United States Environmental Protection Agency
March 1998

Analysis of Carbon Monoxide Exposure for Fourteen Cities using HAPEM-MS3

Appendix A

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Note that the electronic version of Appendix A is not organized the same as the hardcopy. Instead of being organized just by city, it is organized by type of data and by city.

Baltimore: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	0.0	12.8	24.9	90.8	91.3	91.3	91.3	91.3
African americans	0.0	0.0	0.0	0.0	3.8	45.7	81.6	81.6	81.6	81.6	97.6
Hispanics	0.0	0.0	0.0	0.0	7.7	22.8	91.7	91.7	91.7	91.7	95.7
Household income lt $10K	0.0	0.0	0.0	0.0	5.8	29.0	87.0	87.0	87.0	87.0	100.0
Household income $10K-$25K	0.0	0.0	0.0	0.0	11.9	38.4	81.6	81.6	81.6	81.6	81.9
Household income $25K-$50K	0.0	0.0	0.0	0.0	12.0	36.0	85.8	86.9	86.9	86.9	86.9
Household income $50K-$75K	0.0	0.0	0.0	0.0	12.3	30.0	79.2	90.7	90.7	90.7	90.7
Household income gt $75K	0.0	0.0	0.0	0.0	8.3	21.6	93.8	93.8	93.8	93.8	93.9
Children, 0 to 17	0.0	0.0	0.0	0.0	9.8	28.3	88.3	88.3	88.3	88.3	88.3
Nonworking men, 18 to 44	0.0	0.0	0.0	0.0	9.6	37.0	48.3	86.1	86.1	86.1	86.1
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	11.4	29.0	91.6	91.6	91.6	100.0
Nonworking women, 18 to 44	0.0	0.0	0.0	0.0	10.4	35.6	87.6	87.6	87.6	87.6	99.6
Working women, 18 to 44	0.0	0.0	0.0	0.0	10.1	27.5	90.9	90.9	90.9	90.9	100.0
Nonworking men, 45 to 64	0.0	0.0	0.0	0.0	11.2	38.6	86.8	86.8	86.8	86.8	96.7
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	10.9	26.9	92.1	92.1	92.1	100.0
Nonworking women, 45 to 64	0.0	0.0	0.0	0.0	13.2	35.9	88.7	88.7	88.7	88.7	100.0
Working women, 45 to 64	0.0	0.0	0.0	0.0	10.7	27.1	91.5	91.5	91.5	91.5	100.0
Men, 65+	0.0	0.0	0.0	0.0	12.1	36.7	87.1	87.2	87.2	87.2	87.2
Women, 65+	0.0	0.0	0.0	0.0	14.9	38.5	86.9	86.9	86.9	86.9	100.0
Outdoor workers	0.0	0.0	0.0	0.0	0.0	0.0	11.0	31.9	87.9	87.9	87.9
Outdoor children	0.0	0.0	0.0	0.0	9.6	28.0	34.4	88.4	88.4	88.4	88.4
Heart and respiratory	0.0	0.0	0.0	0.0	10.7	32.1	88.5	88.5	88.5	88.5	100.0
All persons	0.0	0.0	0.0	0.0	10.3	30.3	87.2	88.8	88.8	88.8	88.8

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Boston: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	0.0	7.1	7.2	100.0	100.0	100.0	100.0	100.0
African americans	0.0	0.0	0.0	0.0	3.3	25.3	100.0	100.0	100.0	100.0	100.0
Hispanics	0.0	0.0	0.0	0.0	9.6	48.7	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	0.0	0.0	0.0	0.0	8.6	59.9	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	0.0	0.0	7.8	9.1	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	0.0	0.0	0.0	0.0	7.7	7.8	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	0.0	0.0	0.0	0.0	6.0	6.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	0.0	0.0	0.0	0.0	3.9	4.3	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	0.0	0.0	0.0	0.0	6.4	6.6	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	0.0	0.0	7.6	7.6	79.4	100.0	100.0	100.0	100.0
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	6.2	78.1	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	0.0	0.0	7.5	65.8	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	0.0	0.0	0.0	0.0	6.1	6.1	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	0.0	0.0	8.2	33.7	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	6.4	84.2	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	0.0	0.0	7.9	74.2	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	0.0	0.0	6.5	7.2	100.0	100.0	100.0	100.0	100.0
Men, 65+	0.0	0.0	0.0	0.0	8.7	10.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	0.0	0.0	0.0	0.0	8.8	71.8	100.0	100.0	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	0.0	0.0	0.0	7.2	84.0	100.0	100.0	100.0
Outdoor children	0.0	0.0	0.0	0.0	6.1	6.1	80.3	100.0	100.0	100.0	100.0
Heart and respiratory	0.0	0.0	0.0	0.0	7.4	71.4	100.0	100.0	100.0	100.0	100.0
All persons	0.0	0.0	0.0	0.0	6.9	6.9	100.0	100.0	100.0	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Chicago: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	11.9	87.2	93.9	93.9	98.2	100.0	100.0	100.0
African americans	0.0	0.0	0.0	25.3	90.0	96.1	96.1	100.0	100.0	100.0	100.0
Hispanics	0.0	0.0	0.0	29.9	95.1	96.6	96.6	100.0	100.0	100.0	100.0
Household income lt $10K	0.0	0.0	0.0	25.7	92.7	97.1	97.1	100.0	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	0.0	14.7	85.0	95.0	95.0	99.6	100.0	100.0	100.0
Household income $25K-$50K	0.0	0.0	0.0	12.4	86.4	94.2	94.2	98.1	100.0	100.0	100.0
Household income $50K-$75K	0.0	0.0	0.0	11.1	87.9	93.9	93.9	95.3	100.0	100.0	100.0
Household income gt $75K	0.0	0.0	0.0	10.9	88.8	93.6	93.6	99.2	100.0	100.0	100.0
Children, 0 to 17	0.0	0.0	0.0	14.5	84.2	95.4	95.4	99.4	100.0	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	0.0	9.1	40.4	95.4	95.4	95.4	100.0	100.0	100.0
Working men, 18 to 44	0.0	0.0	0.0	4.0	19.0	95.0	95.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	0.0	21.7	92.1	95.1	95.1	100.0	100.0	100.0	100.0
Working women, 18 to 44	0.0	0.0	0.0	8.9	92.7	94.7	94.7	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	0.0	22.3	88.5	94.8	94.8	100.0	100.0	100.0	100.0
Working men, 45 to 64	0.0	0.0	0.0	4.7	20.6	94.4	94.4	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	0.0	22.1	91.1	94.5	94.5	100.0	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	0.0	11.1	91.8	94.2	94.2	100.0	100.0	100.0	100.0
Men, 65+	0.0	0.0	0.0	19.6	83.3	92.9	92.9	100.0	100.0	100.0	100.0
Women, 65+	0.0	0.0	0.0	21.8	90.0	92.8	92.8	100.0	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	0.0	9.8	88.6	94.6	94.6	100.0	100.0	100.0
Outdoor children	0.0	0.0	0.0	9.1	25.8	95.4	95.4	95.4	100.0	100.0	100.0
Heart and respiratory	0.0	0.0	0.0	20.7	91.5	94.2	94.2	100.0	100.0	100.0	100.0
All persons	0.0	0.0	0.0	10.2	83.4	94.7	94.7	96.7	100.0	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
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Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Denver: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	6.4	12.7	21.1	74.4	86.1	86.5	100.0	100.0	100.0
African americans	0.0	0.0	0.7	1.8	6.9	39.8	41.8	56.3	100.0	100.0	100.0
Hispanics	0.0	0.0	1.4	3.6	20.0	60.0	80.7	93.1	100.0	100.0	100.0
Household income lt $10K	0.0	0.0	1.7	9.1	31.4	70.2	72.6	99.8	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	3.0	9.1	22.6	65.4	80.6	84.8	100.0	100.0	100.0
Household income $25K-$50K	0.0	0.0	5.7	10.4	17.6	75.6	86.4	86.7	100.0	100.0	100.0
Household income $50K-$75K	0.0	0.0	9.2	14.6	15.3	79.7	88.2	88.2	100.0	100.0	100.0
Household income gt $75K	0.0	0.0	15.8	23.8	25.9	81.0	86.5	86.6	100.0	100.0	100.0
Children, 0 to 17	0.0	0.0	6.6	10.4	18.5	74.1	86.5	87.0	100.0	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	3.6	13.4	13.4	64.4	78.4	78.4	100.0	100.0	100.0
Working men, 18 to 44	0.0	0.0	0.0	12.3	12.3	65.1	83.4	88.0	100.0	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	4.7	12.3	35.3	76.9	80.7	86.7	100.0	100.0	100.0
Working women, 18 to 44	0.0	0.0	4.9	12.0	12.0	73.6	83.4	87.1	100.0	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	6.1	10.4	36.3	77.7	80.0	86.1	100.0	100.0	100.0
Working men, 45 to 64	0.0	0.0	0.0	13.3	13.3	47.0	84.7	88.4	100.0	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	7.4	11.6	37.1	78.7	81.7	99.8	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	8.0	12.9	12.9	73.3	84.4	87.4	100.0	100.0	100.0
Men, 65+	0.0	0.0	3.8	8.6	27.2	59.4	76.5	78.1	100.0	100.0	100.0
Women, 65+	0.0	0.0	3.7	8.1	34.0	72.8	75.6	100.0	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	3.2	7.8	7.8	70.5	84.3	88.9	100.0	100.0
Outdoor children	0.0	0.0	7.0	11.2	11.2	74.9	86.8	87.2	100.0	100.0	100.0
Heart and respiratory	0.0	0.0	5.5	11.0	34.4	79.0	81.6	99.1	100.0	100.0	100.0
All persons	0.0	0.0	5.7	11.5	17.0	70.8	83.0	83.2	100.0	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Houston: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	10.0	76.5	87.3	100.0	100.0	100.0	100.0	100.0
African americans	0.0	0.0	3.1	9.2	55.0	93.1	100.0	100.0	100.0	100.0	100.0
Hispanics	0.0	0.0	0.3	23.1	63.9	90.7	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	0.0	0.0	11.2	14.6	59.1	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	0.0	14.3	69.5	89.6	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	0.0	0.0	0.0	10.3	74.7	85.8	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	0.0	0.0	0.0	6.8	80.9	84.2	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	0.0	0.0	0.0	3.4	75.7	87.5	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	0.0	0.0	0.0	12.4	73.0	88.5	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	0.0	12.6	28.0	71.9	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	0.0	0.0	0.0	9.9	14.4	79.8	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	2.3	13.0	68.4	92.2	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	0.0	0.0	0.0	8.5	74.7	89.8	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	7.4	12.7	61.2	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	0.0	0.0	0.0	9.9	9.9	78.5	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	8.9	12.5	73.9	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	0.0	8.7	72.3	88.4	100.0	100.0	100.0	100.0	100.0
Men, 65+	0.0	0.0	0.0	13.5	60.2	69.8	100.0	100.0	100.0	100.0	100.0
Women, 65+	0.0	0.0	10.0	13.1	61.8	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	0.0	14.1	69.9	89.7	100.0	100.0	100.0	100.0
Outdoor children	0.0	0.0	0.0	12.5	53.5	80.8	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	0.0	0.0	7.8	11.4	69.2	99.7	100.0	100.0	100.0	100.0	100.0
All persons	0.0	0.0	0.0	11.2	71.0	87.0	100.0	100.0	100.0	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Los Angeles: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	0.0	1.0	2.3	14.6	19.5	60.4	81.9	88.3
African americans	0.0	0.0	0.0	0.0	0.1	2.0	7.6	32.4	48.1	74.9	75.9
Hispanics	0.0	0.0	0.0	0.0	0.2	2.9	7.0	11.6	50.4	78.2	80.8
Household income lt $10K	0.0	0.0	0.0	0.0	0.3	9.5	9.7	22.3	67.7	80.4	85.9
Household income $10K-$25K	0.0	0.0	0.0	0.0	0.3	0.8	9.6	16.7	46.3	76.6	82.5
Household income $25K-$50K	0.0	0.0	0.0	0.0	0.7	1.6	11.2	17.9	55.9	79.0	85.4
Household income $50K-$75K	0.0	0.0	0.0	0.0	1.1	2.5	12.9	20.0	52.9	79.4	89.5
Household income gt $75K	0.0	0.0	0.0	0.0	1.7	4.0	16.9	24.1	68.7	88.0	91.3
Children, 0 to 17	0.0	0.0	0.0	0.0	0.7	1.8	9.2	15.9	56.6	79.0	83.3
Nonworking men, 18 to 44	0.0	0.0	0.0	0.0	0.5	1.1	10.7	17.5	39.3	74.3	83.5
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	0.8	11.9	12.1	27.6	77.0	86.4
Nonworking women, 18 to 44	0.0	0.0	0.0	0.0	0.5	5.0	11.0	18.6	58.0	83.5	84.4
Working women, 18 to 44	0.0	0.0	0.0	0.0	0.8	1.8	13.0	20.8	63.8	85.3	87.0
Nonworking men, 45 to 64	0.0	0.0	0.0	0.0	0.6	3.0	11.3	18.9	60.5	83.9	85.2
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	1.0	8.5	12.5	26.2	74.2	88.0
Nonworking women, 45 to 64	0.0	0.0	0.0	0.0	0.7	11.9	19.0	29.8	77.0	85.6	91.6
Working women, 45 to 64	0.0	0.0	0.0	0.0	0.0	2.1	13.3	21.3	63.6	87.1	88.4
Men, 65+	0.0	0.0	0.0	0.0	0.5	1.4	14.1	20.6	61.9	80.9	86.3
Women, 65+	0.0	0.0	0.0	0.0	0.5	14.6	17.3	34.2	76.9	86.5	93.7
Outdoor workers	0.0	0.0	0.0	0.0	0.0	0.0	0.7	10.0	10.0	26.9	76.2
Outdoor children	0.0	0.0	0.0	0.0	0.7	1.6	9.4	15.9	42.2	73.9	83.5
Heart and respiratory	0.0	0.0	0.0	0.0	0.7	7.4	12.3	25.5	64.6	85.8	91.6
All persons	0.0	0.0	0.0	0.0	0.7	1.6	11.5	18.5	56.4	79.6	85.3

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	95.6	95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	77.5	91.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	85.3	85.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	85.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	88.5	88.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	91.5	91.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	95.2	95.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	97.3	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	88.1	88.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	89.4	89.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	92.6	92.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	89.5	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	93.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	91.2	96.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	94.1	94.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	91.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	94.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	93.7	93.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	93.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	85.6	91.0	91.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	88.1	88.1	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	92.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	91.2	91.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Minneapolis/St. Paul: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	2.8	2.8	2.8	20.5	79.5	79.5	80.2	100.0
African americans	0.0	0.0	0.0	10.1	10.1	13.4	44.9	61.2	61.2	76.3	100.0
Hispanics	0.0	0.0	0.0	6.1	6.1	15.6	44.3	77.9	77.9	88.5	100.0
Household income lt $10K	0.0	0.0	0.0	8.8	8.8	24.8	48.4	76.4	76.4	97.3	100.0
Household income $10K-$25K	0.0	0.0	0.0	5.6	5.6	5.6	29.4	75.3	75.3	77.8	100.0
Household income $25K-$50K	0.0	0.0	0.0	2.2	2.2	2.2	19.4	80.3	80.3	81.0	100.0
Household income $50K-$75K	0.0	0.0	0.0	1.1	1.1	1.1	14.7	81.4	81.4	81.5	100.0
Household income gt $75K	0.0	0.0	0.0	0.8	0.8	0.8	11.4	78.0	78.0	81.5	100.0
Children, 0 to 17	0.0	0.0	0.0	2.4	2.4	2.4	20.3	83.6	83.6	84.7	100.0
Nonworking men, 18 to 44	0.0	0.0	0.0	3.8	7.4	7.4	21.0	76.1	76.1	76.1	89.3
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	3.7	11.5	65.4	79.7	79.8	100.0
Nonworking women, 18 to 44	0.0	0.0	0.0	5.5	5.5	9.8	27.9	75.5	75.5	85.7	100.0
Working women, 18 to 44	0.0	0.0	0.0	0.0	3.4	3.4	16.1	78.0	78.0	86.5	100.0
Nonworking men, 45 to 64	0.0	0.0	0.0	4.0	4.0	4.1	29.7	77.6	77.6	84.1	100.0
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	2.0	10.0	56.1	81.2	82.0	100.0
Nonworking women, 45 to 64	0.0	0.0	0.0	3.2	3.2	14.7	27.0	77.0	77.0	87.4	100.0
Working women, 45 to 64	0.0	0.0	0.0	0.0	1.9	1.9	19.4	79.8	79.8	87.5	100.0
Men, 65+	0.0	0.0	0.0	4.3	4.3	4.3	31.1	68.3	68.3	74.5	100.0
Women, 65+	0.0	0.0	0.0	4.0	4.0	17.1	37.0	66.4	66.4	91.4	100.0
Outdoor workers	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.0	21.3	83.0	83.0
Outdoor children	0.0	0.0	0.0	1.1	2.3	2.3	14.0	84.0	84.1	84.1	91.0
Heart and respiratory	0.0	0.0	0.0	3.5	3.5	13.7	29.2	76.3	76.3	94.3	100.0
All persons	0.0	0.0	0.0	3.5	3.5	3.5	22.5	78.7	78.7	78.8	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

New York City: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	0.0	7.5	21.9	30.7	33.1	35.7	86.5	90.4
African americans	0.0	0.0	0.0	0.0	34.4	38.6	40.4	42.6	61.2	88.9	91.4
Hispanics	0.0	0.0	0.0	0.0	16.3	22.0	25.1	33.0	41.6	80.1	83.8
Household income lt $10K	0.0	0.0	0.0	0.0	25.4	33.1	33.2	37.6	81.1	83.3	85.4
Household income $10K-$25K	0.0	0.0	0.0	0.0	18.8	28.5	34.2	38.8	40.4	84.4	89.0
Household income $25K-$50K	0.0	0.0	0.0	0.0	9.9	24.6	32.8	35.3	38.9	86.4	90.9
Household income $50K-$75K	0.0	0.0	0.0	0.0	3.7	21.3	31.2	31.5	36.0	89.1	92.7
Household income gt $75K	0.0	0.0	0.0	0.0	7.1	20.2	26.3	29.6	30.0	87.4	90.1
Children, 0 to 17	0.0	0.0	0.0	0.0	15.7	27.6	32.9	35.9	37.1	86.8	91.1
Nonworking men, 18 to 44	0.0	0.0	0.0	0.0	0.5	24.6	32.8	32.8	37.9	83.4	85.2
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	4.2	24.1	31.6	37.2	84.6	88.2
Nonworking women, 18 to 44	0.0	0.0	0.0	0.0	19.7	28.3	31.9	37.1	62.4	86.6	89.1
Working women, 18 to 44	0.0	0.0	0.0	0.0	0.0	22.2	32.5	32.5	38.1	86.4	88.8
Nonworking men, 45 to 64	0.0	0.0	0.0	0.0	19.7	28.3	32.1	37.1	40.4	86.3	89.4
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	2.1	23.2	30.2	35.6	86.0	89.4
Nonworking women, 45 to 64	0.0	0.0	0.0	0.0	18.3	30.4	30.8	36.0	86.3	88.1	90.0
Working women, 45 to 64	0.0	0.0	0.0	0.0	0.0	21.4	30.9	30.9	37.7	88.1	89.9
Men, 65+	0.0	0.0	0.0	0.0	13.6	23.9	31.7	34.6	37.4	86.9	90.6
Women, 65+	0.0	0.0	0.0	0.0	17.6	31.6	31.7	36.9	87.0	89.1	90.5
Outdoor workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.6	31.1	33.1	74.4
Outdoor children	0.0	0.0	0.0	0.0	0.1	25.8	33.0	33.0	37.0	86.5	88.9
Heart and respiratory	0.0	0.0	0.0	0.0	17.9	31.3	31.7	36.8	86.0	88.0	90.0
All persons	0.0	0.0	0.0	0.0	7.0	24.1	32.0	33.2	37.0	85.7	89.7

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	90.4	90.4	92.8	94.0	94.0	94.0	94.0	94.0	94.0	99.2	100.0
African americans	91.4	93.0	94.9	95.4	95.4	95.4	95.4	95.4	96.3	100.0	100.0
Hispanics	83.8	85.5	90.3	91.8	91.8	91.8	91.8	91.8	92.2	100.0	100.0
Household income lt $10K	85.4	91.4	93.5	93.5	93.5	93.5	93.5	93.5	100.0	100.0	100.0
Household income $10K-$25K	89.0	89.0	92.8	94.6	94.6	94.6	94.6	94.6	94.6	99.8	100.0
Household income $25K-$50K	90.9	90.9	93.6	95.0	95.0	95.0	95.0	95.0	95.0	98.9	100.0
Household income $50K-$75K	92.8	92.8	94.4	95.6	95.6	95.6	95.6	95.6	95.6	97.2	100.0
Household income gt $75K	90.1	90.1	91.3	92.6	92.6	92.6	92.6	92.6	92.6	100.0	100.0
Children, 0 to 17	91.1	91.1	95.0	96.0	96.0	96.0	96.0	96.0	96.0	99.8	100.0
Nonworking men, 18 to 44	87.5	87.5	90.0	91.5	93.4	93.4	93.4	93.4	93.4	93.4	99.6
Working men, 18 to 44	89.0	89.0	91.8	93.7	93.7	93.7	93.7	93.7	100.0	100.0	100.0
Nonworking women, 18 to 44	89.1	91.7	93.1	94.4	94.4	94.4	94.4	94.4	94.8	100.0	100.0
Working women, 18 to 44	88.8	91.3	93.2	93.2	93.2	93.2	93.2	96.4	100.0	100.0	100.0
Nonworking men, 45 to 64	89.4	89.6	92.8	94.6	94.6	94.6	94.6	94.6	94.6	100.0	100.0
Working men, 45 to 64	90.3	92.2	92.6	94.0	94.0	94.0	94.0	94.0	100.0	100.0	100.0
Nonworking women, 45 to 64	90.0	93.2	94.4	94.5	94.5	94.5	94.5	94.5	100.0	100.0	100.0
Working women, 45 to 64	89.9	92.0	93.5	93.5	93.5	93.5	93.5	100.0	100.0	100.0	100.0
Men, 65+	90.6	90.6	92.9	94.5	94.5	94.5	94.5	94.5	94.5	99.5	100.0
Women, 65+	90.5	92.9	94.2	94.2	94.2	94.2	94.2	94.2	100.0	100.0	100.0
Outdoor workers	89.3	91.9	91.9	94.7	96.0	96.0	96.0	96.0	96.0	100.0	100.0
Outdoor children	91.3	91.3	92.2	95.1	96.2	96.2	96.2	96.2	96.2	96.2	99.8
Heart and respiratory	90.0	92.8	94.3	94.3	94.3	94.3	94.3	94.3	100.0	100.0	100.0
All persons	89.8	89.8	92.9	94.4	94.4	94.4	94.4	94.4	94.4	98.2	100.0

Philadelphia: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	1.1	20.9	38.7	92.1	94.0	94.1	100.0	100.0	100.0
African americans	0.0	0.0	0.9	12.9	57.1	64.9	67.9	67.9	100.0	100.0	100.0
Hispanics	0.0	0.0	1.2	21.4	52.9	59.4	61.9	61.9	100.0	100.0	100.0
Household income lt $10K	0.0	0.0	3.4	15.8	66.9	75.5	76.5	88.4	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	1.1	17.6	47.3	83.9	85.3	85.4	100.0	100.0	100.0
Household income $25K-$50K	0.0	0.0	1.3	20.9	39.8	87.3	90.0	90.3	100.0	100.0	100.0
Household income $50K-$75K	0.0	0.0	1.0	20.8	34.8	88.2	91.0	92.6	100.0	100.0	100.0
Household income gt $75K	0.0	0.0	0.9	19.4	35.1	91.0	92.6	92.6	100.0	100.0	100.0
Children, 0 to 17	0.0	0.0	1.2	19.4	39.5	84.6	86.8	86.9	100.0	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	1.1	13.5	41.2	76.8	82.5	84.1	97.9	100.0	100.0
Working men, 18 to 44	0.0	0.0	1.1	6.2	25.1	83.3	90.0	90.0	100.0	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	1.2	18.4	77.3	84.3	86.0	86.0	100.0	100.0	100.0
Working women, 18 to 44	0.0	0.0	1.1	14.4	38.3	86.2	88.5	96.1	100.0	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	1.0	18.0	74.5	83.1	84.9	84.9	100.0	100.0	100.0
Working men, 45 to 64	0.0	0.0	1.0	5.6	21.9	83.6	90.4	90.4	100.0	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	4.4	18.2	79.1	85.2	87.0	91.9	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	1.0	18.9	64.3	86.3	88.9	100.0	100.0	100.0	100.0
Men, 65+	0.0	0.0	0.9	18.7	42.8	87.1	88.8	88.9	100.0	100.0	100.0
Women, 65+	0.0	0.0	3.8	18.3	80.6	86.6	88.2	92.5	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	1.3	12.1	38.6	87.0	89.7	100.0	100.0	100.0
Outdoor children	0.0	0.0	1.2	16.3	35.9	79.6	84.6	86.8	98.4	100.0	100.0
Heart and respiratory	0.0	0.0	4.4	19.0	80.8	86.1	88.0	89.9	100.0	100.0	100.0
All persons	0.0	0.0	1.0	19.2	38.9	84.9	87.4	87.8	100.0	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Phoenix: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	0.0	7.6	21.4	34.9	87.8	95.1	95.1	95.1
African americans	0.0	0.0	0.0	0.0	1.6	10.3	44.2	80.4	93.6	93.6	93.6
Hispanics	0.0	0.0	0.0	0.0	1.5	11.7	33.7	79.6	95.1	95.1	95.1
Household income lt $10K	0.0	0.0	0.0	0.0	3.1	20.8	35.0	93.3	93.3	93.3	93.3
Household income $10K-$25K	0.0	0.0	0.0	0.0	4.2	16.2	32.3	83.8	93.6	93.6	93.6
Household income $25K-$50K	0.0	0.0	0.0	0.0	6.1	21.9	35.3	86.2	95.5	95.5	95.5
Household income $50K-$75K	0.0	0.0	0.0	0.0	9.7	25.7	37.1	85.7	96.7	96.7	96.7
Household income gt $75K	0.0	0.0	0.0	0.0	19.0	28.3	41.0	95.1	97.8	97.8	97.8
Children, 0 to 17	0.0	0.0	0.0	0.0	6.3	20.2	33.9	86.2	95.3	95.3	95.3
Nonworking men, 18 to 44	0.0	0.0	0.0	0.0	4.7	10.0	28.2	61.6	93.9	93.9	93.9
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	7.0	24.2	71.0	95.2	95.2	95.2
Nonworking women, 18 to 44	0.0	0.0	0.0	0.0	6.5	18.5	35.6	87.0	94.3	94.3	94.3
Working women, 18 to 44	0.0	0.0	0.0	0.0	6.9	20.6	36.3	84.6	94.9	94.9	94.9
Nonworking men, 45 to 64	0.0	0.0	0.0	0.0	6.2	17.5	32.9	94.5	94.6	94.6	94.6
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	9.2	26.7	69.3	95.0	95.0	95.0
Nonworking women, 45 to 64	0.0	0.0	0.0	0.0	7.9	24.9	34.9	95.0	95.0	95.0	95.0
Working women, 45 to 64	0.0	0.0	0.0	0.0	7.1	21.3	37.7	88.5	94.7	94.7	94.7
Men, 65+	0.0	0.0	0.0	0.0	5.1	18.0	31.7	88.4	94.4	94.4	94.4
Women, 65+	0.0	0.0	0.0	0.0	5.0	22.1	32.5	94.8	94.8	94.8	94.8
Outdoor workers	0.0	0.0	0.0	0.0	0.0	0.0	4.5	32.8	78.2	94.8	94.8
Outdoor children	0.0	0.0	0.0	0.0	3.0	16.7	29.9	71.8	95.7	95.7	95.7
Heart and respiratory	0.0	0.0	0.0	0.0	6.4	21.1	34.5	94.2	94.8	94.8	94.8
All persons	0.0	0.0	0.0	0.0	6.6	19.9	35.0	87.3	94.9	94.9	94.9

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	95.1	95.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	93.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	95.1	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	93.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	93.6	93.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	95.5	95.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	96.7	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	97.8	97.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	95.3	95.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	93.9	93.9	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	95.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	94.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	94.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	94.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	95.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	95.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	94.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	94.4	94.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	94.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	94.8	94.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	95.7	95.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	94.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	94.9	94.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

San Francisco: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	0.0	2.1	15.9	51.3	75.1	84.4	100.0	100.0
African americans	0.0	0.0	0.0	0.0	1.8	42.1	76.1	86.3	96.3	100.0	100.0
Hispanics	0.0	0.0	0.0	0.0	1.5	15.7	57.6	63.8	79.8	100.0	100.0
Household income lt $10K	0.0	0.0	0.0	0.0	3.3	34.1	66.3	77.2	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	0.0	0.0	1.4	21.0	51.7	67.4	78.1	100.0	100.0
Household income $25K-$50K	0.0	0.0	0.0	0.0	1.7	18.0	48.3	70.2	80.4	100.0	100.0
Household income $50K-$75K	0.0	0.0	0.0	0.0	1.9	15.7	28.9	72.3	82.4	100.0	100.0
Household income gt $75K	0.0	0.0	0.0	0.0	1.5	14.0	63.6	77.1	85.8	100.0	100.0
Children, 0 to 17	0.0	0.0	0.0	0.0	1.9	19.8	61.2	73.1	82.2	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	0.0	0.0	1.0	19.9	31.4	67.2	77.6	100.0	100.0
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	18.2	28.2	70.0	79.4	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	0.0	0.0	5.7	22.3	69.3	79.6	96.7	100.0	100.0
Working women, 18 to 44	0.0	0.0	0.0	0.0	1.7	18.7	59.2	74.2	99.4	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	0.0	0.0	1.8	17.4	68.3	72.4	84.5	100.0	100.0
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	14.4	26.1	72.6	83.1	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	0.0	0.0	5.8	27.1	71.3	82.9	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	0.0	0.0	1.6	16.8	61.7	77.7	99.7	100.0	100.0
Men, 65+	0.0	0.0	0.0	0.0	1.1	16.4	63.9	72.6	81.6	100.0	100.0
Women, 65+	0.0	0.0	0.0	0.0	4.3	28.3	68.9	82.5	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	0.0	0.0	1.8	18.0	28.2	70.7	80.2	100.0
Outdoor children	0.0	0.0	0.0	0.0	1.9	19.7	30.3	71.6	82.1	100.0	100.0
Heart and respiratory	0.0	0.0	0.0	0.0	6.2	22.2	70.2	81.5	100.0	100.0	100.0
All persons	0.0	0.0	0.0	0.0	1.5	18.4	50.3	71.0	81.1	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Spokane: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	34.6	34.6
African americans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	27.4	27.6	27.6
Hispanics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	34.3	34.5	34.5
Household income lt $10K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.8	37.5	37.5	37.6
Household income $10K-$25K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	37.5	37.5
Household income $25K-$50K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.5	31.9	31.9
Household income $50K-$75K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	32.3	32.3
Household income gt $75K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	22.6	22.6
Children, 0 to 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	33.3	33.3
Nonworking men, 18 to 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	35.9	35.9
Working men, 18 to 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	31.5
Nonworking women, 18 to 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	35.4	35.5	35.5
Working women, 18 to 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	32.9	32.9
Nonworking men, 45 to 64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	35.3	37.6	37.6
Working men, 45 to 64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.9	32.9
Nonworking women, 45 to 64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.3	37.0	37.0	37.0
Working women, 45 to 64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5	34.0	34.0
Men, 65+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	39.7	39.7
Women, 65+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.5	40.0	40.0	40.1
Outdoor workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Outdoor children	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	32.6	32.6
Heart and respiratory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.0	36.0	36.0	36.0
All persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	34.6	34.6

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	57.0	71.2	86.6	86.6	86.6	99.9	100.0	100.0	100.0	100.0	100.0
African americans	53.4	58.7	77.4	77.4	84.9	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	71.4	74.9	84.8	84.8	90.8	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	68.4	86.7	86.7	86.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	68.3	71.9	88.5	88.5	88.5	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	55.4	73.2	87.5	87.5	87.5	99.8	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	40.5	73.2	84.9	84.9	84.9	99.2	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	55.5	58.1	71.3	71.3	71.3	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	63.0	73.3	87.6	87.6	87.6	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	35.9	69.7	73.2	87.9	87.9	87.9	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	31.5	71.7	74.3	86.8	86.8	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	69.3	72.6	86.6	86.6	88.9	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	38.5	70.8	86.4	86.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	71.6	71.8	87.2	87.2	87.2	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	32.9	73.0	73.8	86.6	86.6	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	71.3	85.7	86.2	86.2	98.8	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	70.9	72.8	86.6	86.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	62.1	65.8	83.8	83.8	83.8	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	64.7	82.8	82.8	82.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	13.6	31.2	31.2	72.4	75.2	90.6	90.6	100.0	100.0	100.0	100.0
Outdoor children	32.6	74.1	74.1	87.8	87.8	87.8	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	69.4	85.6	85.6	85.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	43.1	70.9	86.5	86.5	86.5	98.3	100.0	100.0	100.0	100.0	100.0

St. Louis: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	11.7	46.3	86.7	100.0	100.0	100.0	100.0	100.0	100.0
African americans	0.0	0.0	0.9	25.4	38.3	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	0.0	0.0	10.4	46.8	80.8	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	0.0	0.0	3.3	32.2	57.9	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	6.3	41.0	76.2	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	0.0	0.0	9.9	44.8	81.5	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	0.0	0.0	13.7	45.3	84.3	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	0.0	0.0	26.8	49.0	88.5	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	0.0	0.0	9.9	40.5	76.7	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	0.0	39.3	63.3	93.2	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	0.0	0.0	0.0	37.1	70.8	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	8.5	41.4	75.5	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	0.0	0.0	0.0	39.8	77.9	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	8.9	43.7	71.8	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	0.0	0.0	0.0	23.1	69.1	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	11.2	46.2	76.4	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	0.0	45.3	78.3	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	0.0	0.0	8.3	46.8	76.7	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	0.0	0.0	7.9	46.4	75.7	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	6.8	40.2	78.3	100.0	100.0	100.0	100.0	100.0
Outdoor children	0.0	0.0	0.0	40.7	71.2	92.5	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	0.0	0.0	9.5	43.8	77.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	0.0	0.0	9.7	42.2	77.2	100.0	100.0	100.0	100.0	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Washington DC: City-wide

HAPEM-MS3 Annual Fractiles in Percent (%) for 1990

Demographic Group	100	200	300	400	500	600	700	800	900	1000	1100
						μg/m³					
Caucasians	0.0	0.0	0.0	11.8	34.7	88.9	95.3	99.5	100.0	100.0	100.0
African americans	0.0	0.0	0.0	12.1	67.5	67.5	68.4	100.0	100.0	100.0	100.0
Hispanics	0.0	0.0	0.0	7.5	77.2	79.3	85.6	100.0	100.0	100.0	100.0
Household income lt $10K	0.0	0.0	0.0	11.4	66.1	70.7	71.3	100.0	100.0	100.0	100.0
Household income $10K-$25K	0.0	0.0	0.0	10.5	46.4	73.9	78.3	99.8	100.0	100.0	100.0
Household income $25K-$50K	0.0	0.0	0.0	11.4	30.0	84.6	88.5	97.6	100.0	100.0	100.0
Household income $50K-$75K	0.0	0.0	0.0	12.5	27.9	88.9	92.3	94.3	100.0	100.0	100.0
Household income gt $75K	0.0	0.0	0.0	14.3	40.8	87.0	94.0	100.0	100.0	100.0	100.0
Children, 0 to 17	0.0	0.0	0.0	12.9	39.7	87.5	89.8	99.7	100.0	100.0	100.0
Nonworking men, 18 to 44	0.0	0.0	0.0	8.1	25.6	74.0	79.2	79.2	100.0	100.0	100.0
Working men, 18 to 44	0.0	0.0	0.0	7.7	27.5	84.9	89.4	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	0.0	0.0	0.0	10.9	78.3	78.3	84.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	0.0	0.0	0.0	7.5	27.5	83.4	88.5	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	0.0	0.0	0.0	11.4	75.1	75.1	79.9	100.0	100.0	100.0	100.0
Working men, 45 to 64	0.0	0.0	0.0	9.5	24.2	85.4	89.7	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	0.0	0.0	0.0	11.6	79.2	84.1	84.8	100.0	100.0	100.0	100.0
Working women, 45 to 64	0.0	0.0	0.0	8.9	47.7	83.5	88.4	100.0	100.0	100.0	100.0
Men, 65+	0.0	0.0	0.0	7.7	35.1	72.5	80.1	94.5	100.0	100.0	100.0
Women, 65+	0.0	0.0	0.0	7.5	71.0	78.6	79.9	100.0	100.0	100.0	100.0
Outdoor workers	0.0	0.0	0.0	0.0	5.9	27.3	85.6	88.4	100.0	100.0	100.0
Outdoor children	0.0	0.0	0.0	11.7	28.0	87.3	89.6	89.6	100.0	100.0	100.0
Heart and respiratory	0.0	0.0	0.0	11.2	80.5	83.4	85.9	100.0	100.0	100.0	100.0
All persons	0.0	0.0	0.0	11.9	30.9	82.6	87.2	97.4	100.0	100.0	100.0

Demographic Group	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
						μg/m³					
Caucasians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African americans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanics	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income lt $10K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $10K-$25K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $25K-$50K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income $50K-$75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household income gt $75K	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Children, 0 to 17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 18 to 44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working men, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonworking women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working women, 45 to 64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women, 65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Outdoor children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heart and respiratory	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0