Danger in the Air:

Acknowledgements

Executive Summary

Sources of Ozone and Fine Particle Pollution

Ozone

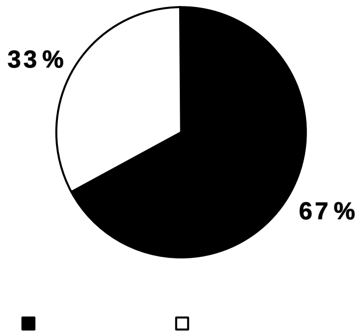


Figure 3. Sources of Sulfur Dioxide, 1999

Health Effects of Ozone and Fine Particles

Ozone

Fine Particle Pollution

Table 2. EPA's Air Quality Index for Fine Particles

24-Hour Fine Particle Concentration (micrograms per cubic meter)	Level of Health Concern	EPA's Cautionary Statement

Trends in Ozone and Fine Particle Pollution

Ozone

Figure 4. Trend in 8-Hour Ozone Levels Averaged Across EPA Regions, 1980–2003

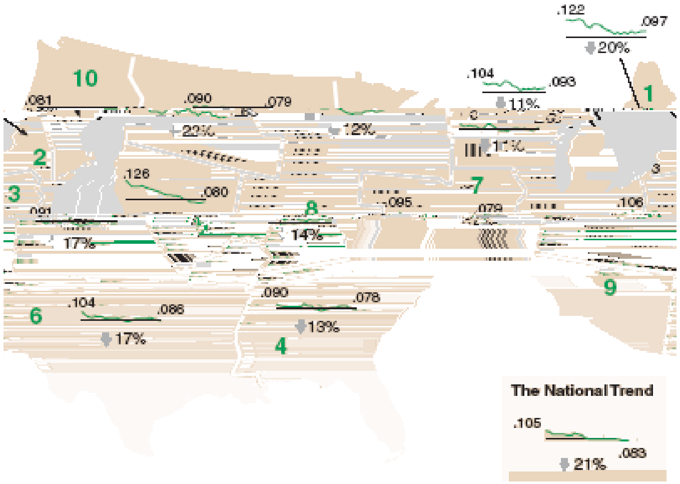
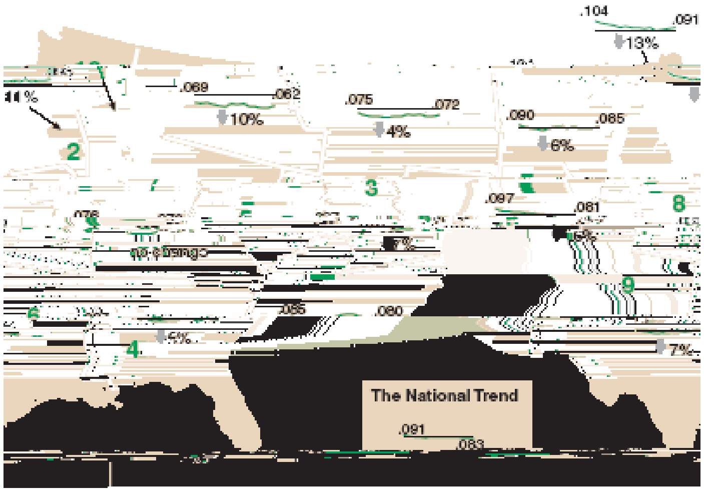


Figure 5. Trend in 8-Hour Ozone Levels Averaged Across EPA Regions, 1990–2003



Fine Particle Pollution

Failing to Meet Health Standards

Ozone

‘Pristine’ Parks Fail to Meet National Health Standards

Report Findings: 2003 Air Quality

Table 4. 15 Most Ozone-Polluted Mid-Sized Metropolitan Areas, 2003

Rank	Metropolitan Statistical Area	Population	Number of Smog Days	Exceedances of 8-Hour Ozone Health Standard	Exceedances of 1-Hour Ozone Health Standard

Table 6. Exceedances of Ozone Health Standards at Parks and Other Areas Not Located in Metropolitan Areas, 2003

Area	Exceedances of 8-Hour Ozone Health Standard	Exceedances of 1-Hour Ozone Health Standard

Code Purple, Very Unhealthy Ozone Levels

Table 7. Very Unhealthy 8-Hour Ozone Exceedances, 2003

Rank	Date	Metropolitan Statistical Area

Rank	Date	Metropolitan Statistical Area	Very Unhealthy Exceedances of 8-Hour Ozone Standard (ppm)

Fine Particle Pollution

Table 10. Small Metropolitan Areas Plagued by Year-Round Particle Pollution, 2003

Rank	Metropolitan Statistical Area	Population

Table 11. States Exceeding Health Standards for Particle Pollution, 2003

State	Number of Soot Days	Exceedances of 24-Hour Fine Particle Health Standard	Maximum 24-Hour Fine Particle Value (micrograms per cubic meter)	Maximum Average Year-Round Fine Particle Value (micrograms per cubic meter)

Table 13. Mid-Sized Metropolitan Areas with Spikes in Particle Pollution, 2003

Rank	Metropolitan Statistical Area	Population	Number of Soot Days	Exceedances of 24-Hour Fine Particle Health Standard	Maximum 24-Hour Fine Particle Value (micrograms per cubic meter)

Table 14. Small Metropolitan Areas with Spikes in Particle Pollution, 2003

Rank	Metropolitan Statistical Area	Population	Number of Soot Days	Exceedances of 24-Hour Fine Particle Health Standard	Maximum 24-Hour Fine Particle Value (micrograms per cubic meter)
					213.7
					146.5
					83.2
					69.0
					65.1
					70.2
					76.7
					75.0
					72.3

Code Purple, Very Unhealthy Particle Levels

Preliminary 2004 Ozone Data

Methodology

Fine particles:

California
Ozone:

Fine particles:

Hawaii
Ozone and fine particles:

Idaho
Ozone and fine particles:

Illinois
Ozone:
Fine particles:

Indiana
Ozone:

Fine particles

Iowa
Ozone:
Fine particles:

Kansas
Ozone:

Fine particles:

Kentucky
Ozone:
Fine particles:

Louisiana
Ozone and fine particles:

Maine
Ozone:

Nebraska
Ozone and fine particles:

Nevada
Ozone:

Fine particles:

New Hampshire
Ozone:

Fine particles:

New Jersey
Ozone:

Fine particles:

New Mexico
Ozone:
Fine particles:

New York
Ozone:

Fine particles:

North Carolina
Ozone:

Fine particles:

North Dakota
Ozone and fine particles:

Ohio
Ozone:
Fine particles:

Oklahoma
Ozone and fine particles:

Oregon
Ozone:

South Dakota
Ozone and fine particles:

Tennessee
Ozone:

Fine particles:

Texas
Ozone:

Fine particles:

Appendix A. Unhealthy Levels of Ozone by State, 2001-2003

Rank	State	Exceedances of 8-Hour Ozone Health Standard, 2003	Exceedances of 8-Hour Ozone Health Standard, 2002	Exceedances of 8-Hour Ozone Health Standard, 2001	Exceedances of 1-Hour Ozone Health Standard, 2003	Exceedances of 1-Hour Ozone Health Standard, 2002	Exceedances of 1-Hour Ozone Health Standard, 2001
1	California	2,298	2,306	1,359	410	326	241
2	Texas	449	397	310	127	83	108
3	Ohio	205	800	250	22	22	2
4	Pennsylvania	156	594	393	14	26	14
5	Michigan	122	221	159	7	6	5
6	North Carolina	110	602	182	4	19	6
7	New York	103	290	143	7	29	10
8	Indiana	93	422	104	2	24	2
9	Louisiana	89	10	41	12	5	1
10	Wisconsin	80	147	169	5	15	8
11	New Jersey	79	291	190	11	38	26
12	Missouri	75	174	14	6	5	1
13	Virginia	73	264	149	7	29	3
14	Colorado	60	8	3	7	0	0
15	Connecticut	59	179	105	18	51	38
16	Maryland	57	275	214	11	44	22
17	Tennessee	50	320	95	1	1	1
18	Arizona	42	68	27	0	0	0
19	Georgia	36	166	64	3	14	4
20	Florida	34	3	60	0	0	2
21	Massachusetts	33	122	125	2	22	10
22	Illinois	30	217	40	3	7	2
23	Nevada	28	23	11	0	0	0
24	Kentucky	27	225	54	0	3	1
25	Mississippi	26	15	10	0	1	0
26	Oklahoma	23	20	24	0	0	1
27	Delaware	20	74	53	4	6	2
28	Maine	19	69	58	0	12	3
28	West Virginia	19	80	24	0	2	0
30	Alabama	15	57	31	0	1	3
30	Utah	15	19	15	0	0	1
32	Rhode Island	13	29	34	1	3	8
33	Kansas	11	5	5	0	0	0
33	South Carolina	11	189	48	0	0	0
35	District of Columbia	8	44	24	0	9	3
36	Arkansas	7	24	14	1	2	1

Appendix B. Smog Days by State, 2003

Rank	State	Number of Smog Days

Rank	State	Number of Smog Days

Appendix C. Smog Days and Exceedances of 8-Hour and 1-Hour Ozone Health Standards in Large Metropolitan Areas, 2003

Rank	Metropolitan Statistical Area	Population	Number of Smog Days	Exceedances of 8-Hour Ozone Health Standard	Exceedances of 1-Hour Ozone Health Standard	Maximum Exceedance of 8-Hour Ozone Health Standard

Appendix D. Smog Days and Exceedances of 8-Hour and 1-Hour Ozone Health Standards in Mid-Sized Metropolitan Areas, 2003

Rank	Metropolitan Statistical Area	Population	Number of Smog Days	Exceedances of 8-Hour Ozone Health Standard	Exceedances of 1-Hour Ozone Health Standard	Maximum Exceedance of 8-Hour Ozone Health Standard (ppm)

Rank	Metropolitan Statistical Area

Appendix E. Smog Days and Exceedances of 8-Hour and 1-Hour Ozone Health Standards in Small Metropolitan Areas, 2003

Rank	Metropolitan Statistical Area

Appendix F. Preliminary 2004 Data on Exceedances of Ozone Health Standards by Metropolitan Area

Metropolitan Statistical Area	Population	Number of Smog Days	Exceedances of 8-Hour Ozone Health Standard	Exceedances of 1-Hour Ozone Health Standard

Metropolitan Statistical Area	Population	Number of Smog Days	Exceedances of 8-Hour Ozone Health Standard	Exceedances of 1-Hour Ozone Health Standard

Endnotes