Rank by Number of Attributable Deaths:	230 of 239
Rank Attributable Death Rate:	234 of 239

Mortality (1989 data)

Total Mortality:	1,462
Adult Cardiopulmonary Deaths:	837
Auto Accident Deaths:	34

Population (1980 data)

Total Population:	174,000
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Counties Assigned to MSA

Potter Co, TX
Randall Co, TX

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
TX Potter Co AMARILLO VAN BUREN & 4TH STREET	17.6	46	1991	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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AUSTIN, TX

This table provides summary information for Metropolitan Statistical Area 0640, AUSTIN, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.3
Rank by PM-10 Concentration:	203 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	71 (42-99)
Attributable Deaths per 100,000 Population:	13
Rank by Number of Attributable Deaths:	143 of 239
Rank Attributable Death Rate:	217 of 239

Mortality (1989 data)

Total Mortality:	3,837
Adult Cardiopulmonary Deaths:	1,745
Auto Accident Deaths:	140

Population (1980 data)

Total Population:	536,000
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Counties Assigned to MSA

Hays Co, TX

Travis Co, TX

Williamson Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
TX				
Travis Co				
AUSTIN				
2802 WEBBERVILLE ROAD	22.1	50	1992	5
RIDGETOP SCH 5005 CASWELL AVE	20.6	52	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BEAUMONT-PORT ARTHUR-ORANGE, TX

This table provides summary information for Metropolitan Statistical Area 0840, BEAUMONT-PORT ARTHUR-ORANGE, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.6
Rank by PM-10 Concentration:	166 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	89 (52-123)
Attributable Deaths per 100,000 Population:	24
Rank by Number of Attributable Deaths:	129 of 239
Rank Attributable Death Rate:	162 of 239

Mortality (1989 data)

Total Mortality:	3,298
Adult Cardiopulmonary Deaths:	1,604
Auto Accident Deaths:	82

Population (1980 data)

Total Population:	375,000
-------------------	---------

Counties Assigned to MSA

Hardin Co, TX
Jefferson Co, TX

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Orange Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX				
Jefferson Co				
BEAUMONT				
GEORGIA AT CUNNINGHAM, BEAUMONT, TX	23.6	58	1991	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BROWNSVILLE-HARLINGEN-SAN BENITO, TX

This table provides summary information for Metropolitan Statistical Area 1240, BROWNSVILLE-HARLINGEN-SAN BENITO, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.5
Rank by PM-10 Concentration:	100 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	48 (29-67)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	168 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	1,474
Adult Cardiopulmonary Deaths:	612
Auto Accident Deaths:	65

Population (1980 data)

Total Population:	210,000
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Counties Assigned to MSA

Cameron Co, TX

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX Cameron Co BROWNSVILLE GLADYS PORTER ZOO AT 6TH & RINGOLD	27.5	72	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CORPUS CHRISTI, TX

This table provides summary information for Metropolitan Statistical Area 1880, CORPUS CHRISTI, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.7
Rank by PM-10 Concentration:	77 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	98 (58-135)
Attributable Deaths per 100,000 Population:	30
Rank by Number of Attributable Deaths:	122 of 239
Rank Attributable Death Rate:	126 of 239

Mortality (1989 data)

Total Mortality:	2,412
Adult Cardiopulmonary Deaths:	1,133
Auto Accident Deaths:	65

Population (1980 data)

Total Population:	326,000
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Counties Assigned to MSA

Nueces Co, TX
San Patricio Co, TX

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
TX				
Nueces Co				
CORPUS CHRISTI				
1111 NAVIGATION BLVD CORPUS CHRISTI	30.9	78	1990	5
FIRE STATION #5 LEOPARD & NUECES BAY	26.5	70	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GALVESTON-TEXAS CITY, TX

This table provides summary information for Metropolitan Statistical Area 2920, GALVESTON-TEXAS CITY, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.8
Rank by PM-10 Concentration:	184 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	39 (23-54)
Attributable Deaths per 100,000 Population:	20
Rank by Number of Attributable Deaths:	185 of 239
Rank Attributable Death Rate:	193 of 239

Mortality (1989 data)

Total Mortality:	1,692
Adult Cardiopulmonary Deaths:	775
Auto Accident Deaths:	44

Population (1980 data)

Total Population:	196,000
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Counties Assigned to MSA

Galveston Co, TX

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
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TX

Galveston Co

TEXAS CITY

2701 13TH AVE NORTH AT LOGAN	23.1	64	1992	2
TEXAS AVE. & 25 THS ST., FIRE STATION	22.6	54	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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KILLEEN-TEMPLE, TX

This table provides summary information for Metropolitan Statistical Area 3810, KILLEEN-TEMPLE, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	17.4
Rank by PM-10 Concentration:	237 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.02
Adult Cardiopulmonary Attributable Deaths:	13 (8-18)
Attributable Deaths per 100,000 Population:	6
Rank by Number of Attributable Deaths:	233 of 239
Rank Attributable Death Rate:	236 of 239

Mortality (1989 data)

Total Mortality:	1,472
Adult Cardiopulmonary Deaths:	834
Auto Accident Deaths:	55

Population (1980 data)

Total Population:	215,000
-------------------	---------

Counties Assigned to MSA

Bell Co, TX

Coryell Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX Bell Co TEMPLE 7800 AIRPORT RD. DRAUGHON MILLER AIRPORT	17.4	44	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LUBBOCK, TX

This table provides summary information for Metropolitan Statistical Area 4600, LUBBOCK, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.0
Rank by PM-10 Concentration:	178 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	40 (23-55)
Attributable Deaths per 100,000 Population:	19
Rank by Number of Attributable Deaths:	184 of 239
Rank Attributable Death Rate:	198 of 239

Mortality (1989 data)

Total Mortality:	1,454
Adult Cardiopulmonary Deaths:	775
Auto Accident Deaths:	47

Population (1980 data)

Total Population:	212,000
-------------------	---------

Counties Assigned to MSA

Lubbock Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX Lubbock Co LUBBOCK 5TH STREET AT AVE. K	23.0	81	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ODESSA, TX

This table provides summary information for Metropolitan Statistical Area 5800, ODESSA, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.1
Rank by PM-10 Concentration:	219 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	11 (6-15)
Attributable Deaths per 100,000 Population:	10
Rank by Number of Attributable Deaths:	235 of 239
Rank Attributable Death Rate:	227 of 239

Mortality (1989 data)

Total Mortality:	773
Adult Cardiopulmonary Deaths:	317
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	115,000
-------------------	---------

Counties Assigned to MSA

Ector Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX Ector Co ODESSA 3008 E. UNIVERSITY BLVD. & PARKER PARK	20.1	36	1990	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SAN ANTONIO, TX

This table provides summary information for Metropolitan Statistical Area 7240, SAN ANTONIO, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.2
Rank by PM-10 Concentration:	160 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	247 (146-343)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	57 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	8,785
Adult Cardiopulmonary Deaths:	4,212
Auto Accident Deaths:	231

Population (1980 data)

Total Population:	1,072,000
-------------------	-----------

Counties Assigned to MSA

Bexar Co, TX

Comal Co, TX

Guadalupe Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX				
Bexar Co				
SAN ANTONIO				
900 BLK E DURANGO	26.4	55	1990	5
BLDG 3810 EASTERN RD. E. KELLY AFB	26.2	63	1993	4
DELLVIEW PARK, PILGRIM & PANDA DRIVES	20.1	46	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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TYLER, TX

This table provides summary information for Metropolitan Statistical Area 8640, TYLER, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	18.8
Rank by PM-10 Concentration:	228 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	17 (10-23)
Attributable Deaths per 100,000 Population:	13
Rank by Number of Attributable Deaths:	223 of 239
Rank Attributable Death Rate:	217 of 239

Mortality (1989 data)

Total Mortality:	1,307
Adult Cardiopulmonary Deaths:	672
Auto Accident Deaths:	33

Population (1980 data)

Total Population:	128,000
-------------------	---------

Counties Assigned to MSA

Smith Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX Smith Co TYLER 1304 SOUTH VINE STREET, TYLER	18.8	53	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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WICHITA FALLS, TX

This table provides summary information for Metropolitan Statistical Area 9080, WICHITA FALLS, TX. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.8
Rank by PM-10 Concentration:	131 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	47 (28-64)
Attributable Deaths per 100,000 Population:	36
Rank by Number of Attributable Deaths:	171 of 239
Rank Attributable Death Rate:	91 of 239

Mortality (1989 data)

Total Mortality:	1,247
Adult Cardiopulmonary Deaths:	678
Auto Accident Deaths:	41

Population (1980 data)

Total Population:	131,000
-------------------	---------

Counties Assigned to MSA

Clay Co, TX

Wichita Co, TX

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
TX Wichita Co WICHITA FALLS 1700 THIRD STREET	25.8	62	1993	4

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Georgia: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Georgia. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
ATLANTA, GA	35.1	946	565 - 1,292	47	7,608	572
AUGUSTA, GA-SC	22.0	68	40 - 94	21	1,488	92
CHATTANOOGA, TN-GA	34.9	270	161 - 368	63	2,190	103

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COLUMBUS, GA-
AL

26.6

76

45 - 105

32

1,025

48

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Nebraska: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Nebraska. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
LINCOLN, NE	27.5	57	34 - 79	30	724	39
OMAHA, NE-IA	35.5	288	172 - 393	51	2,268	75

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<u>SIOUX</u> <u>CITY, IA-NE</u>	26.0	42	25 - 57	36	590	22
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Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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LINCOLN, NE

This table provides summary information for Metropolitan Statistical Area 4360, LINCOLN, NE. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.5
Rank by PM-10 Concentration:	98 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	57 (34-79)
Attributable Deaths per 100,000 Population:	30
Rank by Number of Attributable Deaths:	157 of 239
Rank Attributable Death Rate:	126 of 239

Mortality (1989 data)

Total Mortality:	1,443
Adult Cardiopulmonary Deaths:	724
Auto Accident Deaths:	39

Population (1980 data)

Total Population:	193,000
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Counties Assigned to MSA

Lancaster Co, NE

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NE Lancaster Co LINCOLN 4327 O STREET , CORNHUSKER SHOOTERS SPLY	27.5	67	1991	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SIOUX CITY, IA-NE

This table provides summary information for Metropolitan Statistical Area 7720, SIOUX CITY, IA-NE. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.0
Rank by PM-10 Concentration:	128 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	42 (25-57)
Attributable Deaths per 100,000 Population:	36
Rank by Number of Attributable Deaths:	181 of 239
Rank Attributable Death Rate:	91 of 239

Mortality (1989 data)

Total Mortality:	1,042
Adult Cardiopulmonary Deaths:	590
Auto Accident Deaths:	22

Population (1980 data)

Total Population:	117,000
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Counties Assigned to MSA

Woodbury Co, IA

Dakota Co, NE

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IA Woodbury Co SIOUX CITY LOWELL SCHOOL 27TH AT MORGAN	26.0	69	1990	3

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Utah: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Utah. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
PROVO-OREM, UT	36.5	64	38 - 87	29	484	41
SALT LAKE CITY-OGDEN, UT	33.2	295	176 - 404	32	2,606	168

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Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Hawaii: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Hawaii. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
HONOLULU, HI	18.7	54	31 - 75	7	2,198	84

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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HONOLULU, HI

This table provides summary information for Metropolitan Statistical Area 3320, HONOLULU, HI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	18.7
Rank by PM-10 Concentration:	231 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	54 (31-75)
Attributable Deaths per 100,000 Population:	7
Rank by Number of Attributable Deaths:	161 of 239
Rank Attributable Death Rate:	235 of 239

Mortality (1989 data)

Total Mortality:	4,478
Adult Cardiopulmonary Deaths:	2,198
Auto Accident Deaths:	84

Population (1980 data)

Total Population:	763,000
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Counties Assigned to MSA

Honolulu Co, HI

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
HI				
Honolulu Co				
EWA BEACH				
91-591 KALAELOA BLVD	27.1	76	1994	2
KO'OLINA GOLF COURSE	16.1	40	1994	2
HONOLULU				
1486 AALA ST., HONOLULU, HAWAII 96817	16.9	31	1993	3
91-480 MALAKOLE ST, HONOLULU	28.4	52	1990	1
PEARL CITY				
860 4TH ST, PEARL CITY	14.9	28	1992	3
WAIMANALO				
STP, 41-1060 KALANIANAOLE, WAIMANALO	17.1	35	1991	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33
<i>All PM-10 concentrations are reported in (ug/m³).</i>		
<i>Bold</i> <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)</i>		
<i>Italic</i> <i>designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)</i>		
<i>Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.</i>		
<i>Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.</i>		



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Nevada: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Nevada. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
LAS VEGAS, NV	38.3	350	210 - 476	76	2,444	154
RENO, NV	38.5	118	71 - 161	61	822	52

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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Vermont: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Vermont. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BURLINGTON, VT	22.7	18	11 - 25	16	367	25

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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BURLINGTON, VT

This table provides summary information for Metropolitan Statistical Area 1305, BURLINGTON, VT. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.7
Rank by PM-10 Concentration:	186 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	18 (11-25)
Attributable Deaths per 100,000 Population:	16
Rank by Number of Attributable Deaths:	219 of 239
Rank Attributable Death Rate:	208 of 239

Mortality (1989 data)

Total Mortality:	707
Adult Cardiopulmonary Deaths:	367
Auto Accident Deaths:	25

Population (1980 data)

Total Population:	116,000
-------------------	---------

Counties Assigned to MSA

Chittenden Co, VT

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
VT				
Chittenden Co				
BURLINGTON				
ADJ. TO 82 S. WINOOSKI AVENUE	22.7	66	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Idaho: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Idaho. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BOISE CITY, ID	34.0	73	44 - 100	42	618	32

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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New Hampshire: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of New Hampshire. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
MANCHESTER-NASHUA, NH	17.2	16	10 - 23	6	1,149	48

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PORTSMOUTH-
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NH-ME

18.7 43 25 - 59 10 1,751 74

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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MANCHESTER-NASHUA, NH

This table provides summary information for Metropolitan Statistical Area 4763, MANCHESTER-NASHUA, NH. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	17.2
Rank by PM-10 Concentration:	238 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.01
Adult Cardiopulmonary Attributable Deaths:	16 (10-23)
Attributable Deaths per 100,000 Population:	6
Rank by Number of Attributable Deaths:	225 of 239
Rank Attributable Death Rate:	236 of 239

Mortality (1989 data)

Total Mortality:	2,243
Adult Cardiopulmonary Deaths:	1,149
Auto Accident Deaths:	48

Population (1980 data)

Total Population:	277,000
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Counties Assigned to MSA

Hillsborough Co, NH

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NH				
Hillsborough Co				
HOLLIS				
RTE. 122, SILVER LAKE RD. ELEMENTARY SCH	15.0	45	1991	5
MANCHESTER				
351 CHESTNUT STREET, POLICE STATION	18.2	51	1992	5
NOTRE DAME AVENUE	18.2	52	1992	4
NASHUA				
MAIN STREET	18.2	53	1992	5
SANDERS ASSOCIATES, PARKING LOT D	17.1	58	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Virginia: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Virginia. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Deaths (1989)	Deaths from Pulmonary Auto Accidents (1989)
		Point Estimate	Range			
CHARLOTTESVILLE, VA	24.4	28	16 - 38	25	458	27
JOHNSON CITY-KINGSPORT-BRISTOL, TN-VA	29.1	197	117 - 271	45	2,219	90
LYNCHBURG, VA	22.3	36	21 - 50	24	766	33

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<u>NEWPORT NEWS- HAMPTON, VA</u>	22.3	67	39 - 93	18	1,421	48
<u>NORFOLK-VIRGINIA BEACH- PORTSMOUTH, VA- NC</u>	23.4	164	97 - 228	20	3,033	118
<u>PETERSBURG- COLONIAL HEIGHTS- HOPEWELL, VA</u>	26.5	41	24 - 56	32	558	27
<u>RICHMOND, VA</u>	23.2	151	89 - 209	24	2,841	109
<u>ROANOKE, VA</u>	33.7	141	84 - 193	63	1,213	26
<u>WASHINGTON, DC- MD-VA</u>	24.5	588	346 - 814	19	9,687	490

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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CHARLOTTESVILLE, VA

This table provides summary information for Metropolitan Statistical Area 1540, CHARLOTTESVILLE, VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.4
Rank by PM-10 Concentration:	154 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	28 (16-38)
Attributable Deaths per 100,000 Population:	25
Rank by Number of Attributable Deaths:	207 of 239
Rank Attributable Death Rate:	157 of 239

Mortality (1989 data)

Total Mortality:	924
Adult Cardiopulmonary Deaths:	458
Auto Accident Deaths:	27

Population (1980 data)

Total Population:	114,000
-------------------	---------

Counties Assigned to MSA

Albemarle Co, VA

Charlottesville, VA

Fluvanna Co, VA

Greene Co, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
VA				
Charlottesville				
CHARLOTTESVILLE				
606 EAST MARKET STREET	24.4	57	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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LYNCHBURG, VA

This table provides summary information for Metropolitan Statistical Area 4640, LYNCHBURG, VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.3
Rank by PM-10 Concentration:	193 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	36 (21-50)
Attributable Deaths per 100,000 Population:	24
Rank by Number of Attributable Deaths:	192 of 239
Rank Attributable Death Rate:	162 of 239

Mortality (1989 data)

Total Mortality:	1,428
Adult Cardiopulmonary Deaths:	766
Auto Accident Deaths:	33

Population (1980 data)

Total Population:	153,000
-------------------	---------

Counties Assigned to MSA

Amherst Co, VA

Appomattox Co, VA

Campbell Co, VA

Lynchburg, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
VA				
Campbell Co				
ALTAVISTA				
ALTAVISTA FAMILY PHYSICIANS	19.7	50	1991	5
Lynchburg				
LYNCHBURG				
LYNCHBURG RESCUE, MEMORIAL AVE & PAGE ST.	24.8	63	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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NEWPORT NEWS-HAMPTON, VA

This table provides summary information for Metropolitan Statistical Area 5680, NEWPORT NEWS-HAMPTON, VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.3
Rank by PM-10 Concentration:	192 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	67 (39-93)
Attributable Deaths per 100,000 Population:	18
Rank by Number of Attributable Deaths:	146 of 239
Rank Attributable Death Rate:	202 of 239

Mortality (1989 data)

Total Mortality:	2,863
Adult Cardiopulmonary Deaths:	1,421
Auto Accident Deaths:	48

Population (1980 data)

Total Population:	364,000
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Counties Assigned to MSA

Gloucester Co, VA
Hampton, VA

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James City Co, VA
 Newport News, VA
 Poquoson, VA
 Williamsburg, VA
 York Co, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
VA				
Hampton				
HAMPTON				
700 SHELL ROAD	22.6	56	1991	5
York Co				
TABB SCHOOL, 70 YORKTOWN ROAD	22.0	53	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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NORFOLK-VIRGINIA BEACH-PORTSMOUTH, VA-NC

This table provides summary information for Metropolitan Statistical Area 5720, NORFOLK-VIRGINIA BEACH-PORTSMOUTH, VA-NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.4
Rank by PM-10 Concentration:	172 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	164 (97-228)
Attributable Deaths per 100,000 Population:	20
Rank by Number of Attributable Deaths:	88 of 239
Rank Attributable Death Rate:	193 of 239

Mortality (1989 data)

Total Mortality:	6,323
Adult Cardiopulmonary Deaths:	3,033
Auto Accident Deaths:	118

Population (1980 data)

Total Population:	807,000
-------------------	---------

Counties Assigned to MSA

Currituck Co, NC

Chesapeake, VA

Norfolk, VA
 Portsmouth, VA
 Suffolk, VA
 Virginia Beach, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
VA				
Chesapeake				
CHESAPEAKE				
OSCAR SMITH H.S. 2500 RODGERS STREET	23.5	57	1991	5
Norfolk				
NORFOLK				
NORFOLK FIRE DEPARTMENT	24.9	67	1990	5
Portsmouth				
PORTSMOUTH				
1401 ELMHURST LANE, MANOR HIGH SCHOOL	22.1	50	1991	2
Suffolk				
SUFFOLK				
B T WASHINGTON HIGH SCHOOL WALNUT & ADAM	23.2	74	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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PETERSBURG-COLONIAL HEIGHTS-HOPEWELL, VA

This table provides summary information for Metropolitan Statistical Area 6140, PETERSBURG-COLONIAL HEIGHTS-HOPEWELL, VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.5
Rank by PM-10 Concentration:	117 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	41 (24-56)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	183 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	1,181
Adult Cardiopulmonary Deaths:	558
Auto Accident Deaths:	27

Population (1980 data)

Total Population:	129,000
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Counties Assigned to MSA

Colonial Heights, VA
Dinwiddie Co, VA

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Hopewell, VA
 Petersburg, VA
 Prince George Co, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
VA				
Hopewell				
HOPEWELL				
HOPEWELL WASTE WATER TREATMENT PLANT	26.5	57	1990	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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RICHMOND, VA

This table provides summary information for Metropolitan Statistical Area 6760, RICHMOND, VA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.2
Rank by PM-10 Concentration:	176 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	151 (89-209)
Attributable Deaths per 100,000 Population:	24
Rank by Number of Attributable Deaths:	92 of 239
Rank Attributable Death Rate:	162 of 239

Mortality (1989 data)

Total Mortality:	5,842
Adult Cardiopulmonary Deaths:	2,841
Auto Accident Deaths:	109

Population (1980 data)

Total Population:	632,000
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Counties Assigned to MSA

Charles City Co, VA
Chesterfield Co, VA

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Goochland Co, VA
 Hanover Co, VA
 Henrico Co, VA
 New Kent Co, VA
 Powhatan Co, VA
 Richmond, VA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
VA				
Chesterfield Co				
6700 STRATHMORE ROAD, ROOF OF ARMORY	24.9	61	1990	5
Henrico Co				
VARINA ELEMENTARY SCH BUFFIN RD (VARINA)	21.1	60	1990	5
Richmond				
RICHMOND				
1406 OVERBROOK RD PUBLIC WORKS BLDG.	23.4	68	1990	4
5324 DISTRIBUTOR DR. MONITORING DIV SAPC	24.1	60	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Illinois: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Illinois. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
CHAMPAIGN-URBANA-RANTOUL, IL	27.4	38	22 - 52	23	479	23
CHICAGO, IL	33.7	3,479	2,075 - 4,759	49	29,873	1,073

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<u>DAVENPORT- ROCK ISLAND- MOLINE, IA- IL</u>	28.2	148	88 - 204	39	1,766	49
<u>DECATUR, IL</u>	33.0	72	43 - 99	55	642	27
<u>PEORIA, IL</u>	25.2	99	58 - 136	27	1,510	62
<u>ROCKFORD, IL</u>	20.8	44	26 - 62	16	1,186	59
<u>SPRINGFIELD, IL</u>	23.6	49	29 - 69	26	897	26
<u>ST. LOUIS, MO-IL</u>	31.8	1,195	711 - 1,639	51	11,368	386

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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CHAMPAIGN-URBANA-RANTOUL, IL

This table provides summary information for Metropolitan Statistical Area 1400, CHAMPAIGN-URBANA-RANTOUL, IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.4
Rank by PM-10 Concentration:	103 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	38 (22-52)
Attributable Deaths per 100,000 Population:	23
Rank by Number of Attributable Deaths:	186 of 239
Rank Attributable Death Rate:	166 of 239

Mortality (1989 data)

Total Mortality:	992
Adult Cardiopulmonary Deaths:	479
Auto Accident Deaths:	23

Population (1980 data)

Total Population:	168,000
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Counties Assigned to MSA

Champaign Co, IL

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
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IL

Champaign Co

CHAMPAIGN

POST OFFICE, 600 N.
NEIL

27.4

71

1992

5

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*Annual Mean
PM-10 Concentration*

*24-Hour
PM-10 Concentration*

*National Ambient Air
Quality Standards:*

50

150

*California Ambient Air
Quality Standards:*

30

50

*NRDC Recommended
Standards:*

17

33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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DAVENPORT-ROCK ISLAND-MOLINE, IA-IL

This table provides summary information for Metropolitan Statistical Area 1960, DAVENPORT-ROCK ISLAND-MOLINE, IA-IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.2
Rank by PM-10 Concentration:	87 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	148 (88-204)
Attributable Deaths per 100,000 Population:	39
Rank by Number of Attributable Deaths:	94 of 239
Rank Attributable Death Rate:	74 of 239

Mortality (1989 data)

Total Mortality:	3,149
Adult Cardiopulmonary Deaths:	1,766
Auto Accident Deaths:	49

Population (1980 data)

Total Population:	384,000
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Counties Assigned to MSA

Scott Co, IA
Henry Co, IL

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Rock Island Co, IL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IA				
Scott Co				
DAVENPORT				
405 S.FARAGUT ,WORLD OF OZ DAY CARE	37.2	98	1993	4
FIRE STATION 331 SCOTT	27.6	68	1990	4
IL				
Rock Island Co				
EAST MOLINE				
CITY HALL 915 16TH ST	23.2	54	1990	5
ROCK ISLAND				
CITY HALL 1528 3RD AVE	27.7	65	1992	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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PEORIA, IL

This table provides summary information for Metropolitan Statistical Area 6120, PEORIA, IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.2
Rank by PM-10 Concentration:	138 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	99 (58-136)
Attributable Deaths per 100,000 Population:	27
Rank by Number of Attributable Deaths:	121 of 239
Rank Attributable Death Rate:	143 of 239

Mortality (1989 data)

Total Mortality:	2,913
Adult Cardiopulmonary Deaths:	1,510
Auto Accident Deaths:	62

Population (1980 data)

Total Population:	366,000
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Counties Assigned to MSA

Peoria Co, IL
Tazewell Co, IL

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Woodford Co, IL

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IL				
Peoria Co				
PEORIA				
613 N.E. JEFFERSON	23.3	72	1990	5
Tazewell Co				
EAST PEORIA				
235 E WASHINGTON	27.3	62	1994	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ROCKFORD, IL

This table provides summary information for Metropolitan Statistical Area 6880, ROCKFORD, IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.8
Rank by PM-10 Concentration:	211 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	44 (26-62)
Attributable Deaths per 100,000 Population:	16
Rank by Number of Attributable Deaths:	179 of 239
Rank Attributable Death Rate:	208 of 239

Mortality (1989 data)

Total Mortality:	2,272
Adult Cardiopulmonary Deaths:	1,186
Auto Accident Deaths:	59

Population (1980 data)

Total Population:	280,000
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Counties Assigned to MSA

Boone Co, IL
Winnebago Co, IL

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IL Winnebago Co ROCKFORD CHARLES BEYER SCHOOL, 333 15TH AVE.	20.8	55	1991	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SPRINGFIELD, IL

This table provides summary information for Metropolitan Statistical Area 7880, SPRINGFIELD, IL. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.6
Rank by PM-10 Concentration:	169 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	49 (29-69)
Attributable Deaths per 100,000 Population:	26
Rank by Number of Attributable Deaths:	167 of 239
Rank Attributable Death Rate:	150 of 239

Mortality (1989 data)

Total Mortality:	1,687
Adult Cardiopulmonary Deaths:	897
Auto Accident Deaths:	26

Population (1980 data)

Total Population:	188,000
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Counties Assigned to MSA

Menard Co, IL
Sangamon Co, IL

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IL Sangamon Co SPRINGFIELD 2105 E. COOK ST.	23.6	66	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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New Jersey: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of New Jersey. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
ALLENTOWN-BETHLEHEM-EASTON, PA-NJ	25.0	207	122 - 287	32	3,234	132
ATLANTIC CITY, NJ	32.4	120	72 - 165	62	1,106	44

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<u>JERSEY CITY, NJ</u>	29.4	222	132 - 306	40	2,450	53
<u>NEW YORK, NY- NJ</u>	28.8	4,024	2,384 - 5,540	44	46,227	973
<u>NEWARK, NJ</u>	31.4	819	487 - 1,124	42	7,975	240
<u>PATERSON- CLIFTON- PASSIAC, NJ</u>	34.8	251	150 - 343	56	2,041	45
<u>PHILADELPHIA, PA-NJ</u>	33.5	2,599	1,550 - 3,556	55	22,531	637
<u>TRENTON, NJ</u>	28.3	123	73 - 170	40	1,463	38
<u>WILMINGTON, DE-NJ-MD</u>	28.6	190	113 - 262	36	2,221	113

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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TRENTON, NJ

This table provides summary information for Metropolitan Statistical Area 8480, TRENTON, NJ. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	28.3
Rank by PM-10 Concentration:	85 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	123 (73-170)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	105 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	2,868
Adult Cardiopulmonary Deaths:	1,463
Auto Accident Deaths:	38

Population (1980 data)

Total Population:	308,000
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Counties Assigned to MSA

Mercer Co, NJ

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NJ Mercer Co TRENTON 120 ACADEMY STREET, TRENTON PUBLIC LIBR.	28.3	68	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Washington: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Washington. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
BELLINGHAM, WA	22.5	22	13 - 30	21	444	26
BREMERTON, WA	18.6	14	8 - 20	10	604	30
OLYMPIA, WA	22.9	26	15 - 36	21	507	18

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<u>PORTLAND, OR-WA</u>	23.9	307	180 - 425	25	5,388	225
<u>RICHLAND- KENNEWICK- PASCO, WA</u>	30.0	45	27 - 62	31	476	29
<u>SEATTLE- EVERETT, WA</u>	27.7	501	296 - 690	31	6,237	281
<u>SPOKANE, WA</u>	38.7	220	132 - 299	64	1,516	57
<u>TACOMA, WA</u>	30.0	195	116 - 268	40	2,062	89
<u>YAKIMA, WA</u>	33.1	94	56 - 129	54	833	56

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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BELLINGHAM, WA

This table provides summary information for Metropolitan Statistical Area 0860, BELLINGHAM, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.5
Rank by PM-10 Concentration:	190 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	22 (13-30)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	214 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	861
Adult Cardiopulmonary Deaths:	444
Auto Accident Deaths:	26

Population (1980 data)

Total Population:	107,000
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Counties Assigned to MSA

Whatcom Co, WA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
WA Whatcom Co BELLINGHAM YEW ST CENTER/2412 YEW ST	22.5	98	1991	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BREMERTON, WA

This table provides summary information for Metropolitan Statistical Area 1150, BREMERTON, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	18.6
Rank by PM-10 Concentration:	234 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.02
Adult Cardiopulmonary Attributable Deaths:	14 (8-20)
Attributable Deaths per 100,000 Population:	10
Rank by Number of Attributable Deaths:	230 of 239
Rank Attributable Death Rate:	227 of 239

Mortality (1989 data)

Total Mortality:	1,192
Adult Cardiopulmonary Deaths:	604
Auto Accident Deaths:	30

Population (1980 data)

Total Population:	147,000
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Counties Assigned to MSA

Kitsap Co, WA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
WA Kitsap Co POULSBO/LIONS PARK 6TH AVE NE/FJORD DR	18.6	35	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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OLYMPIA, WA

This table provides summary information for Metropolitan Statistical Area 5910, OLYMPIA, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.9
Rank by PM-10 Concentration:	182 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	26 (15-36)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	210 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	1,056
Adult Cardiopulmonary Deaths:	507
Auto Accident Deaths:	18

Population (1980 data)

Total Population:	124,000
-------------------	---------

Counties Assigned to MSA

Thurston Co, WA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WA				
Thurston Co				
LACEY				
MT VIEW ELEM/1900 COLLEGE ST SE	22.7	99	1991	5
OLYMPIA				
SCHAEFER BLDG/120 E STATE AVE	24.6	85	1990	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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TACOMA, WA

This table provides summary information for Metropolitan Statistical Area 8200, TACOMA, WA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.0
Rank by PM-10 Concentration:	61 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	195 (116-268)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	71 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	3,961
Adult Cardiopulmonary Deaths:	2,062
Auto Accident Deaths:	89

Population (1980 data)

Total Population:	486,000
-------------------	---------

Counties Assigned to MSA

Pierce Co, WA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WA				
Pierce Co				
TACOMA				
ALEXANDER AVE/2301 ALEXANDER AVE	28.5	85	1991	5
FIRE STATION #12/2316 E 11TH ST	33.2	140	1990	5
NE TACOMA/27TH ST & 54TH AVE NE	28.8	105	1992	5
TAYLOR WAY/2340 TAYLOR WY	31.1	78	1991	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Indiana: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Indiana. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
ANDERSON, IN	23.6	35	21 - 49	25	638	28
CINCINNATI-HAMILTON, OH-KY-IN	30.2	617	366 - 848	44	6,438	213

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<u>EVANSVILLE, IN-KY</u>	30.9	162	96 - 222	52	1,627	46
<u>FORT WAYNE, IN</u>	24.7	103	61 - 143	27	1,663	64
<u>GARY- HAMMOND- EAST CHICAGO, IN</u>	27.4	206	122 - 284	32	2,605	91
<u>INDIANAPOLIS, IN</u>	31.0	494	294 - 678	42	4,919	177
<u>LOUISVILLE, KY-IN</u>	29.7	392	232 - 539	43	4,230	129
<u>MUNCIE, IN</u>	22.0	26	15 - 36	20	567	24
<u>SOUTH BEND, IN</u>	27.0	103	61 - 143	37	1,358	50
<u>TERRE HAUTE, IN</u>	27.8	83	49 - 115	47	1,027	26

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ANDERSON, IN

This table provides summary information for Metropolitan Statistical Area 0400, ANDERSON, IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.6
Rank by PM-10 Concentration:	168 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	35 (21-49)
Attributable Deaths per 100,000 Population:	25
Rank by Number of Attributable Deaths:	194 of 239
Rank Attributable Death Rate:	157 of 239

Mortality (1989 data)

Total Mortality:	1,245
Adult Cardiopulmonary Deaths:	638
Auto Accident Deaths:	28

Population (1980 data)

Total Population:	139,000
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Counties Assigned to MSA

Madison Co, IN

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
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IN

Madison Co

ANDERSON

44 W. 5TH STREET	25.9	80	1990	5
MADISON HEIGHTS HIGH SCHOOL	22.6	72	1990	5
NORTHSIDE JR. HIGH SCHOOL	20.9	61	1991	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FORT WAYNE, IN

This table provides summary information for Metropolitan Statistical Area 2760, FORT WAYNE, IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.7
Rank by PM-10 Concentration:	150 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	103 (61-143)
Attributable Deaths per 100,000 Population:	27
Rank by Number of Attributable Deaths:	118 of 239
Rank Attributable Death Rate:	143 of 239

Mortality (1989 data)

Total Mortality:	3,023
Adult Cardiopulmonary Deaths:	1,663
Auto Accident Deaths:	64

Population (1980 data)

Total Population:	383,000
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Counties Assigned to MSA

Adams Co, IN
Allen Co, IN

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De Kalb Co, IN

Wells Co, IN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
IN				
Allen Co				
FORT WAYNE				
2022 NORTH BEACON	24.7	64	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GARY-HAMMOND-EAST CHICAGO, IN

This table provides summary information for Metropolitan Statistical Area 2960, GARY-HAMMOND-EAST CHICAGO, IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.4
Rank by PM-10 Concentration:	102 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	206 (122-284)
Attributable Deaths per 100,000 Population:	32
Rank by Number of Attributable Deaths:	66 of 239
Rank Attributable Death Rate:	106 of 239

Mortality (1989 data)

Total Mortality:	5,037
Adult Cardiopulmonary Deaths:	2,605
Auto Accident Deaths:	91

Population (1980 data)

Total Population:	643,000
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Counties Assigned to MSA

Lake Co, IN
Porter Co, IN

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IN				
Lake Co				
201 MISSISSIPPI ST., IITRI BUNKER	32.8	122	1993	2
EAST CHICAGO				
FIELD SCHOOL, BLOCK & JAMES STREETS	31.4	123	1990	5
FRANKLIN SCHOOL ALDER & 142ND ST	29.4	80	1992	5
INLAND STEEL NUMBER 7 PUMPHOUSE	28.7	81	1990	5
GARY				
FEDERAL BLDG 6TH AVE & CONN	28.9	72	1990	5
GARY ARMOR PLATE, NEXT TO HARBOR BELT RR	40.3	203	1990	3
IVANHOE SCHOOL 15TH & GERRY STS	25.2	71	1991	5
HAMMOND				
1921 DAVIS ST., ROBERTSDALE, CLARK H.S.	25.0	81	1990	5
GENERAL SERVICES ADMIN 3200 SHEFFIELD AV	25.9	81	1990	5
PURDUE UNIV CALUMET CAMPUS 2233 171ST ST	25.1	79	1990	5
Porter Co				
BETHLEHEM STEEL HEADQUARTERS BUILDING	23.2	52	1993	3
DUNE ACRES	18.6	38	1993	1
EAST OFFICE BETH STEEL	22.7	53	1994	3
HWY 12 WASTE LAGOON	22.1	60	1994	2
SOUTH HAVEN SCHOOL (SOUTH HAVEN)	21.8	40	1992	1

WATER TREATMENT PLANT	22.5	55	1993	3
VALPARAISO				
VALPARAISO U. HWY 30 & 49	24.0	74	1990	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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MUNCIE, IN

This table provides summary information for Metropolitan Statistical Area 5280, MUNCIE, IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.0
Rank by PM-10 Concentration:	198 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	26 (15-36)
Attributable Deaths per 100,000 Population:	20
Rank by Number of Attributable Deaths:	210 of 239
Rank Attributable Death Rate:	193 of 239

Mortality (1989 data)

Total Mortality:	1,045
Adult Cardiopulmonary Deaths:	567
Auto Accident Deaths:	24

Population (1980 data)

Total Population:	129,000
-------------------	---------

Counties Assigned to MSA

Delaware Co, IN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IN Delaware Co MUNCIE MUNCIE CENTRAL HIGH	22.0	45	1990	1

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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SOUTH BEND, IN

This table provides summary information for Metropolitan Statistical Area 7800, SOUTH BEND, IN. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.0
Rank by PM-10 Concentration:	111 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	103 (61-143)
Attributable Deaths per 100,000 Population:	37
Rank by Number of Attributable Deaths:	118 of 239
Rank Attributable Death Rate:	85 of 239

Mortality (1989 data)

Total Mortality:	2,538
Adult Cardiopulmonary Deaths:	1,358
Auto Accident Deaths:	50

Population (1980 data)

Total Population:	281,000
-------------------	---------

Counties Assigned to MSA

Marshall Co, IN
St. Joseph Co, IN

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IN				
St. Joseph Co				
SOUTH BEND				
122 WEST WAYNE	27.3	96	1990	5
LASALLE HIGH SCHOOL	26.6	82	1990	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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New Mexico: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of New Mexico. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
ALBUQUERQUE, NM	25.0	97	57 - 135	21	1,520	120
LAS CRUCES, NM	31.7	31	19 - 43	32	299	35

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived

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from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ALBUQUERQUE, NM

This table provides summary information for Metropolitan Statistical Area 0200, ALBUQUERQUE, NM. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	25.0
Rank by PM-10 Concentration:	142 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	97 (57-135)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	125 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	3,318
Adult Cardiopulmonary Deaths:	1,520
Auto Accident Deaths:	120

Population (1980 data)

Total Population:	454,000
-------------------	---------

Counties Assigned to MSA

Bernalillo Co, NM

Sandoval Co, NM

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NM				
Bernalillo Co				
4100 ISLETA RD SW	34.6	98	1990	5
9819A SECOND STREET NW	32.5	127	1990	4
ALBUQUERQUE				
10155 COORS ROAD NW	22.9	68	1990	5
1500 BROADWAY NE	29.0	65	1993	5
2421 MESILLA AVE. N. E.	18.0	52	1992	5
2621 SAN MATEO NE ALBUQUERQUE NM	25.5	55	1994	5
4700A SAN MATEO NE (2ZM)	22.2	58	1993	4
6000 ANDERSON AVENUE SE (2ZN)	19.3	53	1991	5
CITY YARDS 5501 PINO N. E.	21.6	48	1991	5
Sandoval Co				
BERNALILLO				
BERNALILLO CITY HALL	25.3	79	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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West Virginia: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of West Virginia. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
CHARLESTON, WV	30.6	126	75 - 173	47	1,284	69
CUMBERLAND, MD-WV	22.0	31	18 - 43	29	694	18

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<u>HUNTINGTON- ASHLAND, WV- KY-OH</u>	31.4	166	99 - 228	53	1,617	52
<u>PARKERSBURG- MARIETTA, WV- OH</u>	27.2	60	36 - 83	37	779	30
<u>STEUBENVILLE- WEIRTON, OH- WV</u>	36.6	127	76 - 173	78	953	24
<u>WHEELING, WV- OH</u>	29.8	104	62 - 143	56	1,114	23

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Iowa: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Iowa. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
CEDAR RAPIDS, IA	26.1	46	27 - 63	27	647	24

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<u>DAVENPORT- ROCK ISLAND- MOLINE, IA- IL</u>	28.2	148	88 - 204	39	1,766	49
<u>DES MOINES, IA</u>	30.7	137	81 - 188	41	1,389	58
<u>OMAHA, NE- IA</u>	35.5	288	172 - 393	51	2,268	75
<u>SIOUX CITY, IA-NE</u>	26.0	42	25 - 57	36	590	22
<u>WATERLOO- CEDAR FALLS, IA</u>	33.0	61	37 - 84	44	548	16

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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CEDAR RAPIDS, IA

This table provides summary information for Metropolitan Statistical Area 1360, CEDAR RAPIDS, IA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	26.1
Rank by PM-10 Concentration:	127 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.08
Adult Cardiopulmonary Attributable Deaths:	46 (27-63)
Attributable Deaths per 100,000 Population:	27
Rank by Number of Attributable Deaths:	172 of 239
Rank Attributable Death Rate:	143 of 239

Mortality (1989 data)

Total Mortality:	1,248
Adult Cardiopulmonary Deaths:	647
Auto Accident Deaths:	24

Population (1980 data)

Total Population:	170,000
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Counties Assigned to MSA

Linn Co, IA

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
--	---	---	------------------------------------	-------------------------------

IA

Linn Co

CEDAR RAPIDS

14TH AVE & 10TH STREET SE / JANE BOYD	25.4	68	1990	5
FIRST STREET AND FIFTH AVENUE SE	27.0	80	1990	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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DES MOINES, IA

This table provides summary information for Metropolitan Statistical Area 2120, DES MOINES, IA. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	30.7
Rank by PM-10 Concentration:	52 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.11
Adult Cardiopulmonary Attributable Deaths:	137 (81-188)
Attributable Deaths per 100,000 Population:	41
Rank by Number of Attributable Deaths:	96 of 239
Rank Attributable Death Rate:	64 of 239

Mortality (1989 data)

Total Mortality:	2,704
Adult Cardiopulmonary Deaths:	1,389
Auto Accident Deaths:	58

Population (1980 data)

Total Population:	338,000
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Counties Assigned to MSA

Polk Co, IA
Warren Co, IA

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
IA				
Polk Co				
MAIN & S. 5TH ST,DALLAS-GRIMES ELEM SCH	26.8	65	1990	2
DES MOINES				
9TH & MULBERRY , FIRE STATION #1	28.3	83	1992	3
SE 18TH AND SCOTT, NATIONAL BY- PRODUCTS	37.4	131	1990	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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New York: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of New York. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
ALBANY-SCHENECTADY-TROY, NY	21.6	178	105 - 248	22	4,194	126
BINGHAMTON, NY-PA	21.0	63	37 - 87	21	1,613	46

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<u>BUFFALO, NY</u>	20.9	260	152 - 361	21	6,732	164
<u>ELMIRA, NY</u>	19.6	15	9 - 22	15	520	15
<u>GLENS FALLS, NY</u>	20.6	20	12 - 28	18	557	26
<u>NASSAU- SUFFOLK, NY</u>	23.2	605	356 - 839	23	11,481	378
<u>NEW YORK, NY- NJ</u>	28.8	4,024	2,384 - 5,540	44	46,227	973
<u>ROCHESTER, NY</u>	21.8	183	108 - 254	19	4,143	138
<u>SYRACUSE, NY</u>	24.3	165	97 - 229	26	2,776	97
<u>UTICA-ROME, NY</u>	22.6	89	52 - 123	28	1,812	67

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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ALBANY-SCHENECTADY-TROY, NY

This table provides summary information for Metropolitan Statistical Area 0160, ALBANY-SCHENECTADY-TROY, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.6
Rank by PM-10 Concentration:	202 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	178 (105-248)
Attributable Deaths per 100,000 Population:	22
Rank by Number of Attributable Deaths:	77 of 239
Rank Attributable Death Rate:	179 of 239

Mortality (1989 data)

Total Mortality:	7,492
Adult Cardiopulmonary Deaths:	4,194
Auto Accident Deaths:	126

Population (1980 data)

Total Population:	795,000
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Counties Assigned to MSA

Albany Co, NY
Montgomery Co, NY

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Rensselaer Co, NY
 Saratoga Co, NY
 Schenectady Co, NY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NY				
Albany Co				
ALBANY				
ALBANY CO. HEALTH DEPT.,GREEN & S.FERRY ST	23.9	69	1992	4
ALBANY LOUDONVILLE RESERVOIR AREA	19.4	51	1993	5
PORT OF ALBANY, GOODYEAR WAREHOUSE	24.3	62	1990	5
COHOES				
26 REMSEN STREET	20.7	52	1994	4
Rensselaer Co				
TROY				
UNCLE SAM ATRIUM,DTN.SHOPPING CENTER	21.8	56	1992	3
Saratoga Co				
SARATOGA SPRINGS				
POST OFFICE BROADWAY	20.3	48	1993	5
Schenectady Co				
SCHENECTADY				
MT.PLEASANT HS, NORWOOD AVE. & FOREST RD.	21.4	59	1992	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold *designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)*

Italic *designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)*

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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BUFFALO, NY

This table provides summary information for Metropolitan Statistical Area 1280, BUFFALO, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.9
Rank by PM-10 Concentration:	210 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	260 (152-361)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	52 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	11,928
Adult Cardiopulmonary Deaths:	6,732
Auto Accident Deaths:	164

Population (1980 data)

Total Population:	1,243,000
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Counties Assigned to MSA

Erie Co, NY
Niagara Co, NY

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NY				
Erie Co				
HOLLAND MIDDLE SCHOOL, ROUTES 16 A 396	17.0	56	1991	5
BUFFALO				
2258 BAILEY AVE.(RTE.62)& KENSINGTON EXP	24.0	69	1993	5
MACHNICA COMMUNITY CENTER,1799 CLINTON S	21.1	61	1990	1
PS 33,157 ELK STREET	21.9	57	1991	3
CHEEKTOWAGA				
TOWN HALL, BROADWAY & UNION ROAD	22.1	68	1993	5
LACKAWANNA				
SEWAGE TREATMENT PLANT,252 LEHIGH AVENUE	19.7	58	1991	5
TONAWANDA				
WASTE WATER TR.PLANT, TWO MILE CREEK RD.	20.9	67	1993	5
Niagara Co				
LEWISTON				
LEWISTON(T),STATE POWER AUTHOR.SWITCH YD	19.8	62	1991	5
LOCKPORT				
COURTHOUSE, NIAGARA & HAWLEY STREETS	20.4	70	1991	5
NIAGARA FALLS				
10TH & E.FALLS ST.,HUMAN RESOURCES BLDG.	20.9	61	1993	5
61ST STREET AND GERARD AVENUE	21.9	59	1993	5

HYDE PARK BLVD. AT PACKARD RD.	22.1	70	1991	5
ROBBINS DR.,PARKS DEPT.BLDG.	21.1	67	1993	5
NORTH TONAWANDA				
DEGRAFF MEMORIAL HOSPITAL,445 TREMONT ST	21.3	67	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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ELMIRA, NY

This table provides summary information for Metropolitan Statistical Area 2335, ELMIRA, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	19.6
Rank by PM-10 Concentration:	222 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	15 (9-22)
Attributable Deaths per 100,000 Population:	15
Rank by Number of Attributable Deaths:	226 of 239
Rank Attributable Death Rate:	212 of 239

Mortality (1989 data)

Total Mortality:	965
Adult Cardiopulmonary Deaths:	520
Auto Accident Deaths:	15

Population (1980 data)

Total Population:	98,000
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Counties Assigned to MSA

Chemung Co, NY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NY Chemung Co ELMIRA 203-209 WILLIAMS ST.	19.6	56	1993	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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GLENS FALLS, NY

This table provides summary information for Metropolitan Statistical Area 2975, GLENS FALLS, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	20.6
Rank by PM-10 Concentration:	215 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	20 (12-28)
Attributable Deaths per 100,000 Population:	18
Rank by Number of Attributable Deaths:	216 of 239
Rank Attributable Death Rate:	202 of 239

Mortality (1989 data)

Total Mortality:	1,033
Adult Cardiopulmonary Deaths:	557
Auto Accident Deaths:	26

Population (1980 data)

Total Population:	110,000
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Counties Assigned to MSA

Warren Co, NY
Washington Co, NY

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NY Warren Co GLENS FALLS RADIO STATION WWSC, DIX AVENUE	20.6	53	1994	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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ROCHESTER, NY

This table provides summary information for Metropolitan Statistical Area 6840, ROCHESTER, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.8
Rank by PM-10 Concentration:	201 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	183 (108-254)
Attributable Deaths per 100,000 Population:	19
Rank by Number of Attributable Deaths:	75 of 239
Rank Attributable Death Rate:	198 of 239

Mortality (1989 data)

Total Mortality:	7,958
Adult Cardiopulmonary Deaths:	4,143
Auto Accident Deaths:	138

Population (1980 data)

Total Population:	972,000
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Counties Assigned to MSA

Livingston Co, NY
Monroe Co, NY

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Ontario Co, NY

Orleans Co, NY

Wayne Co, NY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading	Number of Years of Data
NY				
Monroe Co				
ROCHESTER				
1639 EAST AVENUE AND ROUTE 490 FIRE	24.3	73	1993	5
HQ.BUILDING,ANDREWS & CHESTNUT STS.	20.6	57	1991	5
JEFFERSON SR.HIGH, EDGERTON PARK	20.6	58	1991	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SYRACUSE, NY

This table provides summary information for Metropolitan Statistical Area 8160, SYRACUSE, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.3
Rank by PM-10 Concentration:	158 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	165 (97-229)
Attributable Deaths per 100,000 Population:	26
Rank by Number of Attributable Deaths:	87 of 239
Rank Attributable Death Rate:	150 of 239

Mortality (1989 data)

Total Mortality:	5,244
Adult Cardiopulmonary Deaths:	2,776
Auto Accident Deaths:	97

Population (1980 data)

Total Population:	642,000
-------------------	---------

Counties Assigned to MSA

Madison Co, NY
Onondaga Co, NY

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NY				
Onondaga Co				
SOLVAY				
SOLVAY HIGH SCHOOL, GERTRUDE AVENUE	18.4	61	1993	5
SYRACUSE				
300 ERIE BLVD. NIAGARA MOHAWK BLDG.	21.7	64	1993	5
734 BURNETT AVENUE SEWAGE TREATMENT PLANT HIAWATHA BLVD	30.5	79	1991	5
	26.4	79	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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UTICA-ROME, NY

This table provides summary information for Metropolitan Statistical Area 8680, UTICA-ROME, NY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.6
Rank by PM-10 Concentration:	188 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	89 (52-123)
Attributable Deaths per 100,000 Population:	28
Rank by Number of Attributable Deaths:	129 of 239
Rank Attributable Death Rate:	138 of 239

Mortality (1989 data)

Total Mortality:	3,152
Adult Cardiopulmonary Deaths:	1,812
Auto Accident Deaths:	67

Population (1980 data)

Total Population:	320,000
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Counties Assigned to MSA

Herkimer Co, NY
Oneida Co, NY

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NY Oneida Co UTICA 406 ELIZABETH ST.,CITY HEALTH OFFICE	22.6	60	1991	4

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Wisconsin: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Wisconsin. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
DULUTH-SUPERIOR, MN-WI	21.2	55	32 - 76	21	1,357	38
GREEN BAY, WI	21.1	18	10 - 25	10	450	38

<u>MADISON, WI</u>	22.4	50	29 - 70	15	1,045	61
<u>MILWAUKEE, WI</u>	28.4	518	307 - 714	37	6,118	151
<u>MINNEAPOLIS-ST. PAUL, MN-WI</u>	25.8	495	292 - 685	23	7,186	299

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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GREEN BAY, WI

This table provides summary information for Metropolitan Statistical Area 3080, GREEN BAY, WI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	21.1
Rank by PM-10 Concentration:	207 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.04
Adult Cardiopulmonary Attributable Deaths:	18 (10-25)
Attributable Deaths per 100,000 Population:	10
Rank by Number of Attributable Deaths:	219 of 239
Rank Attributable Death Rate:	227 of 239

Mortality (1989 data)

Total Mortality:	1,246
Adult Cardiopulmonary Deaths:	450
Auto Accident Deaths:	38

Population (1980 data)

Total Population:	175,000
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Counties Assigned to MSA

Brown Co, WI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
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WI

Brown Co

DE PERE

SCRAY HILL QUARRY, TEL CO BLDG	20.4	62	1990	3
SCRAY HILL QUARRY- MORRISON/SCRAY HILL RD	21.9	74	1990	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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MADISON, WI

This table provides summary information for Metropolitan Statistical Area 4720, MADISON, WI. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.4
Rank by PM-10 Concentration:	191 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	50 (29-70)
Attributable Deaths per 100,000 Population:	15
Rank by Number of Attributable Deaths:	166 of 239
Rank Attributable Death Rate:	212 of 239

Mortality (1989 data)

Total Mortality:	2,079
Adult Cardiopulmonary Deaths:	1,045
Auto Accident Deaths:	61

Population (1980 data)

Total Population:	324,000
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Counties Assigned to MSA

Dane Co, WI

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
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WI

Dane Co

MADISON

RODEFELD SE SITE, CNTY AB & HWY 12/18	22.8	55	1991	5
WATER RESERVOIR, DAYTON & LIVINGSON ST.	20.6	63	1992	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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Kansas: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Kansas. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (1990-1994) (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
KANSAS CITY, MO-KS	29.5	507	300 - 697	38	5,534	232
WICHITA, KS	29.8	158	93 - 217	38	1,687	78

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Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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WICHITA, KS

This table provides summary information for Metropolitan Statistical Area 9040, WICHITA, KS. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.8
Rank by PM-10 Concentration:	64 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	158 (93-217)
Attributable Deaths per 100,000 Population:	38
Rank by Number of Attributable Deaths:	90 of 239
Rank Attributable Death Rate:	79 of 239

Mortality (1989 data)

Total Mortality:	3,316
Adult Cardiopulmonary Deaths:	1,687
Auto Accident Deaths:	78

Population (1980 data)

Total Population:	411,000
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Counties Assigned to MSA

Butler Co, KS
Sedgwick Co, KS

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
KS				
Sedgwick Co				
WICHITA				
COLEMAN CO., 37TH & HYDRAULIC	35.3	100	1994	5
FIRE STA#11, G.WASHINGTONBLVD & E.SKINNE	27.8	86	1992	5
FIRE STA#12 GLEN & PAWNEE	28.8	125	1993	5
FIRE STA#7 ST.PAUL & WEST 13TH	27.4	73	1993	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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North Carolina: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of North Carolina. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution			Adult Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range	Deaths per 100,000 Population		
ASHEVILLE, NC	23.5	53	31 - 73	30	963	48
CHARLOTTE-GASTONIA, NC	29.4	252	149 - 346	40	2,765	144
FAYETTEVILLE, NC	27.4	52	31 - 72	21	664	64

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<u>GREENSBORO- WINSTON SALEM-HIGH POINT, NC</u>	28.1	304	180 - 419	37	3,673	187
<u>HICKORY, NC</u>	24.5	38	23 - 53	29	631	81
<u>JACKSONVILLE, NC</u>	22.5	11	7 - 16	10	232	19
<u>NORFOLK- VIRGINIA BEACH- PORTSMOUTH, VA-NC</u>	23.4	164	97 - 228	20	3,033	118
<u>RALEIGH- DURHAM, NC</u>	24.9	125	74 - 173	24	1,961	92
<u>SALISBURY- CONCORD, NC</u>	23.6	57	34 - 79	31	1,037	56
<u>WILMINGTON, NC</u>	23.7	38	22 - 53	27	681	38

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

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ASHEVILLE, NC

This table provides summary information for Metropolitan Statistical Area 0480, ASHEVILLE, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.5
Rank by PM-10 Concentration:	170 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	53 (31-73)
Attributable Deaths per 100,000 Population:	30
Rank by Number of Attributable Deaths:	162 of 239
Rank Attributable Death Rate:	126 of 239

Mortality (1989 data)

Total Mortality:	1,927
Adult Cardiopulmonary Deaths:	963
Auto Accident Deaths:	48

Population (1980 data)

Total Population:	178,000
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Counties Assigned to MSA

Buncombe Co, NC

Madison Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NC				
Buncombe Co				
LONDON RD ASHVILLE NC 28803	30.7	58	1993	1
ASHEVILLE				
HEALTH & SOCIAL SERVICES BLDG WOODFIN ST	22.6	53	1991	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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CHARLOTTE-GASTONIA, NC

This table provides summary information for Metropolitan Statistical Area 1520, CHARLOTTE-GASTONIA, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	29.4
Rank by PM-10 Concentration:	68 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.10
Adult Cardiopulmonary Attributable Deaths:	252 (149-346)
Attributable Deaths per 100,000 Population:	40
Rank by Number of Attributable Deaths:	54 of 239
Rank Attributable Death Rate:	66 of 239

Mortality (1989 data)

Total Mortality:	5,543
Adult Cardiopulmonary Deaths:	2,765
Auto Accident Deaths:	144

Population (1980 data)

Total Population:	637,000
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Counties Assigned to MSA

Gaston Co, NC
Mecklenburg Co, NC

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Union Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NC				
Mecklenburg Co				
CHARLOTTE				
FIRE STA #10 2136 REMOUNT ROAD	30.1	59	1991	5
FIRE STA #11 620 MORETZ STREET	29.9	56	1994	2
DAVIDSON				
FILTER PLANT	25.1	51	1992	3

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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FAYETTEVILLE, NC

This table provides summary information for Metropolitan Statistical Area 2560, FAYETTEVILLE, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	27.4
Rank by PM-10 Concentration:	103 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.09
Adult Cardiopulmonary Attributable Deaths:	52 (31-72)
Attributable Deaths per 100,000 Population:	21
Rank by Number of Attributable Deaths:	164 of 239
Rank Attributable Death Rate:	184 of 239

Mortality (1989 data)

Total Mortality:	1,415
Adult Cardiopulmonary Deaths:	664
Auto Accident Deaths:	64

Population (1980 data)

Total Population:	247,000
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Counties Assigned to MSA

Cumberland Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NC Cumberland Co FAYETTEVILLE F.S. # 5 3296 VILLAGE DR.	27.4	56	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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HICKORY, NC

This table provides summary information for Metropolitan Statistical Area 3290, HICKORY, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.5
Rank by PM-10 Concentration:	152 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	38 (23-53)
Attributable Deaths per 100,000 Population:	29
Rank by Number of Attributable Deaths:	186 of 239
Rank Attributable Death Rate:	132 of 239

Mortality (1989 data)

Total Mortality:	1,240
Adult Cardiopulmonary Deaths:	631
Auto Accident Deaths:	81

Population (1980 data)

Total Population:	130,000
-------------------	---------

Counties Assigned to MSA

Alexander Co, NC
Catawba Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NC				
Alexander Co				
STATE ROAD 1177	22.6	53	1993	2
Catawba Co				
HICKORY				
1650 1ST. ST.	26.4	50	1993	2

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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JACKSONVILLE, NC

This table provides summary information for Metropolitan Statistical Area 3605, JACKSONVILLE, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	22.5
Rank by PM-10 Concentration:	189 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.05
Adult Cardiopulmonary Attributable Deaths:	11 (7-16)
Attributable Deaths per 100,000 Population:	10
Rank by Number of Attributable Deaths:	235 of 239
Rank Attributable Death Rate:	227 of 239

Mortality (1989 data)

Total Mortality:	479
Adult Cardiopulmonary Deaths:	232
Auto Accident Deaths:	19

Population (1980 data)

Total Population:	113,000
-------------------	---------

Counties Assigned to MSA

Onslow Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NC Onslow Co JACKSONVILLE 2553 ONSLOW DRIVE, JACKSONVILLE	22.5	44	1991	4

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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RALEIGH-DURHAM, NC

This table provides summary information for Metropolitan Statistical Area 6640, RALEIGH-DURHAM, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	24.9
Rank by PM-10 Concentration:	144 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.07
Adult Cardiopulmonary Attributable Deaths:	125 (74-173)
Attributable Deaths per 100,000 Population:	24
Rank by Number of Attributable Deaths:	103 of 239
Rank Attributable Death Rate:	162 of 239

Mortality (1989 data)

Total Mortality:	4,164
Adult Cardiopulmonary Deaths:	1,961
Auto Accident Deaths:	92

Population (1980 data)

Total Population:	531,000
-------------------	---------

Counties Assigned to MSA

Durham Co, NC

Orange Co, NC

Wake Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NC				
Durham Co				
DURHAM				
HEALTH DEPT 300 E MAIN ST	25.6	52	1990	5
Wake Co				
RALEIGH				
FIRE STATION #9 SIX FORKS RD NORTH HILLS	24.3	50	1991	5

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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SALISBURY-CONCORD, NC

This table provides summary information for Metropolitan Statistical Area 7140, SALISBURY-CONCORD, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.6
Rank by PM-10 Concentration:	167 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	57 (34-79)
Attributable Deaths per 100,000 Population:	31
Rank by Number of Attributable Deaths:	157 of 239
Rank Attributable Death Rate:	118 of 239

Mortality (1989 data)

Total Mortality:	1,957
Adult Cardiopulmonary Deaths:	1,037
Auto Accident Deaths:	56

Population (1980 data)

Total Population:	185,000
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Counties Assigned to MSA

Cabarrus Co, NC
Rowan Co, NC

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Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years of Data
NC				
Cabarrus Co				
KANNAPOLIS				
FLOYD ST. KANNAPOLIS	23.4	49	1993	2
Rowan Co				
SALISBURY				
CORNER OF CHURCH & KERR STS	23.8	49	1993	2

Notes

	Annual Mean PM-10 Concentration	24-Hour PM-10 Concentration
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

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WILMINGTON, NC

This table provides summary information for Metropolitan Statistical Area 9200, WILMINGTON, NC. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	23.7
Rank by PM-10 Concentration:	164 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.06
Adult Cardiopulmonary Attributable Deaths:	38 (22-53)
Attributable Deaths per 100,000 Population:	27
Rank by Number of Attributable Deaths:	186 of 239
Rank Attributable Death Rate:	143 of 239

Mortality (1989 data)

Total Mortality:	1,376
Adult Cardiopulmonary Deaths:	681
Auto Accident Deaths:	38

Population (1980 data)

Total Population:	139,000
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Counties Assigned to MSA

Brunswick Co, NC
New Hanover Co, NC

Monitoring Stations

Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
NC				
New Hanover Co				
WAREHSE & RECEIVING ST UNCW WILM NC28403	20.4	28	1994	1
WILMINGTON				
NINTH AND ORANGE STREETS	23.8	61	1990	5

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

All PM-10 concentrations are reported in (ug/m³).

Bold designates PM-10 Hotspots, individual monitoring stations among the top 50 annual mean concentrations in the U. S. (There were none in this MSA.)

Italic designates PM-10 Hotspots, individual monitoring stations among the top 50 24-hour concentrations in the U. S. in 1994. (There were none in this MSA.)

Peak 24-hour PM-10 concentration reported is the highest value of the 2nd highest 24-hour concentration reported during a year for which data is available.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for 1980, except for New England, where areas are New England County Metropolitan Areas.



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Wyoming: Particulate Air Pollution Attributable Mortality by MSA

This table identifies Metropolitan Statistical Areas in the state of Wyoming. For each MSA, the table shows PM-10 concentration and NRDC's estimate of air pollution attributable deaths.

The table shows the average annual mean PM-10 concentration in each MSA over the five-year period, 1990 through 1994. The higher the PM-10 concentration, the greater the risk of premature mortality from heart and lung disease.

For each MSA, we present point and range estimates of the annual adult cardiopulmonary deaths attributable to air pollution. The estimates are derived by applying a risk factor reported in a study of an American Cancer Society cohort to MSA-specific information on PM-10 concentrations and mortality from selected causes. The range estimates are derived from the confidence intervals for the risk ratio reported in the ACS study.

For the purposes of comparison, the table also shows the total number of cardiopulmonary deaths in the MSA and the number of deaths from car accidents.

Metropolitan Statistical Area	Average Annual Mean PM-10 Concentration (ug/m ³)	Estimated Annual Cardiopulmonary Deaths Attributable to Particulate Air Pollution		Deaths per 100,000 Population	Adult Cardio-Pulmonary Deaths (1989)	Deaths from Auto Accidents (1989)
		Point Estimate	Range			
CASPER, WY	18.8	4	3 - 6	6	181	14

Point estimates are derived from the risk ratio reported in the ACS study. Ranges are derived from 95-percent confidence intervals around the risk ratio in the ACS study.

Metropolitan Statistical Areas are as defined by the Office of Management and Budget for

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1980, except for New England, where areas are New England County Metropolitan Areas.



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CASPER, WY

This table provides summary information for Metropolitan Statistical Area 1350, CASPER, WY. The table also provides detailed information on PM-10 concentrations reported at individual monitoring stations within the MSA.

A [glossary](#) provides an explanation of key terms reported in the MSA tables.

PM-10 Concentration

1990-1994 Average Annual Mean:	18.8
Rank by PM-10 Concentration:	229 of 239

Mortality Attributable to Air Pollution

Risk Ratio for Cardiopulmonary Mortality:	1.03
Adult Cardiopulmonary Attributable Deaths:	4 (3-6)
Attributable Deaths per 100,000 Population:	6
Rank by Number of Attributable Deaths:	238 of 239
Rank Attributable Death Rate:	236 of 239

Mortality (1989 data)

Total Mortality:	423
Adult Cardiopulmonary Deaths:	181
Auto Accident Deaths:	14

Population (1980 data)

Total Population:	72,000
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Counties Assigned to MSA

Natrona Co, WY

Monitoring Stations

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Location (State, County, City, Address)	Average Annual Mean PM-10 Concentration (1990-1994)	Peak 24-Hour PM-10 Concentration	Year of Peak Reading of Data	Number of Years
WY Natrona Co CASPER CITY COUNTY BLDG CENTER AND C STREETS	18.8	46	1994	3

Notes

	<i>Annual Mean PM-10 Concentration</i>	<i>24-Hour PM-10 Concentration</i>
<i>National Ambient Air Quality Standards:</i>	50	150
<i>California Ambient Air Quality Standards:</i>	30	50
<i>NRDC Recommended Standards:</i>	17	33

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