



APPENDIX AVAILABLE ON THE WEB

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Relationships of Indoor, Outdoor, and Personal Air (RIOPA) Part II. Analyses of Concentrations of Particulate Matter Species

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Appendix C. Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species by City and Season

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Table C.1. Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
AER (hr⁻¹)									
Los Angeles		131	1.2	0.9	0.9	0.2	0.3	2.9	4.2
Elizabeth		111	1.2	1.0	0.9	0.2	0.3	3.5	4.5
Houston		107	0.7	0.7	0.5	0.1	0.2	2.6	2.8
Carbon (µgC/m³)									
EC									
Los Angeles	Indoor	44	1.3	0.8	1.1	0.2	0.4	3.2	3.8
Los Angeles	Outdoor	44	1.4	0.9	1.2	0.2	0.5	2.8	4.6
Elizabeth	Indoor	60	1.4	1.3	1.1	0.4	0.5	2.6	10.0
Elizabeth	Outdoor	60	1.4	0.6	1.3	0.5	0.6	2.8	3.5
Houston	Indoor	69	0.7	0.8	0.5	0.1	0.2	1.7	6.4
Houston	Outdoor	69	0.7	0.3	0.7	0.2	0.3	1.4	2.0
OC									
Los Angeles	Indoor	44	5.4	3.4	4.7	1.7	1.8	9.8	23.1
Los Angeles	Outdoor	44	4.1	1.9	3.6	0.9	1.6	7.2	10.1
Elizabeth	Indoor	60	7.9	9.1	5.4	1.3	1.4	25.2	56.7
Elizabeth	Outdoor	60	3.3	1.7	3.0	0.8	1.2	7.2	9.5
Houston	Indoor	69	7.2	5.4	5.4	0.4	1.4	19.7	24.1
Houston	Outdoor	69	3.2	3.1	2.3	0.0	0.3	9.3	18.3
Elements (ng/m³)									
Ag									
Los Angeles	Indoor	104	0.7	0.8	0.5	ND	ND	2.4	3.0
Los Angeles	Outdoor	103	0.5	0.6	0.3	ND	ND	1.7	2.1
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND
Los Angeles	Personal adult	91	0.7	0.9	0.4	ND	ND	2.4	3.7
Elizabeth	Indoor	77	0.9	0.6	0.9	ND	ND	2.0	2.3
Elizabeth	Outdoor	75	0.9	0.7	0.9	ND	ND	2.1	3.4
Elizabeth	Personal child	18	1.3	1.1	1.4	ND	ND	3.2	3.2
Elizabeth	Personal adult	64	1.6	1.1	1.6	ND	ND	3.2	4.5
Houston	Indoor	81	0.9	0.7	0.8	ND	ND	1.9	3.4
Houston	Outdoor	81	0.7	0.6	0.7	ND	ND	1.9	2.1
Houston	Personal child	2	0.9	0.2	0.9	0.7	0.7	1.0	1.0
Houston	Personal adult	75	1.4	1.3	1.3	ND	ND	3.8	4.5
Al									
Los Angeles	Indoor	104	25.4	30.1	16.3	ND	ND	79.6	125.2
Los Angeles	Outdoor	103	24.7	37.0	12.7	ND	ND	97.9	173.5
Los Angeles	Personal child	1	377.9	ND	377.9	377.9	377.9	377.9	377.9
Los Angeles	Personal adult	91	75.1	96.4	43.4	ND	2.1	206.8	656.8
Elizabeth	Indoor	77	13.2	26.0	3.4	ND	ND	66.3	148.8
Elizabeth	Outdoor	75	84.9	151.2	15.5	ND	ND	388.1	735.5
Elizabeth	Personal child	18	103.1	73.5	89.3	16.3	16.3	255.5	255.5
Elizabeth	Personal adult	64	92.3	111.5	56.2	ND	ND	281.6	583.8
Houston	Indoor	81	41.8	41.9	29.4	ND	1.6	120.0	225.5
Houston	Outdoor	81	105.5	219.7	21.6	ND	ND	532.5	1164.9
Houston	Personal child	2	188.5	12.5	188.5	179.7	179.7	197.4	197.4
Houston	Personal adult	75	181.1	147.3	149.9	ND	14.7	483.8	671.2

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile				
						1st	5th	95th	99th	
Elements (continued)										
As										
Los Angeles	Indoor	104	0.5	0.5	0.4	ND	ND	1.3	1.6	
Los Angeles	Outdoor	103	0.5	0.6	0.4	ND	ND	1.5	2.2	
Los Angeles	Personal child	1	0.3	ND	0.3	0.3	0.3	0.3	0.3	
Los Angeles	Personal adult	91	0.5	0.5	0.4	ND	ND	1.7	2.4	
Elizabeth	Indoor	77	0.9	0.6	0.8	ND	0.0	2.3	2.7	
Elizabeth	Outdoor	75	1.2	0.8	1.0	ND	0.2	2.9	4.6	
Elizabeth	Personal child	18	1.1	0.8	0.7	ND	ND	2.4	2.4	
Elizabeth	Personal adult	64	0.9	0.8	0.8	ND	ND	2.4	3.4	
Houston	Indoor	81	0.9	1.1	0.6	ND	ND	2.4	7.2	
Houston	Outdoor	81	1.0	0.7	0.9	ND	0.1	2.6	3.4	
Houston	Personal child	2	2.1	2.7	2.1	0.2	0.2	3.9	3.9	
Houston	Personal adult	75	1.2	1.2	1.1	ND	ND	3.0	7.0	
Ba										
Los Angeles	Indoor	104	17.2	6.9	17.0	4.3	7.0	28.1	32.7	
Los Angeles	Outdoor	103	22.9	9.9	20.7	6.7	10.2	43.3	48.5	
Los Angeles	Personal child	1	39.8	ND	39.8	39.8	39.8	39.8	39.8	
Los Angeles	Personal adult	91	31.7	47.5	25.9	4.8	12.8	50.0	467.7	
Elizabeth	Indoor	77	10.8	4.5	10.3	1.2	3.2	20.3	22.2	
Elizabeth	Outdoor	75	21.2	14.6	17.6	3.3	5.9	55.5	84.1	
Elizabeth	Personal child	18	17.1	7.0	18.1	6.9	6.9	32.3	32.3	
Elizabeth	Personal adult	64	18.4	8.4	18.1	1.7	4.2	33.7	42.0	
Houston	Indoor	81	11.5	5.3	11.5	0.6	4.0	20.2	23.9	
Houston	Outdoor	81	14.6	5.7	13.6	ND	8.6	23.2	37.5	
Houston	Personal child	2	23.9	6.8	23.9	19.1	19.1	28.7	28.7	
Houston	Personal adult	75	24.0	8.5	23.0	2.8	11.0	39.6	49.6	
Br										
Los Angeles	Indoor	104	4.2	2.5	3.8	0.6	0.9	8.7	12.3	
Los Angeles	Outdoor	103	5.3	3.0	4.7	0.9	1.5	9.8	14.5	
Los Angeles	Personal child	1	5.6	ND	5.6	5.6	5.6	5.6	5.6	
Los Angeles	Personal adult	91	6.0	15.1	3.8	1.0	1.4	9.4	146.1	
Elizabeth	Indoor	77	3.1	1.9	2.5	0.7	1.0	7.4	8.6	
Elizabeth	Outdoor	75	4.1	2.6	3.5	0.4	1.1	9.5	14.9	
Elizabeth	Personal child	18	3.7	1.4	3.4	1.6	1.6	6.8	6.8	
Elizabeth	Personal adult	64	3.4	2.0	2.8	0.3	1.2	6.0	14.0	
Houston	Indoor	81	3.4	4.1	2.3	0.4	0.6	7.8	28.7	
Houston	Outdoor	81	3.9	2.1	3.9	ND	1.0	9.0	9.9	
Houston	Personal child	2	4.0	0.8	4.0	3.4	3.4	4.5	4.5	
Houston	Personal adult	75	4.3	2.9	3.5	0.4	1.2	9.9	15.0	

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
Ca									
Los Angeles	Indoor	104	114.4	127.9	78.9	30.7	37.1	308.1	691.7
Los Angeles	Outdoor	103	80.9	49.4	71.5	16.8	29.3	162.0	255.5
Los Angeles	Personal child	1	761.2	ND	761.2	761.2	761.2	761.2	761.2
Los Angeles	Personal adult	91	264.5	326.3	160.8	35.7	56.4	909.8	2109.0
Elizabeth	Indoor	77	71.6	173.4	42.1	ND	19.1	182.2	1532.2
Elizabeth	Outdoor	75	164.9	256.3	55.6	13.6	16.2	570.2	1735.0
Elizabeth	Personal child	18	364.7	294.9	286.5	76.2	76.2	1258.9	1258.9
Elizabeth	Personal adult	64	388.8	724.0	188.3	24.2	50.3	937.8	5047.0
Houston	Indoor	81	104.8	69.3	81.3	21.4	36.2	216.4	415.6
Houston	Outdoor	81	137.3	115.2	109.2	0.9	35.0	359.1	715.5
Houston	Personal child	2	513.7	404.8	513.7	227.4	227.4	799.9	799.9
Houston	Personal adult	75	611.6	557.8	497.4	84.3	126.0	1626.4	3535.0
Cd									
Los Angeles	Indoor	104	0.5	0.5	0.3	ND	ND	1.7	1.9
Los Angeles	Outdoor	103	0.4	0.6	0.1	ND	ND	1.6	2.3
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND
Los Angeles	Personal adult	91	0.7	2.7	ND	ND	ND	2.3	24.9
Elizabeth	Indoor	77	0.6	0.8	0.3	ND	ND	1.9	5.1
Elizabeth	Outdoor	75	0.6	1.4	0.0	ND	ND	2.6	11.2
Elizabeth	Personal child	18	0.4	0.6	ND	ND	ND	1.8	1.8
Elizabeth	Personal adult	64	0.7	1.2	0.2	ND	ND	2.0	8.1
Houston	Indoor	81	0.4	0.7	0.1	ND	ND	1.5	5.1
Houston	Outdoor	81	0.2	0.4	ND	ND	ND	1.2	1.9
Houston	Personal child	2	0.2	0.4	0.2	ND	ND	0.5	0.5
Houston	Personal adult	75	0.6	0.8	0.1	ND	ND	2.3	3.3
Cl									
Los Angeles	Indoor	104	35.4	37.1	22.9	3.6	7.1	122.4	163.9
Los Angeles	Outdoor	103	62.0	124.3	21.1	ND	2.5	217.0	720.2
Los Angeles	Personal child	1	246.9	ND	246.9	246.9	246.9	246.9	246.9
Los Angeles	Personal adult	91	80.0	80.3	50.2	5.3	9.6	207.6	469.9
Elizabeth	Indoor	77	55.3	139.8	12.2	ND	ND	392.3	982.1
Elizabeth	Outdoor	75	129.1	331.1	6.8	ND	ND	798.3	2004.3
Elizabeth	Personal child	18	239.1	204.0	179.2	16.4	16.4	771.7	771.7
Elizabeth	Personal adult	64	185.2	312.9	93.6	3.7	13.1	446.1	2303.3
Houston	Indoor	81	111.5	333.4	28.9	ND	1.0	518.6	2713.0
Houston	Outdoor	81	33.4	94.6	6.0	ND	ND	117.6	761.8
Houston	Personal child	2	215.1	26.3	215.1	196.5	196.5	233.6	233.6
Houston	Personal adult	75	237.1	260.0	155.5	34.0	39.1	695.1	1765.0

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
Co									
Los Angeles	Indoor	104	0.0	0.0	ND	ND	ND	ND	ND
Los Angeles	Outdoor	103	ND	ND	ND	ND	ND	ND	ND
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND
Los Angeles	Personal adult	91	0.1	0.3	ND	ND	ND	0.4	2.1
Elizabeth	Indoor	77	0.1	0.4	ND	ND	ND	0.6	2.9
Elizabeth	Outdoor	75	0.1	0.4	ND	ND	ND	0.6	3.6
Elizabeth	Personal child	18	0.5	0.6	0.0	ND	ND	1.5	1.5
Elizabeth	Personal adult	64	0.5	1.2	0.1	ND	ND	2.2	8.3
Houston	Indoor	81	0.3	1.2	ND	ND	ND	0.4	8.4
Houston	Outdoor	81	0.4	1.3	ND	ND	ND	1.1	11.8
Houston	Personal child	2	0.4	0.5	0.4	ND	ND	0.7	0.7
Houston	Personal adult	75	0.5	0.8	0.2	ND	ND	1.9	4.1
Cr									
Los Angeles	Indoor	104	0.9	2.2	0.5	ND	ND	1.7	4.5
Los Angeles	Outdoor	103	0.6	0.6	0.4	ND	ND	1.6	3.6
Los Angeles	Personal child	1	1.8	ND	1.8	1.8	1.8	1.8	1.8
Los Angeles	Personal adult	91	2.8	9.0	1.3	ND	ND	5.1	84.8
Elizabeth	Indoor	77	4.0	9.8	0.8	ND	0.1	34.2	54.2
Elizabeth	Outdoor	75	7.1	23.3	1.5	ND	0.3	31.7	188.9
Elizabeth	Personal child	18	5.9	5.8	4.2	0.6	0.6	19.6	19.6
Elizabeth	Personal adult	64	5.4	10.1	1.7	0.2	0.3	29.9	52.7
Houston	Indoor	81	1.2	2.3	0.5	ND	0.1	3.0	17.5
Houston	Outdoor	81	1.1	2.8	0.6	ND	0.0	1.9	25.1
Houston	Personal child	2	0.3	0.5	0.3	ND	ND	0.6	0.6
Houston	Personal adult	75	2.3	2.2	1.6	ND	0.3	6.9	11.5
Cu									
Los Angeles	Indoor	104	5.4	2.8	4.9	1.0	2.0	10.5	13.1
Los Angeles	Outdoor	103	5.5	3.7	4.2	1.1	1.8	11.7	17.4
Los Angeles	Personal child	1	17.3	ND	17.3	17.3	17.3	17.3	17.3
Los Angeles	Personal adult	91	17.5	80.6	7.3	1.8	3.9	17.9	776.5
Elizabeth	Indoor	77	11.9	49.5	4.3	ND	1.9	23.8	436.8
Elizabeth	Outdoor	75	11.0	11.6	6.9	1.1	2.4	33.5	62.5
Elizabeth	Personal child	18	25.9	53.2	13.8	5.6	5.6	237.6	237.6
Elizabeth	Personal adult	64	17.6	36.0	10.7	ND	2.8	36.1	290.8
Houston	Indoor	81	4.5	5.7	2.7	ND	0.8	12.8	34.2
Houston	Outdoor	81	1.9	1.6	1.5	0.3	0.5	5.7	9.8
Houston	Personal child	2	4.0	1.8	4.0	2.8	2.8	5.3	5.3
Houston	Personal adult	75	12.6	9.7	10.4	ND	2.8	33.3	52.2

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
Fe									
Los Angeles	Indoor	104	109.5	56.7	108.4	26.7	35.9	211.3	275.0
Los Angeles	Outdoor	103	162.9	89.3	149.7	38.6	51.0	258.4	459.3
Los Angeles	Personal child	1	477.9	ND	477.9	477.9	477.9	477.9	477.9
Los Angeles	Personal adult	91	189.3	123.7	154.6	49.1	64.5	470.1	713.6
Elizabeth	Indoor	77	74.3	55.4	58.0	16.6	32.2	208.4	367.8
Elizabeth	Outdoor	75	278.4	326.5	150.9	32.9	54.9	813.2	1988.0
Elizabeth	Personal child	18	203.8	98.7	194.9	70.6	70.6	429.1	429.1
Elizabeth	Personal adult	64	208.4	200.1	143.0	40.3	48.6	665.5	998.2
Houston	Indoor	81	49.4	30.6	42.2	11.1	14.2	102.4	189.1
Houston	Outdoor	81	118.2	124.1	72.2	1.0	23.4	393.1	651.2
Houston	Personal child	2	145.3	27.6	145.3	125.8	125.8	164.8	164.8
Houston	Personal adult	75	171.5	125.0	136.8	31.4	56.6	402.5	745.1
Ga									
Los Angeles	Indoor	104	0.1	0.2	ND	ND	ND	0.4	0.7
Los Angeles	Outdoor	103	0.1	0.2	ND	ND	ND	0.5	0.6
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND
Los Angeles	Personal adult	91	0.2	0.3	ND	ND	ND	0.7	1.2
Elizabeth	Indoor	77	0.4	0.4	0.5	ND	ND	1.1	1.1
Elizabeth	Outdoor	75	0.5	0.4	0.5	ND	ND	1.1	1.2
Elizabeth	Personal child	18	0.8	0.7	1.2	ND	ND	1.7	1.7
Elizabeth	Personal adult	64	0.8	0.8	0.9	ND	ND	2.0	2.8
Houston	Indoor	81	0.1	0.2	ND	ND	ND	0.5	0.7
Houston	Outdoor	81	0.2	0.3	ND	ND	ND	0.7	1.1
Houston	Personal child	2	0.5	0.7	0.5	ND	ND	1.0	1.0
Houston	Personal adult	75	0.1	0.3	ND	ND	ND	0.9	1.2
Ge									
Los Angeles	Indoor	104	0.1	0.1	ND	ND	ND	0.4	0.5
Los Angeles	Outdoor	103	0.1	0.1	ND	ND	ND	0.4	0.5
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND
Los Angeles	Personal adult	91	0.3	0.7	0.2	ND	ND	0.8	6.9
Elizabeth	Indoor	77	0.2	0.2	0.1	ND	ND	0.6	1.4
Elizabeth	Outdoor	75	0.2	0.2	0.1	ND	ND	0.5	0.6
Elizabeth	Personal child	18	0.3	0.3	0.3	ND	ND	0.9	0.9
Elizabeth	Personal adult	64	0.4	0.6	0.3	ND	ND	1.1	2.8
Houston	Indoor	81	0.2	0.2	0.1	ND	ND	0.5	0.7
Houston	Outdoor	81	0.1	0.2	0.1	ND	ND	0.4	0.5
Houston	Personal child	2	0.2	0.3	0.2	ND	ND	0.4	0.4
Houston	Personal adult	75	0.2	0.3	0.1	ND	ND	0.9	1.1

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile				
						1st	5th	95th	99th	
Elements (continued)										
Hg										
Los Angeles	Indoor	104	0.1	0.2	ND	ND	ND	0.5	0.9	
Los Angeles	Outdoor	103	0.1	0.2	ND	ND	ND	0.4	0.7	
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND	
Los Angeles	Personal adult	91	0.3	0.8	ND	ND	ND	1.0	7.6	
Elizabeth	Indoor	77	0.2	0.3	ND	ND	ND	1.0	1.3	
Elizabeth	Outdoor	75	0.2	0.3	ND	ND	ND	0.8	1.2	
Elizabeth	Personal child	18	0.4	0.4	0.1	ND	ND	1.3	1.3	
Elizabeth	Personal adult	64	0.3	0.5	ND	ND	ND	1.3	2.0	
Houston	Indoor	81	0.2	0.3	ND	ND	ND	0.9	1.4	
Houston	Outdoor	81	0.2	0.3	0.0	ND	ND	0.8	1.5	
Houston	Personal child	2	0.6	0.8	0.6	ND	ND	1.2	1.2	
Houston	Personal adult	75	0.3	0.5	ND	ND	ND	1.2	2.0	
In										
Los Angeles	Indoor	104	0.3	0.4	ND	ND	ND	1.2	1.6	
Los Angeles	Outdoor	103	0.3	0.5	ND	ND	ND	1.3	1.6	
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND	
Los Angeles	Personal adult	91	0.5	0.8	ND	ND	ND	2.2	3.7	
Elizabeth	Indoor	77	0.3	0.4	ND	ND	ND	1.1	1.8	
Elizabeth	Outdoor	75	0.3	0.4	0.0	ND	ND	1.2	2.1	
Elizabeth	Personal child	18	0.2	0.4	ND	ND	ND	1.5	1.5	
Elizabeth	Personal adult	64	0.6	1.0	ND	ND	ND	2.8	3.1	
Houston	Indoor	81	0.3	0.5	0.0	ND	ND	1.4	1.6	
Houston	Outdoor	81	0.2	0.3	ND	ND	ND	0.9	1.5	
Houston	Personal child	2	0.3	0.5	0.3	ND	ND	0.7	0.7	
Houston	Personal adult	75	0.4	0.8	ND	ND	ND	2.6	4.6	
K										
Los Angeles	Indoor	104	75.2	54.0	70.0	20.1	24.8	138.3	292.6	
Los Angeles	Outdoor	103	74.1	47.2	65.5	19.0	26.3	136.3	164.5	
Los Angeles	Personal child	1	339.3	ND	339.3	339.3	339.3	339.3	339.3	
Los Angeles	Personal adult	91	117.3	84.0	100.8	29.1	36.6	314.7	531.6	
Elizabeth	Indoor	77	110.0	175.5	49.1	15.4	21.9	522.8	1036.0	
Elizabeth	Outdoor	75	88.0	99.2	58.4	22.8	25.1	247.3	720.5	
Elizabeth	Personal child	18	211.8	137.8	147.8	75.1	75.1	507.1	507.1	
Elizabeth	Personal adult	64	170.9	172.4	106.6	32.3	45.2	465.8	1028.0	
Houston	Indoor	81	88.5	105.8	64.9	16.7	23.1	241.8	671.3	
Houston	Outdoor	81	97.6	58.4	82.9	ND	32.6	219.2	317.9	
Houston	Personal child	2	157.2	32.8	157.2	134.0	134.0	180.4	180.4	
Houston	Personal adult	75	182.9	144.7	153.9	48.2	58.8	378.2	901.8	

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
La									
Los Angeles	Indoor	104	2.5	3.4	0.0	ND	ND	9.5	11.1
Los Angeles	Outdoor	103	2.3	3.2	0.3	ND	ND	8.2	13.3
Los Angeles	Personal child	1	0.1	ND	0.1	0.1	0.1	0.1	0.1
Los Angeles	Personal adult	91	3.9	4.9	1.1	ND	ND	14.1	18.4
Elizabeth	Indoor	77	3.0	3.9	1.1	ND	ND	12.7	14.1
Elizabeth	Outdoor	75	2.8	3.7	0.5	ND	ND	9.9	15.0
Elizabeth	Personal child	18	4.5	5.7	1.0	ND	ND	15.6	15.6
Elizabeth	Personal adult	64	3.7	4.9	1.3	ND	ND	12.8	23.4
Houston	Indoor	81	2.2	2.9	0.4	ND	ND	7.6	15.8
Houston	Outdoor	81	2.5	3.4	0.7	ND	ND	8.9	13.4
Houston	Personal child	2	ND	ND	ND	ND	ND	ND	ND
Houston	Personal adult	75	3.3	4.7	0.3	ND	ND	13.3	19.0
Mn									
Los Angeles	Indoor	104	2.0	1.1	2.0	0.3	0.5	3.8	5.0
Los Angeles	Outdoor	103	2.9	1.6	2.6	0.7	0.8	5.7	8.8
Los Angeles	Personal child	1	7.0	ND	7.0	7.0	7.0	7.0	7.0
Los Angeles	Personal adult	91	3.1	2.2	2.5	0.4	0.8	7.7	12.6
Elizabeth	Indoor	77	2.2	1.4	1.8	ND	0.7	5.0	7.7
Elizabeth	Outdoor	75	5.6	5.2	3.7	1.1	1.6	18.8	31.4
Elizabeth	Personal child	18	4.1	1.6	4.0	1.3	1.3	8.4	8.4
Elizabeth	Personal adult	64	4.0	2.5	3.3	0.3	1.2	9.1	12.3
Houston	Indoor	81	2.1	2.1	1.5	0.2	0.4	4.3	15.3
Houston	Outdoor	81	4.3	3.7	3.2	0.5	0.8	10.3	22.4
Houston	Personal child	2	3.3	0.8	3.3	2.8	2.8	3.9	3.9
Houston	Personal adult	75	4.3	2.9	3.8	0.5	1.4	8.9	20.1
Mo									
Los Angeles	Indoor	104	0.3	0.3	0.2	ND	ND	1.0	1.1
Los Angeles	Outdoor	103	0.4	0.4	0.3	ND	ND	1.1	1.6
Los Angeles	Personal child	1	ND	ND	ND	ND	ND	ND	ND
Los Angeles	Personal adult	91	0.2	0.4	ND	ND	ND	1.0	1.9
Elizabeth	Indoor	77	0.3	0.3	0.2	ND	ND	0.9	1.1
Elizabeth	Outdoor	75	0.5	0.5	0.4	ND	ND	1.7	1.9
Elizabeth	Personal child	18	0.1	0.2	ND	ND	ND	0.8	0.8
Elizabeth	Personal adult	64	0.2	0.4	ND	ND	ND	1.0	1.8
Houston	Indoor	81	0.3	0.4	0.2	ND	ND	1.0	1.4
Houston	Outdoor	81	0.4	0.5	0.3	ND	ND	1.5	1.8
Houston	Personal child	2	ND	ND	ND	ND	ND	ND	ND
Houston	Personal adult	75	0.2	0.3	ND	ND	ND	0.8	1.6

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile				
						1st	5th	95th	99th	
Elements (continued)										
Ni										
Los Angeles	Indoor	104	1.6	1.2	1.5	ND	ND	4.3	5.2	
Los Angeles	Outdoor	103	2.0	1.6	1.6	ND	0.2	5.4	7.0	
Los Angeles	Personal child	1	3.8	ND	3.8	3.8	3.8	3.8	3.8	
Los Angeles	Personal adult	91	3.9	5.0	2.6	0.2	0.7	9.6	44.1	
Elizabeth	Indoor	77	3.1	2.6	2.6	ND	0.3	9.4	12.1	
Elizabeth	Outdoor	75	5.3	5.1	3.7	0.5	0.8	16.3	24.6	
Elizabeth	Personal child	18	7.1	4.9	5.3	2.3	2.3	19.6	19.6	
Elizabeth	Personal adult	64	7.4	11.1	4.6	1.2	1.6	20.0	85.3	
Houston	Indoor	81	1.2	1.1	1.0	ND	0.2	2.9	5.7	
Houston	Outdoor	81	2.2	1.6	1.8	ND	0.5	4.0	12.2	
Houston	Personal child	2	1.1	0.6	1.1	0.7	0.7	1.5	1.5	
Houston	Personal adult	75	4.1	3.0	3.3	0.6	1.0	10.5	16.2	
Pb										
Los Angeles	Indoor	104	3.7	2.0	3.6	0.1	0.9	6.3	9.6	
Los Angeles	Outdoor	103	4.7	2.5	4.2	1.0	1.6	8.5	13.5	
Los Angeles	Personal child	1	5.0	ND	5.0	5.0	5.0	5.0	5.0	
Los Angeles	Personal adult	91	4.8	3.9	4.0	ND	1.1	10.9	29.3	
Elizabeth	Indoor	77	5.3	4.6	4.2	0.4	1.2	13.4	32.8	
Elizabeth	Outdoor	75	7.5	5.0	6.5	2.1	2.9	19.0	29.1	
Elizabeth	Personal child	18	6.7	2.8	5.6	3.3	3.3	13.2	13.2	
Elizabeth	Personal adult	64	11.4	28.6	6.7	0.1	3.0	23.8	232.3	
Houston	Indoor	81	1.8	1.2	1.5	ND	0.4	3.9	6.4	
Houston	Outdoor	81	2.8	2.0	2.4	0.4	0.9	6.0	11.7	
Houston	Personal child	2	2.0	0.0	2.0	1.9	1.9	2.0	2.0	
Houston	Personal adult	75	3.9	3.4	3.0	ND	0.5	10.4	18.9	
Pd										
Los Angeles	Indoor	104	0.4	0.5	0.1	ND	ND	1.6	2.2	
Los Angeles	Outdoor	103	0.3	0.4	ND	ND	ND	1.2	1.4	
Los Angeles	Personal child	1	0.9	ND	0.9	0.9	0.9	0.9	0.9	
Los Angeles	Personal adult	91	0.7	0.8	0.4	ND	ND	2.4	3.9	
Elizabeth	Indoor	77	0.2	0.4	ND	ND	ND	1.1	1.5	
Elizabeth	Outdoor	75	0.3	0.5	0.0	ND	ND	1.3	2.3	
Elizabeth	Personal child	18	0.4	0.6	ND	ND	ND	1.9	1.9	
Elizabeth	Personal adult	64	0.3	0.6	ND	ND	ND	2.0	2.6	
Houston	Indoor	81	0.3	0.5	ND	ND	ND	1.3	1.9	
Houston	Outdoor	81	0.3	0.4	0.0	ND	ND	1.3	1.7	
Houston	Personal child	2	0.6	0.1	0.6	0.5	0.5	0.6	0.6	
Houston	Personal adult	75	0.4	0.6	ND	ND	ND	1.5	2.8	

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
P									
Los Angeles	Indoor	104	0.3	1.2	ND	ND	ND	1.9	6.9
Los Angeles	Outdoor	103	0.1	0.6	ND	ND	ND	0.3	3.1
Los Angeles	Personal child	1	6.2	ND	6.2	6.2	6.2	6.2	6.2
Los Angeles	Personal adult	91	1.4	8.3	ND	ND	ND	3.7	76.8
Elizabeth	Indoor	77	0.6	2.8	ND	ND	ND	3.7	20.3
Elizabeth	Outdoor	75	0.1	0.6	ND	ND	ND	0.1	3.9
Elizabeth	Personal child	18	3.1	4.6	ND	ND	ND	13.2	13.2
Elizabeth	Personal adult	64	1.7	3.7	ND	ND	ND	8.7	22.5
Houston	Indoor	81	2.4	8.2	ND	ND	ND	10.7	51.3
Houston	Outdoor	81	0.1	0.5	ND	ND	ND	0.0	3.5
Houston	Personal child	2	4.9	5.3	4.9	1.1	1.1	8.6	8.6
Houston	Personal adult	75	3.6	5.5	0.1	ND	ND	17.5	20.3
Rb									
Los Angeles	Indoor	104	0.1	0.1	ND	ND	ND	0.3	0.4
Los Angeles	Outdoor	103	0.1	0.1	ND	ND	ND	0.3	0.5
Los Angeles	Personal child	1	0.6	ND	0.6	0.6	0.6	0.6	0.6
Los Angeles	Personal adult	91	0.2	0.3	0.1	ND	ND	0.7	1.4
Elizabeth	Indoor	77	0.1	0.1	ND	ND	ND	0.4	0.6
Elizabeth	Outdoor	75	0.2	0.4	0.1	ND	ND	0.9	3.1
Elizabeth	Personal child	18	0.3	0.4	0.1	ND	ND	1.2	1.2
Elizabeth	Personal adult	64	0.2	0.3	0.0	ND	ND	0.9	1.4
Houston	Indoor	81	0.1	0.1	0.1	ND	ND	0.3	0.5
Houston	Outdoor	81	0.1	0.2	0.0	ND	ND	0.5	1.0
Houston	Personal child	2	0.6	0.2	0.6	0.5	0.5	0.7	0.7
Houston	Personal adult	75	0.3	0.4	0.2	ND	ND	1.2	1.6
S									
Los Angeles	Indoor	104	916.7	718.3	614.4	120.9	156.3	2144.0	2696.0
Los Angeles	Outdoor	103	1022.9	738.5	825.5	166.4	235.3	2368.0	3141.7
Los Angeles	Personal child	1	516.3	ND	516.3	516.3	516.3	516.3	516.3
Los Angeles	Personal adult	91	895.3	698.2	713.9	149.6	213.6	2131.9	3577.4
Elizabeth	Indoor	77	1011.4	623.0	861.3	184.7	346.1	2426.6	3176.0
Elizabeth	Outdoor	75	1288.8	641.5	1154.0	331.2	415.7	2618.2	3321.0
Elizabeth	Personal child	18	883.8	566.1	755.1	366.3	366.3	2672.0	2672.0
Elizabeth	Personal adult	64	973.6	611.4	828.0	190.9	386.2	2248.0	3190.1
Houston	Indoor	81	651.6	358.9	577.4	150.5	231.6	1410.8	1878.2
Houston	Outdoor	81	1158.3	534.5	1086.0	ND	515.0	2314.6	2852.4
Houston	Personal child	2	457.3	267.0	457.3	268.5	268.5	646.1	646.1
Houston	Personal adult	75	700.4	334.9	635.0	131.1	264.5	1418.8	1734.8

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
Sb									
Los Angeles	Indoor	104	1.8	1.7	1.5	ND	ND	4.8	8.1
Los Angeles	Outdoor	103	2.1	1.9	1.8	ND	ND	5.8	6.8
Los Angeles	Personal child	1	1.7	ND	1.7	1.7	1.7	1.7	1.7
Los Angeles	Personal adult	91	1.9	1.8	1.5	ND	ND	5.1	8.2
Elizabeth	Indoor	77	1.2	1.9	0.8	ND	ND	2.9	15.7
Elizabeth	Outdoor	75	2.1	3.2	1.4	ND	ND	6.9	20.2
Elizabeth	Personal child	18	2.4	3.7	1.4	ND	ND	15.7	15.7
Elizabeth	Personal adult	64	1.3	1.3	1.2	ND	ND	3.3	6.8
Houston	Indoor	81	0.9	0.9	0.7	ND	ND	2.7	3.9
Houston	Outdoor	81	1.7	2.1	1.1	ND	ND	4.6	12.3
Houston	Personal child	2	ND	ND	ND	ND	ND	ND	ND
Houston	Personal adult	75	1.9	1.6	1.8	ND	ND	5.0	7.0
Se									
Los Angeles	Indoor	104	0.8	0.8	0.6	ND	ND	2.7	3.5
Los Angeles	Outdoor	103	1.4	1.5	0.9	0.1	0.2	4.4	7.8
Los Angeles	Personal child	1	0.6	ND	0.6	0.6	0.6	0.6	0.6
Los Angeles	Personal adult	91	0.9	0.8	0.7	ND	0.0	2.4	4.0
Elizabeth	Indoor	77	0.9	0.8	0.7	ND	0.2	2.8	5.1
Elizabeth	Outdoor	75	1.5	1.2	1.3	ND	0.2	4.0	6.4
Elizabeth	Personal child	18	0.8	0.7	0.7	ND	ND	3.1	3.1
Elizabeth	Personal adult	64	0.8	0.6	0.7	ND	ND	2.1	2.7
Houston	Indoor	81	0.3	0.3	0.3	ND	ND	0.9	1.3
Houston	Outdoor	81	0.6	0.4	0.6	ND	0.0	1.4	2.3
Houston	Personal child	2	0.5	0.5	0.5	0.2	0.2	0.8	0.8
Houston	Personal adult	75	0.4	0.3	0.3	ND	ND	0.9	1.3
Si									
Los Angeles	Indoor	104	128.6	78.3	108.6	35.1	44.7	304.8	358.8
Los Angeles	Outdoor	103	128.9	95.1	107.9	18.9	34.9	295.8	447.3
Los Angeles	Personal child	1	901.2	ND	901.2	901.2	901.2	901.2	901.2
Los Angeles	Personal adult	91	273.3	212.4	191.3	49.5	69.5	729.6	1161.0
Elizabeth	Indoor	77	87.7	61.4	67.1	20.4	26.0	211.8	344.2
Elizabeth	Outdoor	75	287.7	401.7	107.2	22.4	31.9	936.2	2363.0
Elizabeth	Personal child	18	346.4	132.3	325.4	169.1	169.1	589.5	589.5
Elizabeth	Personal adult	64	416.4	606.7	230.4	37.0	61.8	1230.0	4492.1
Houston	Indoor	81	166.1	112.0	147.3	36.9	51.5	387.5	632.0
Houston	Outdoor	81	261.9	386.8	121.1	1.2	30.6	1099.6	2240.8
Houston	Personal child	2	513.8	19.2	513.8	500.2	500.2	527.3	527.3
Houston	Personal adult	75	574.7	417.2	460.1	71.5	163.8	1635.8	1816.1

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
Sn									
Los Angeles	Indoor	104	6.8	12.8	4.8	1.3	2.5	10.2	36.3
Los Angeles	Outdoor	103	7.9	16.2	5.0	2.4	2.9	14.1	60.9
Los Angeles	Personal child	1	6.0	ND	6.0	6.0	6.0	6.0	6.0
Los Angeles	Personal adult	91	9.0	16.7	6.9	1.2	2.5	14.2	162.6
Elizabeth	Indoor	77	3.9	2.6	3.3	0.7	1.2	7.9	18.6
Elizabeth	Outdoor	75	5.5	7.2	3.9	0.2	0.9	14.3	55.4
Elizabeth	Personal child	18	7.4	6.3	6.2	1.9	1.9	29.9	29.9
Elizabeth	Personal adult	64	5.0	3.9	3.9	0.2	0.7	11.1	22.7
Houston	Indoor	81	3.1	1.9	2.8	ND	0.6	6.2	8.5
Houston	Outdoor	81	2.7	1.7	2.3	ND	0.4	5.4	10.1
Houston	Personal child	2	4.5	4.9	4.5	1.0	1.0	7.9	7.9
Houston	Personal adult	75	4.9	2.7	4.5	ND	1.4	9.8	13.8
Sr									
Los Angeles	Indoor	104	1.5	1.4	1.2	0.1	0.3	3.4	5.5
Los Angeles	Outdoor	103	1.8	1.8	1.4	0.0	0.3	4.4	7.4
Los Angeles	Personal child	1	6.2	ND	6.2	6.2	6.2	6.2	6.2
Los Angeles	Personal adult	91	3.2	4.3	1.9	ND	0.6	8.5	37.3
Elizabeth	Indoor	77	0.4	0.9	0.3	ND	ND	0.9	7.5
Elizabeth	Outdoor	75	1.3	2.0	0.6	ND	0.1	4.4	14.7
Elizabeth	Personal child	18	1.6	1.2	1.4	0.2	0.2	4.8	4.8
Elizabeth	Personal adult	64	1.9	2.9	1.0	ND	0.1	6.0	15.8
Houston	Indoor	81	0.5	0.4	0.5	ND	ND	1.2	1.6
Houston	Outdoor	81	0.7	0.8	0.5	ND	ND	2.3	4.1
Houston	Personal child	2	1.9	1.0	1.9	1.2	1.2	2.6	2.6
Houston	Personal adult	75	2.3	1.8	2.0	0.2	0.3	5.7	10.3
Ti									
Los Angeles	Indoor	104	10.9	15.0	9.1	2.5	3.1	21.0	46.7
Los Angeles	Outdoor	103	10.4	5.4	9.6	1.8	2.8	20.3	25.5
Los Angeles	Personal child	1	44.7	ND	44.7	44.7	44.7	44.7	44.7
Los Angeles	Personal adult	91	20.3	13.4	15.8	4.8	5.9	47.0	71.1
Elizabeth	Indoor	77	4.2	2.9	3.9	ND	0.9	10.0	18.2
Elizabeth	Outdoor	75	13.5	18.7	6.6	ND	0.4	38.1	123.0
Elizabeth	Personal child	18	28.2	14.0	28.1	6.8	6.8	53.0	53.0
Elizabeth	Personal adult	64	22.8	18.1	17.4	2.7	4.7	66.4	80.1
Houston	Indoor	81	5.6	4.0	4.5	0.8	1.5	12.8	26.5
Houston	Outdoor	81	8.9	12.1	4.7	ND	0.7	31.0	63.4
Houston	Personal child	2	22.1	10.6	22.1	14.6	14.6	29.6	29.6
Houston	Personal adult	75	28.9	28.5	20.9	5.3	7.3	70.0	211.3

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
V									
Los Angeles	Indoor	104	4.2	3.2	3.6	ND	0.3	10.4	13.0
Los Angeles	Outdoor	103	5.3	3.8	4.5	ND	0.5	12.4	15.3
Los Angeles	Personal child	1	0.8	ND	0.8	0.8	0.8	0.8	0.8
Los Angeles	Personal adult	91	3.8	3.4	3.2	ND	ND	12.1	13.8
Elizabeth	Indoor	77	4.2	4.7	2.5	ND	0.1	14.4	20.2
Elizabeth	Outdoor	75	6.6	8.1	3.9	ND	0.3	20.5	56.8
Elizabeth	Personal child	18	3.8	3.4	3.4	ND	ND	11.1	11.1
Elizabeth	Personal adult	64	3.6	3.4	2.5	ND	0.0	11.2	13.9
Houston	Indoor	81	2.7	2.5	2.0	ND	ND	7.8	12.9
Houston	Outdoor	81	5.4	4.0	4.2	ND	0.2	12.9	19.6
Houston	Personal child	2	1.9	2.6	1.9	ND	ND	3.7	3.7
Houston	Personal adult	75	2.6	2.4	2.1	ND	ND	7.3	11.5
Y									
Los Angeles	Indoor	104	0.1	0.2	ND	ND	ND	0.5	0.6
Los Angeles	Outdoor	103	0.1	0.1	ND	ND	ND	0.4	0.6
Los Angeles	Personal child	1	0.2	ND	0.2	0.2	0.2	0.2	0.2
Los Angeles	Personal adult	91	0.2	0.3	ND	ND	ND	0.6	1.1
Elizabeth	Indoor	77	0.0	0.1	ND	ND	ND	0.3	0.4
Elizabeth	Outdoor	75	0.1	0.2	ND	ND	ND	0.6	1.6
Elizabeth	Personal child	18	0.1	0.2	ND	ND	ND	0.7	0.7
Elizabeth	Personal adult	64	0.2	0.3	ND	ND	ND	0.6	1.5
Houston	Indoor	81	0.1	0.1	ND	ND	ND	0.4	0.5
Houston	Outdoor	81	0.1	0.2	ND	ND	ND	0.5	0.6
Houston	Personal child	2	0.2	0.2	0.2	ND	ND	0.3	0.3
Houston	Personal adult	75	0.2	0.2	ND	ND	ND	0.8	1.0
Zn									
Los Angeles	Indoor	104	15.7	23.5	12.0	2.2	3.7	30.3	53.2
Los Angeles	Outdoor	103	16.4	10.9	13.6	3.5	5.3	36.2	52.6
Los Angeles	Personal child	1	29.6	ND	29.6	29.6	29.6	29.6	29.6
Los Angeles	Personal adult	91	76.5	311.0	28.7	8.3	13.3	103.9	2908.7
Elizabeth	Indoor	77	112.3	565.6	14.3	4.2	6.4	348.1	4734.9
Elizabeth	Outdoor	75	48.1	180.2	24.6	4.8	8.1	79.4	1579.0
Elizabeth	Personal child	18	61.6	59.8	41.8	20.9	20.9	271.2	271.2
Elizabeth	Personal adult	64	215.2	658.6	41.3	14.3	22.8	949.5	3361.7
Houston	Indoor	81	54.2	324.9	7.5	1.4	2.4	52.0	2895.6
Houston	Outdoor	81	13.7	14.0	9.0	0.0	3.4	35.8	96.8
Houston	Personal child	2	24.7	19.0	24.7	11.3	11.3	38.2	38.2
Houston	Personal adult	75	70.9	175.3	34.2	10.1	14.9	132.6	1380.2

Table continues on next page

^a ND = Not detected.

Table C.1 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (EC, OC, and Elements) with AERs, by City^a

Species / City	Category	n	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (continued)									
Zr									
Los Angeles	Indoor	104	0.9	0.9	0.8	ND	ND	2.2	2.7
Los Angeles	Outdoor	103	0.5	0.4	0.5	ND	ND	1.2	1.9
Los Angeles	Personal child	1	2.6	ND	2.6	2.6	2.6	2.6	2.6
Los Angeles	Personal adult	91	6.5	17.5	1.6	ND	0.0	23.2	132.8
Elizabeth	Indoor	77	0.7	0.8	0.5	ND	ND	2.1	4.4
Elizabeth	Outdoor	75	1.3	1.5	0.8	ND	ND	4.2	8.0
Elizabeth	Personal child	18	8.7	6.1	7.6	1.5	1.5	25.3	25.3
Elizabeth	Personal adult	64	15.2	26.6	5.3	ND	0.6	74.1	137.4
Houston	Indoor	81	0.8	1.1	0.7	ND	ND	1.8	8.9
Houston	Outdoor	81	0.4	0.5	0.2	ND	ND	1.2	2.9
Houston	Personal child	2	5.2	1.6	5.2	4.1	4.1	6.4	6.4
Houston	Personal adult	75	11.6	22.6	5.8	ND	0.8	31.6	150.6

^a ND = Not detected.

Table C.2. Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Mass, by City

City	Category	<i>n</i>	Mean	SD	Median
Los Angeles	Indoor	124	16.2	9.38	14.5
Los Angeles	Outdoor	121	19.2	13.3	16.1
Los Angeles	Personal child	1	40.2	—	40.2
Los Angeles	Personal adult	105	29.2	14.8	26.5
Elizabeth	Indoor	96	20.1	15.5	15.7
Elizabeth	Outdoor	103	20.4	10.7	18.2
Elizabeth	Personal child	23	54.0	32.0	39.2
Elizabeth	Personal adult	77	44.8	29.9	37.4
Houston	Indoor	106	17.1	12.7	13.4
Houston	Outdoor	110	14.7	5.75	13.2
Houston	Personal child	3	36.6	7.97	39.1
Houston	Personal adult	98	37.2	23.8	31.6

Table C.3. Total (Gas Phase + Particulate Phase) PAH Concentrations, by City

PAH (ng/m ³)	Outdoor Air				Indoor Air			
	Mean	Median	5th Percentile	95th Percentile	Mean	Median	5th Percentile	95th Percentile
Los Angeles, CA (61 Homes)								
1-MA	1.0	0.87	0.32	4.3	2.5	2.2	0.91	6.8
1-MP	0.83	0.62	0.16	3.2	1.5	1.3	0.58	4.2
2-MA	0.23	0.091	0.019	2.1	0.61	0.38	0.11	2.3
3,6-DMP	0.40	0.32	0.12	1.7	0.70	0.62	0.22	1.8
4,5-MP	0.67	0.58	0.19	2.6	0.97	0.62	0.27	2.9
9,10-DMA	0.032	0.014	< MDL	0.19	0.086	0.043	< MDL	0.43
9-MA	0.033	0.010	< MDL	0.16	0.19	0.11	0.0071	0.60
ANT	0.67	0.44	0.078	3.2	1.0	0.47	0.23	3.7
BaA	0.076	0.046	0.0073	0.48	0.037	0.029	0.0096	0.16
BaFLR	0.10	0.086	0.026	0.56	0.071	0.057	0.033	0.30
BaP	0.10	0.050	0.0075	0.54	0.074	0.041	0.0078	0.37
BbFLR	0.053	0.045	0.0049	0.22	0.044	0.023	0.0054	0.17
BeP	0.15	0.11	0.015	0.57	0.11	0.068	0.029	0.30
BFLTs	0.29	0.19	0.037	1.1	0.19	0.15	0.066	0.71
BghiP	0.45	0.27	0.038	1.6	0.34	0.18	0.057	1.0
BNT	0.025	0.019	0.0037	0.077	0.016	0.014	0.0034	0.054
CHR/Tr	0.25	0.24	0.060	1.1	0.16	0.16	0.073	0.51
COR	0.49	0.23	0.010	1.8	0.36	0.20	0.032	1.2
CPP	0.071	0.038	0.0040	0.39	0.057	0.037	0.0087	0.18
DBA	0.015	0.0084	< MDL	0.062	0.014	0.0088	0.0026	0.044
DBT	0.97	0.69	0.15	4.5	2.5	2.0	0.92	7.4
FLT	1.9	1.5	0.54	11	1.6	1.2	0.58	7.0
IP	0.37	0.19	0.027	1.5	0.28	0.18	0.032	0.98
PER	0.020	0.012	< MDL	0.10	0.019	0.011	0.0029	0.085
Phe	11	8.4	2.2	59	16	13	5.9	74
PYR	1.8	1.6	0.24	6.5	1.9	1.5	0.88	4.6
RET	0.25	0.15	0.048	0.78	0.45	0.35	0.15	1.4

Table continues next page

Table C.3 (continued). Total (Gas Phase + Particulate Phase) PAH Concentrations, by City

PAH (ng/m ³)	Outdoor Air				Indoor Air			
	Mean	Median	5th Percentile	95th Percentile	Mean	Median	5th Percentile	95th Percentile
Elizabeth, NJ (51 Homes)								
1-MA	2.2	2.1	0.79	4.4	3.4	3.1	0.85	6.3
1-MP	1.7	1.5	0.69	3.2	2.4	2.0	0.95	4.7
2-MA	0.89	0.57	0.080	2.8	0.97	0.50	0.21	4.1
3,6-DMP	0.86	0.75	0.25	1.7	0.93	0.87	0.36	1.7
4,5-MP	1.5	1.2	0.47	3.4	1.2	1.0	0.53	2.3
9,10-DMA	0.032	0.020	< MDL	0.082	0.081	0.044	< MDL	0.22
9-MA	0.051	0.030	0.0049	0.14	0.12	0.11	< MDL	0.28
ANT	1.7	1.3	0.33	4.9	1.1	1.0	0.34	2.2
BaA	0.21	0.11	0.021	0.66	0.088	0.059	0.019	0.26
BaFLR	0.26	0.21	0.059	0.64	0.17	0.13	0.051	0.36
BaP	0.22	0.12	0.030	0.66	0.14	0.092	0.0091	0.45
BbFLR	0.13	0.086	0.022	0.36	0.052	0.036	0.012	0.13
BeP	0.26	0.21	0.044	0.67	0.14	0.12	0.038	0.33
BFLTs	0.53	0.42	0.11	1.3	0.32	0.25	0.12	0.78
BghiP	0.54	0.33	0.035	1.9	0.37	0.26	0.044	1.1
BNT	0.044	0.030	0.0077	0.11	0.027	0.022	0.0060	0.063
CHR/Tr	0.45	0.36	0.091	1.0	0.28	0.21	0.091	0.52
COR	0.56	0.29	0.046	1.9	0.36	0.24	0.044	1.1
CPP	0.11	0.041	0.0045	0.48	0.072	0.040	0.0070	0.18
DBA	0.023	0.014	< MDL	0.068	0.014	0.010	< MDL	0.044
DBT	2.2	1.6	0.54	4.5	3.5	3.0	0.82	7.6
FLT	5.6	3.8	1.7	13	3.6	2.5	1.2	7.7
IP	0.55	0.32	0.025	1.9	0.32	0.21	0.018	0.94
PER	0.045	0.027	0.0048	0.13	0.029	0.023	< MDL	0.090
Phe	29	20	9.4	71	41	21	5.5	137
PYR	3.8	3.0	0.94	8.3	2.9	2.3	1.3	6.0
RET	0.22	0.14	0.044	0.48	0.82	0.71	0.31	1.4

Table continues next page

Table C.3 (continued). Total (Gas Phase + Particulate Phase) PAH Concentrations, by City

PAH (ng/m ³)	Outdoor Air				Indoor Air			
	Mean	Median	5th Percentile	95th Percentile	Mean	Median	5th Percentile	95th Percentile
Houston, TX (45 Homes)								
1-MA	1.8	1.1	0.46	2.7	5.0	4.9	0.27	11
1-MP	1.1	0.82	0.29	2.2	2.9	2.9	0.98	6.2
2-MA	0.29	0.19	0.032	0.85	0.67	0.49	0.11	1.7
3,6-DMP	0.66	0.47	0.21	1.3	1.3	1.2	0.38	2.4
4,5-MP	1.2	0.93	0.32	3.8	1.3	1.3	0.19	2.4
9,10-DMA	0.11	0.020	< MDL	0.52	0.24	0.10	< MDL	0.85
9-MA	0.094	0.023	0.0049	0.25	0.20	0.15	< MDL	0.44
ANT	1.0	0.69	0.12	3.1	1.7	0.97	0.17	4.7
BaA	0.057	0.031	0.0030	0.15	0.062	0.026	0.0021	0.12
BaFLR	0.20	0.13	0.045	0.52	0.15	0.12	0.056	0.27
BaP	0.078	0.049	0.0039	0.22	0.072	0.027	0.0043	0.23
BbFLR	0.078	0.052	0.011	0.23	0.051	0.033	0.0059	0.086
BeP	0.085	0.053	0.014	0.28	0.080	0.038	0.011	0.16
BFLTs	0.20	0.14	0.028	0.53	0.20	0.091	0.029	0.37
BghiP	0.17	0.074	0.011	0.44	0.25	0.046	< MDL	0.90
BNT	0.042	0.026	0.0059	0.11	0.031	0.029	0.0062	0.065
CHR/Tr	0.67	0.50	0.14	1.6	0.46	0.31	0.021	1.3
COR	0.13	0.049	0.011	0.43	0.35	0.036	0.0072	0.85
CPP	0.037	0.014	< MDL	0.14	0.095	0.0090	< MDL	0.081
DBA	0.012	0.0067	< MDL	0.043	0.014	0.0040	< MDL	0.050
DBT	2.1	1.5	0.13	4.8	5.1	4.2	0.83	12
FLT	3.9	3.1	1.1	8.7	3.0	2.4	0.87	6.2
IP	0.18	0.082	0.012	0.59	0.29	0.060	0.0053	0.63
PER	0.014	0.011	< MDL	0.033	0.022	0.011	< MDL	0.038
Phe	22	15	2.3	70	32	25	11	65
PYR	2.8	2.4	0.75	5.2	2.9	2.4	1.0	7.1
RET	0.73	0.45	0.091	1.6	1.2	0.85	0.25	2.8

Table C.4. Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
AER (hr⁻¹)									
Fall		89	1.0	0.8	0.8	0.1	0.2	2.7	4.2
Spring		77	1.2	1.1	0.8	0.1	0.3	4.1	4.7
Summer		104	1.1	0.9	0.8	0.1	0.2	2.8	4.1
Winter		78	1.0	0.8	0.7	0.1	0.2	2.4	4.5
Carbon (µgC/m³)									
EC									
Fall	Indoor	50	1.2	0.8	1.0	0.3	0.4	3.2	3.8
Fall	Outdoor	50	1.4	0.9	1.1	0.4	0.6	3.5	4.6
Spring	Indoor	39	0.7	0.4	0.6	0.1	0.2	1.5	1.7
Spring	Outdoor	39	0.8	0.4	0.7	0.2	0.2	1.6	1.7
Summer	Indoor	46	1.3	1.6	0.9	0.2	0.2	2.2	10.0
Summer	Outdoor	46	1.2	0.6	1.1	0.2	0.4	2.4	2.8
Winter	Indoor	37	0.9	0.6	0.9	0.1	0.2	2.6	2.6
Winter	Outdoor	37	1.0	0.7	0.9	0.2	0.3	2.6	2.8
OC									
Fall	Indoor	50	7.7	6.9	5.4	1.4	2.4	23.1	40.9
Fall	Outdoor	50	4.3	2.5	3.7	0.3	0.9	9.5	10.1
Spring	Indoor	39	7.7	9.4	5.1	1.6	2.3	25.2	56.7
Spring	Outdoor	39	2.8	1.9	2.5	0.1	0.6	6.9	10.3
Summer	Indoor	46	5.7	3.5	4.6	1.4	1.8	12.4	16.1
Summer	Outdoor	46	3.5	2.9	2.9	0.0	0.4	6.6	18.3
Winter	Indoor	37	6.9	5.4	5.4	0.4	1.3	19.7	20.3
Winter	Outdoor	37	3.1	1.8	3.2	0.3	0.4	6.0	8.3
Elements (ng/m³)									
Ag									
Fall	Indoor	67	0.9	0.7	0.8	ND	ND	2.3	2.8
Fall	Outdoor	66	0.7	0.7	0.6	ND	ND	1.9	2.5
Fall	Personal child	4	1.4	1.6	1.3	ND	ND	3.0	3.0
Fall	Personal adult	61	1.4	1.2	1.3	ND	ND	3.3	4.5
Spring	Indoor	55	0.8	0.6	0.8	ND	ND	1.7	3.2
Spring	Outdoor	57	0.5	0.6	0.4	ND	ND	1.5	2.1
Spring	Personal child	4	0.7	0.8	0.7	ND	ND	1.6	1.6
Spring	Personal adult	51	1.1	1.2	0.8	ND	ND	3.6	3.7
Summer	Indoor	77	0.7	0.7	0.6	ND	ND	1.7	3.4
Summer	Outdoor	71	0.7	0.6	0.7	ND	ND	1.7	2.1
Summer	Personal child	9	1.1	1.0	1.0	ND	ND	2.6	2.6
Summer	Personal adult	64	1.2	1.2	1.0	ND	ND	3.4	4.5
Winter	Indoor	63	0.8	0.8	0.6	ND	ND	2.0	3.0
Winter	Outdoor	65	0.8	0.7	0.7	ND	ND	2.0	3.4
Winter	Personal child	4	1.9	1.0	1.7	1.0	1.0	3.2	3.2
Winter	Personal adult	54	1.0	1.1	0.7	ND	ND	2.7	4.4

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
<i>Al (continued)</i>									
Fall	Indoor	67	28.5	41.4	14.5	ND	ND	107.3	225.5
Fall	Outdoor	66	37.6	105.5	11.0	ND	ND	110.9	735.5
Fall	Personal child	4	117.5	98.8	86.7	40.8	40.8	255.5	255.5
Fall	Personal adult	61	103.6	113.5	69.4	ND	2.6	247.0	671.2
Spring	Indoor	55	27.8	35.8	15.9	ND	ND	115.5	161.6
Spring	Outdoor	57	53.5	79.9	20.0	ND	ND	288.0	328.4
Spring	Personal child	4	133.6	81.7	151.4	30.7	30.7	200.8	200.8
Spring	Personal adult	51	120.9	114.0	80.8	6.6	6.8	364.5	410.6
Summer	Indoor	77	29.2	35.9	16.3	ND	ND	120.0	175.5
Summer	Outdoor	71	129.5	233.6	24.5	ND	ND	758.8	1164.9
Summer	Personal child	9	137.1	108.8	103.5	30.7	30.7	377.9	377.9
Summer	Personal adult	64	105.7	115.4	62.0	ND	ND	367.9	612.2
Winter	Indoor	63	21.5	23.6	13.9	ND	ND	56.0	125.2
Winter	Outdoor	65	42.1	107.3	10.7	ND	ND	239.1	719.8
Winter	Personal child	4	93.3	87.3	79.8	16.3	16.3	197.4	197.4
Winter	Personal adult	54	131.1	164.8	55.1	ND	ND	583.8	656.8
<i>As</i>									
Fall	Indoor	67	0.9	1.0	0.7	ND	0.1	2.2	7.2
Fall	Outdoor	66	1.1	0.9	0.9	ND	ND	3.2	3.4
Fall	Personal child	4	0.5	0.1	0.5	0.4	0.4	0.7	0.7
Fall	Personal adult	61	0.8	0.7	0.7	ND	ND	2.0	2.7
Spring	Indoor	55	0.6	0.5	0.5	ND	ND	1.7	2.1
Spring	Outdoor	57	0.7	0.5	0.7	ND	ND	1.7	2.1
Spring	Personal child	4	1.2	0.7	1.1	0.5	0.5	2.0	2.0
Spring	Personal adult	51	0.7	0.8	0.5	ND	ND	2.5	2.6
Summer	Indoor	77	0.6	0.7	0.5	ND	ND	1.9	3.7
Summer	Outdoor	71	0.9	0.8	0.8	ND	ND	2.2	4.6
Summer	Personal child	9	1.1	0.9	1.4	ND	ND	2.4	2.4
Summer	Personal adult	64	0.9	1.1	0.7	ND	ND	2.4	7.0
Winter	Indoor	63	0.8	0.8	0.5	ND	ND	2.3	5.0
Winter	Outdoor	65	0.7	0.6	0.6	ND	ND	1.9	2.9
Winter	Personal child	4	1.9	1.6	1.5	0.6	0.6	3.9	3.9
Winter	Personal adult	54	0.8	0.9	0.6	ND	ND	3.0	4.1
<i>Ba</i>									
Fall	Indoor	67	14.2	6.9	13.2	1.0	4.3	25.2	32.4
Fall	Outdoor	66	21.9	13.2	17.3	6.9	8.6	45.2	84.1
Fall	Personal child	4	17.5	7.7	18.0	8.2	8.2	26.0	26.0
Fall	Personal adult	61	25.7	10.0	23.2	9.5	13.5	46.7	50.0
Spring	Indoor	55	13.5	5.6	13.1	4.0	5.3	25.2	28.1
Spring	Outdoor	57	18.0	9.9	15.8	ND	4.9	33.2	60.3
Spring	Personal child	4	19.8	5.0	21.5	12.7	12.7	23.5	23.5
Spring	Personal adult	51	22.2	8.8	21.8	2.8	9.3	35.8	48.3

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ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
Ba (continued)									
Summer	Indoor	77	13.9	7.3	13.1	1.3	3.9	26.5	40.0
Summer	Outdoor	71	20.6	9.3	19.4	5.1	7.5	36.7	49.6
Summer	Personal child	9	20.2	11.1	19.0	8.7	8.7	39.8	39.8
Summer	Personal adult	64	30.4	56.7	21.8	1.7	4.8	46.2	467.7
Winter	Indoor	63	12.6	5.7	11.8	0.6	4.6	22.3	23.7
Winter	Outdoor	65	18.3	11.2	15.9	4.3	7.7	36.8	72.7
Winter	Personal child	4	16.2	6.4	18.1	6.9	6.9	21.5	21.5
Winter	Personal adult	54	22.6	9.1	22.5	3.9	10.1	39.6	49.6
Br									
Fall	Indoor	67	4.6	4.1	3.5	0.6	1.0	10.5	28.7
Fall	Outdoor	66	5.3	3.2	4.7	0.4	1.0	9.9	17.6
Fall	Personal child	4	3.5	0.4	3.4	3.1	3.1	4.0	4.0
Fall	Personal adult	61	4.8	2.9	4.1	1.2	1.5	9.4	14.0
Spring	Indoor	55	3.3	1.9	3.0	0.4	0.6	6.6	8.4
Spring	Outdoor	57	4.1	1.7	4.2	0.9	1.5	7.1	7.8
Spring	Personal child	4	4.2	1.4	4.1	2.9	2.9	5.8	5.8
Spring	Personal adult	51	4.2	2.2	3.9	1.0	1.4	9.3	10.1
Summer	Indoor	77	3.5	3.0	3.5	0.4	0.6	8.3	21.4
Summer	Outdoor	71	4.3	2.7	3.6	ND	1.2	9.5	12.7
Summer	Personal child	9	3.8	1.4	4.4	1.6	1.6	5.6	5.6
Summer	Personal adult	64	5.9	18.0	3.3	0.3	1.1	7.7	146.1
Winter	Indoor	63	3.0	1.8	2.5	0.6	0.9	6.4	8.6
Winter	Outdoor	65	4.2	2.8	3.8	0.3	1.3	9.3	14.9
Winter	Personal child	4	3.8	2.1	3.3	1.9	1.9	6.8	6.8
Winter	Personal adult	54	3.6	2.3	3.2	1.1	1.3	8.5	15.0
Ca									
Fall	Indoor	67	130.7	201.8	78.3	19.3	24.4	308.1	1532.2
Fall	Outdoor	66	95.7	132.2	60.4	13.6	21.3	194.7	815.5
Fall	Personal child	4	379.9	213.1	315.0	203.8	203.8	685.9	685.9
Fall	Personal adult	61	450.7	725.6	248.9	49.5	74.0	1137.2	5047.0
Spring	Indoor	55	94.6	75.3	78.3	19.9	24.5	216.4	464.7
Spring	Outdoor	57	128.0	113.6	97.4	14.7	34.5	417.6	546.4
Spring	Personal child	4	428.7	202.1	476.5	147.8	147.8	614.1	614.1
Spring	Personal adult	51	395.9	327.9	278.0	49.2	61.8	1189.6	1347.0
Summer	Indoor	77	88.6	120.7	60.8	18.8	21.4	264.6	977.2
Summer	Outdoor	71	132.5	101.5	98.7	0.9	33.6	359.1	494.8
Summer	Personal child	9	388.9	379.4	227.4	118.9	118.9	1258.9	1258.9
Summer	Personal adult	64	361.3	422.7	181.6	44.6	84.3	1100.5	2120.0
Winter	Indoor	63	81.2	62.2	63.3	ND	19.4	195.5	296.6
Winter	Outdoor	65	135.3	245.4	61.4	13.7	18.9	532.1	1735.0
Winter	Personal child	4	404.5	367.2	371.0	76.2	76.2	799.9	799.9
Winter	Personal adult	54	444.8	645.5	200.8	24.2	44.3	2109.0	3535.0

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
Cd									
Fall	Indoor	67	0.6	0.8	0.4	ND	ND	1.7	5.1
Fall	Outdoor	66	0.6	1.4	0.2	ND	ND	1.6	11.2
Fall	Personal child	4	0.6	0.7	0.4	ND	ND	1.7	1.7
Fall	Personal adult	61	0.6	0.9	0.1	ND	ND	1.9	4.8
Spring	Indoor	55	0.3	0.4	0.1	ND	ND	1.1	1.4
Spring	Outdoor	57	0.4	0.6	ND	ND	ND	1.6	2.6
Spring	Personal child	4	ND	ND	ND	ND	ND	ND	ND
Spring	Personal adult	51	0.5	0.8	ND	ND	ND	2.3	3.3
Summer	Indoor	77	0.5	0.6	0.2	ND	ND	1.8	2.9
Summer	Outdoor	71	0.4	0.6	0.0	ND	ND	1.9	2.9
Summer	Personal child	9	0.4	0.7	ND	ND	ND	1.8	1.8
Summer	Personal adult	64	1.0	3.3	ND	ND	ND	2.7	24.9
Winter	Indoor	63	0.5	0.8	0.2	ND	ND	1.7	5.1
Winter	Outdoor	65	0.4	0.7	ND	ND	ND	1.7	3.4
Winter	Personal child	4	0.2	0.2	0.1	ND	ND	0.5	0.5
Winter	Personal adult	54	0.5	0.6	0.2	ND	ND	1.9	2.6
Cl									
Fall	Indoor	67	75.1	171.0	24.7	ND	ND	392.3	982.1
Fall	Outdoor	66	62.0	127.4	16.1	ND	ND	237.8	886.3
Fall	Personal child	4	315.2	228.3	256.1	113.4	113.4	635.4	635.4
Fall	Personal adult	61	183.8	327.3	86.0	6.0	16.3	544.8	2303.3
Spring	Indoor	55	48.0	98.4	24.3	ND	ND	122.2	596.6
Spring	Outdoor	57	38.0	96.7	10.2	ND	ND	150.6	681.7
Spring	Personal child	4	260.3	162.1	311.4	25.0	25.0	393.5	393.5
Spring	Personal adult	51	134.5	131.2	98.0	6.6	14.7	416.8	695.1
Summer	Indoor	77	61.4	308.4	12.0	ND	ND	148.9	2713.0
Summer	Outdoor	71	46.0	139.6	5.4	ND	ND	171.0	871.5
Summer	Personal child	9	169.3	98.5	157.5	16.4	16.4	334.9	334.9
Summer	Personal adult	64	136.3	231.2	77.5	5.3	22.0	403.3	1765.0
Winter	Indoor	63	72.6	132.2	33.0	ND	3.7	243.2	913.5
Winter	Outdoor	65	142.4	339.9	19.7	ND	ND	761.8	2004.3
Winter	Personal child	4	288.9	325.5	147.5	88.7	88.7	771.7	771.7
Winter	Personal adult	54	187.5	195.2	110.2	3.7	11.2	590.5	941.9
Co									
Fall	Indoor	67	0.3	1.3	ND	ND	ND	0.9	8.4
Fall	Outdoor	66	0.3	1.5	ND	ND	ND	0.6	11.8
Fall	Personal child	4	0.6	0.7	0.5	ND	ND	1.5	1.5
Fall	Personal adult	61	0.4	0.7	ND	ND	ND	1.5	4.1
Spring	Indoor	55	0.0	0.1	ND	ND	ND	0.2	0.4
Spring	Outdoor	57	0.1	0.1	ND	ND	ND	0.5	0.7
Spring	Personal child	4	0.3	0.6	ND	ND	ND	1.1	1.1
Spring	Personal adult	51	0.2	0.5	ND	ND	ND	1.4	2.0

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
<i>Co (continued)</i>									
Summer	Indoor	77	0.0	0.1	ND	ND	ND	0.3	0.5
Summer	Outdoor	71	0.1	0.3	ND	ND	ND	1.1	1.3
Summer	Personal child	9	0.3	0.6	ND	ND	ND	1.4	1.4
Summer	Personal adult	64	0.2	0.5	ND	ND	ND	1.4	2.1
Winter	Indoor	63	0.1	0.2	ND	ND	ND	0.5	0.8
Winter	Outdoor	65	0.1	0.5	ND	ND	ND	0.4	3.6
Winter	Personal child	4	0.6	0.5	0.6	ND	ND	1.1	1.1
Winter	Personal adult	54	0.6	1.3	ND	ND	ND	2.5	8.3
<i>Cr</i>									
Fall	Indoor	67	3.9	10.4	0.7	ND	0.1	34.2	54.2
Fall	Outdoor	66	6.4	24.8	0.7	ND	0.2	25.1	188.9
Fall	Personal child	4	10.1	8.0	9.2	2.4	2.4	19.6	19.6
Fall	Personal adult	61	5.0	10.0	2.1	ND	0.4	29.9	52.7
Spring	Indoor	55	0.7	0.7	0.4	ND	0.1	2.3	3.0
Spring	Outdoor	57	1.0	1.7	0.5	ND	0.1	3.3	11.3
Spring	Personal child	4	3.9	2.3	3.7	1.4	1.4	6.6	6.6
Spring	Personal adult	51	1.8	2.5	1.4	ND	0.1	5.0	17.5
Summer	Indoor	77	0.9	1.2	0.5	ND	ND	3.1	9.0
Summer	Outdoor	71	1.1	1.2	0.7	ND	ND	3.6	7.3
Summer	Personal child	9	2.9	3.7	1.8	ND	ND	11.9	11.9
Summer	Personal adult	64	2.2	2.4	1.4	ND	0.1	7.0	11.5
Winter	Indoor	63	2.0	4.1	0.7	ND	0.1	9.2	22.1
Winter	Outdoor	65	1.9	4.5	0.6	ND	ND	10.1	31.7
Winter	Personal child	4	6.8	7.4	4.5	0.6	0.6	17.5	17.5
Winter	Personal adult	54	4.3	11.7	1.7	ND	0.3	16.9	84.8
<i>Cu</i>									
Fall	Indoor	67	7.2	5.8	6.0	ND	2.2	18.0	31.1
Fall	Outdoor	66	8.7	10.7	5.6	0.7	1.6	23.5	62.5
Fall	Personal child	4	14.5	7.8	14.6	6.7	6.7	22.0	22.0
Fall	Personal adult	61	12.2	7.7	9.9	ND	4.1	27.9	36.1
Spring	Indoor	55	11.9	58.5	3.1	ND	0.9	13.1	436.8
Spring	Outdoor	57	4.3	6.8	2.4	0.5	0.6	15.8	45.7
Spring	Personal child	4	69.3	112.2	14.7	10.3	10.3	237.6	237.6
Spring	Personal adult	51	16.2	40.5	7.2	ND	2.8	37.5	290.8
Summer	Indoor	77	4.7	4.4	3.8	0.7	1.0	9.8	34.2
Summer	Outdoor	71	4.7	4.0	3.6	0.3	0.8	11.0	22.9
Summer	Personal child	9	12.6	7.4	11.6	5.3	5.3	24.6	24.6
Summer	Personal adult	64	12.0	9.1	10.0	1.8	3.4	31.9	52.1
Winter	Indoor	63	5.3	5.8	3.6	0.8	1.2	12.3	39.6
Winter	Outdoor	65	6.0	6.9	3.8	0.4	0.5	21.2	33.5
Winter	Personal child	4	10.7	7.5	10.4	2.8	2.8	19.3	19.3
Winter	Personal adult	54	24.7	104.5	8.6	1.0	3.8	30.5	776.5

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
Fe									
Fall	Indoor	67	102.0	69.5	81.1	12.3	32.7	254.6	287.3
Fall	Outdoor	66	193.9	225.0	119.3	22.3	53.9	622.8	1565.6
Fall	Personal child	4	212.9	105.8	194.9	104.1	104.1	357.9	357.9
Fall	Personal adult	61	184.0	98.2	149.5	56.6	77.5	361.6	470.1
Spring	Indoor	55	68.0	41.2	54.2	12.1	19.2	154.9	189.1
Spring	Outdoor	57	160.8	154.9	108.1	23.4	31.9	605.3	672.6
Spring	Personal child	4	251.5	76.3	272.5	142.9	142.9	317.9	317.9
Spring	Personal adult	51	186.9	151.5	154.6	40.0	54.1	383.9	998.2
Summer	Indoor	77	85.1	56.7	71.1	11.1	26.1	185.8	367.8
Summer	Outdoor	71	207.1	155.1	156.9	1.0	46.1	555.9	707.4
Summer	Personal child	9	220.3	137.7	163.3	100.9	100.9	477.9	477.9
Summer	Personal adult	64	214.5	191.6	151.6	41.0	54.4	645.3	973.0
Winter	Indoor	63	63.3	38.8	52.0	14.3	16.6	134.4	196.6
Winter	Outdoor	65	162.5	267.4	99.7	17.8	25.0	450.3	1988.0
Winter	Personal child	4	149.1	84.9	131.9	70.6	70.6	261.8	261.8
Winter	Personal adult	54	165.6	136.6	126.8	31.4	48.0	402.5	745.1
Ga									
Fall	Indoor	67	0.2	0.3	ND	ND	ND	0.9	1.0
Fall	Outdoor	66	0.2	0.3	ND	ND	ND	1.0	1.1
Fall	Personal child	4	0.8	0.8	0.8	ND	ND	1.7	1.7
Fall	Personal adult	61	0.4	0.6	ND	ND	ND	1.6	2.5
Spring	Indoor	55	0.2	0.3	ND	ND	ND	0.8	1.0
Spring	Outdoor	57	0.2	0.3	0.1	ND	ND	0.8	1.1
Spring	Personal child	4	0.4	0.7	0.1	ND	ND	1.4	1.4
Spring	Personal adult	51	0.3	0.5	ND	ND	ND	1.2	2.8
Summer	Indoor	77	0.2	0.3	ND	ND	ND	1.0	1.1
Summer	Outdoor	71	0.2	0.3	ND	ND	ND	0.9	1.2
Summer	Personal child	9	0.9	0.7	1.2	ND	ND	1.7	1.7
Summer	Personal adult	64	0.2	0.4	ND	ND	ND	1.4	1.6
Winter	Indoor	63	0.2	0.3	0.0	ND	ND	0.9	1.1
Winter	Outdoor	65	0.2	0.3	ND	ND	ND	0.9	1.0
Winter	Personal child	4	0.7	0.8	0.6	ND	ND	1.5	1.5
Winter	Personal adult	54	0.4	0.6	ND	ND	ND	1.8	2.3
Ge									
Fall	Indoor	67	0.2	0.2	ND	ND	ND	0.5	1.4
Fall	Outdoor	66	0.1	0.2	0.0	ND	ND	0.5	0.6
Fall	Personal child	4	0.3	0.4	0.2	ND	ND	0.9	0.9
Fall	Personal adult	61	0.3	0.4	0.1	ND	ND	0.9	2.5
Spring	Indoor	55	0.1	0.1	0.1	ND	ND	0.4	0.6
Spring	Outdoor	57	0.1	0.2	0.1	ND	ND	0.5	0.5
Spring	Personal child	4	0.2	0.3	0.2	ND	ND	0.6	0.6
Spring	Personal adult	51	0.4	1.0	0.2	ND	ND	1.0	6.9

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
<i>Ge (continued)</i>									
Summer	Indoor	77	0.1	0.2	ND	ND	ND	0.6	0.7
Summer	Outdoor	71	0.1	0.1	0.0	ND	ND	0.4	0.5
Summer	Personal child	9	0.3	0.3	0.2	ND	ND	0.8	0.8
Summer	Personal adult	64	0.3	0.3	0.2	ND	ND	0.7	1.6
Winter	Indoor	63	0.2	0.2	0.1	ND	ND	0.5	0.7
Winter	Outdoor	65	0.1	0.1	0.0	ND	ND	0.4	0.5
Winter	Personal child	4	0.3	0.2	0.3	0.2	0.2	0.6	0.6
Winter	Personal adult	54	0.4	0.4	0.3	ND	ND	1.0	2.6
<i>Hg</i>									
Fall	Indoor	67	0.2	0.3	ND	ND	ND	0.8	1.1
Fall	Outdoor	66	0.2	0.3	ND	ND	ND	0.8	1.2
Fall	Personal child	4	0.5	0.6	0.3	ND	ND	1.3	1.3
Fall	Personal adult	61	0.2	0.4	ND	ND	ND	1.2	2.0
Spring	Indoor	55	0.1	0.2	ND	ND	ND	0.6	0.9
Spring	Outdoor	57	0.1	0.2	ND	ND	ND	0.7	0.7
Spring	Personal child	4	0.5	0.5	0.4	ND	ND	1.0	1.0
Spring	Personal adult	51	0.4	1.1	ND	ND	ND	1.3	7.6
Summer	Indoor	77	0.2	0.3	ND	ND	ND	0.9	1.4
Summer	Outdoor	71	0.1	0.3	ND	ND	ND	0.7	1.5
Summer	Personal child	9	0.3	0.4	ND	ND	ND	1.0	1.0
Summer	Personal adult	64	0.3	0.4	0.1	ND	ND	1.1	1.4
Winter	Indoor	63	0.2	0.3	ND	ND	ND	1.1	1.4
Winter	Outdoor	65	0.1	0.2	ND	ND	ND	0.6	1.2
Winter	Personal child	4	0.3	0.6	0.1	ND	ND	1.2	1.2
Winter	Personal adult	54	0.3	0.4	0.0	ND	ND	1.3	1.9
<i>In</i>									
Fall	Indoor	67	0.2	0.4	ND	ND	ND	1.2	1.6
Fall	Outdoor	66	0.3	0.4	0.2	ND	ND	1.2	1.6
Fall	Personal child	4	0.1	0.2	ND	ND	ND	0.4	0.4
Fall	Personal adult	61	0.5	0.9	ND	ND	ND	2.6	4.6
Spring	Indoor	55	0.3	0.4	ND	ND	ND	1.2	1.4
Spring	Outdoor	57	0.4	0.6	ND	ND	ND	1.4	2.5
Spring	Personal child	4	0.2	0.4	0.0	ND	ND	0.8	0.8
Spring	Personal adult	51	0.5	0.8	0.2	ND	ND	2.8	3.4
Summer	Indoor	77	0.4	0.5	0.2	ND	ND	1.6	1.8
Summer	Outdoor	71	0.2	0.3	ND	ND	ND	0.8	1.4
Summer	Personal child	9	0.2	0.5	ND	ND	ND	1.5	1.5
Summer	Personal adult	64	0.5	0.8	ND	ND	ND	2.1	3.7
Winter	Indoor	63	0.3	0.4	ND	ND	ND	1.4	1.6
Winter	Outdoor	65	0.2	0.3	ND	ND	ND	0.8	1.5
Winter	Personal child	4	0.6	0.2	0.6	0.3	0.3	0.7	0.7
Winter	Personal adult	54	0.5	0.9	ND	ND	ND	2.8	3.5

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
K									
Fall	Indoor	67	88.0	84.6	71.1	21.4	29.0	141.4	671.3
Fall	Outdoor	66	86.6	62.3	69.8	21.0	26.5	242.8	317.9
Fall	Personal child	4	256.1	178.7	200.0	117.4	117.4	507.1	507.1
Fall	Personal adult	61	162.5	150.2	119.3	29.1	45.2	358.8	901.8
Spring	Indoor	55	75.8	76.1	51.3	20.3	22.2	233.9	446.7
Spring	Outdoor	57	86.6	50.7	75.2	21.9	25.6	201.0	247.3
Spring	Personal child	4	194.7	98.8	182.1	92.2	92.2	322.4	322.4
Spring	Personal adult	51	148.7	104.0	133.6	32.3	34.2	360.6	578.5
Summer	Indoor	77	74.7	87.3	54.5	15.4	21.7	278.8	617.7
Summer	Outdoor	71	95.6	97.4	71.7	ND	30.7	234.2	720.5
Summer	Personal child	9	200.2	127.0	146.3	75.1	75.1	454.8	454.8
Summer	Personal adult	64	138.0	101.3	100.4	38.0	48.3	362.1	531.6
Winter	Indoor	63	121.4	185.5	62.6	11.6	24.7	522.8	1036.0
Winter	Outdoor	65	72.4	52.2	59.4	10.8	28.0	146.4	385.2
Winter	Personal child	4	215.1	165.1	152.2	98.7	98.7	457.4	457.4
Winter	Personal adult	54	166.8	178.4	106.6	34.7	41.7	465.8	1028.0
La									
Fall	Indoor	67	2.2	3.3	0.1	ND	ND	9.0	15.8
Fall	Outdoor	66	2.5	3.2	0.9	ND	ND	9.0	15.0
Fall	Personal child	4	4.3	7.3	1.0	ND	ND	15.2	15.2
Fall	Personal adult	61	4.0	4.8	1.6	ND	ND	13.1	19.0
Spring	Indoor	55	2.4	3.6	0.2	ND	ND	9.7	13.5
Spring	Outdoor	57	2.6	3.5	0.5	ND	ND	9.9	13.4
Spring	Personal child	4	4.2	4.9	3.9	ND	ND	9.3	9.3
Spring	Personal adult	51	4.2	4.7	1.5	ND	ND	13.3	14.1
Summer	Indoor	77	2.4	3.4	ND	ND	ND	9.5	14.1
Summer	Outdoor	71	2.8	4.0	ND	ND	ND	12.9	14.8
Summer	Personal child	9	3.9	6.2	ND	ND	ND	15.6	15.6
Summer	Personal adult	64	2.5	4.1	ND	ND	ND	9.7	17.9
Winter	Indoor	63	3.3	3.5	2.7	ND	ND	10.6	13.2
Winter	Outdoor	65	2.1	2.8	0.6	ND	ND	6.6	13.9
Winter	Personal child	4	3.2	4.6	1.5	ND	ND	9.7	9.7
Winter	Personal adult	54	4.0	5.6	0.7	ND	ND	18.0	23.4
Mn									
Fall	Indoor	67	2.5	2.0	2.1	0.2	0.8	5.0	15.3
Fall	Outdoor	66	4.4	4.3	3.2	1.1	1.5	9.7	25.2
Fall	Personal child	4	3.9	1.4	3.9	2.1	2.1	5.5	5.5
Fall	Personal adult	61	3.9	1.8	3.6	1.2	1.6	7.1	8.4
Spring	Indoor	55	1.9	1.1	1.7	ND	0.6	3.8	6.4
Spring	Outdoor	57	3.8	2.7	2.9	0.8	1.0	10.9	12.7
Spring	Personal child	4	4.9	0.1	4.9	4.7	4.7	5.0	5.0
Spring	Personal adult	51	3.8	2.2	3.5	0.4	0.8	8.6	9.1

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
Mn (continued)									
Summer	Indoor	77	2.0	1.0	1.8	0.3	0.7	3.8	5.0
Summer	Outdoor	71	4.4	2.8	3.7	0.6	1.0	10.4	12.5
Summer	Personal child	9	4.3	2.1	3.9	1.8	1.8	8.4	8.4
Summer	Personal adult	64	3.6	2.8	2.6	0.3	0.9	10.2	12.3
Winter	Indoor	63	1.9	1.7	1.5	0.3	0.4	4.9	10.3
Winter	Outdoor	65	3.8	4.9	2.6	0.5	0.7	8.2	31.4
Winter	Personal child	4	3.3	1.7	3.3	1.3	1.3	5.4	5.4
Winter	Personal adult	54	3.7	3.3	2.9	0.5	1.0	8.9	20.1
Mo									
Fall	Indoor	67	0.3	0.4	0.2	ND	ND	1.1	1.4
Fall	Outdoor	66	0.4	0.4	0.3	ND	ND	1.2	1.9
Fall	Personal child	4	0.0	0.1	ND	ND	ND	0.1	0.1
Fall	Personal adult	61	0.2	0.4	ND	ND	ND	0.9	1.8
Spring	Indoor	55	0.4	0.3	0.3	ND	ND	1.0	1.4
Spring	Outdoor	57	0.4	0.4	0.3	ND	ND	1.1	1.5
Spring	Personal child	4	0.2	0.4	0.1	ND	ND	0.8	0.8
Spring	Personal adult	51	0.1	0.3	ND	ND	ND	1.0	1.6
Summer	Indoor	77	0.3	0.3	0.2	ND	ND	1.0	1.1
Summer	Outdoor	71	0.5	0.5	0.4	ND	ND	1.6	1.8
Summer	Personal child	9	0.0	0.1	ND	ND	ND	0.2	0.2
Summer	Personal adult	64	0.2	0.3	ND	ND	ND	0.8	1.5
Winter	Indoor	63	0.3	0.3	0.2	ND	ND	0.9	1.1
Winter	Outdoor	65	0.4	0.4	0.2	ND	ND	1.3	1.8
Winter	Personal child	4	ND	ND	ND	ND	ND	ND	ND
Winter	Personal adult	54	0.2	0.4	ND	ND	ND	1.5	1.9
Ni									
Fall	Indoor	67	2.1	2.3	1.5	ND	0.2	5.5	12.1
Fall	Outdoor	66	3.4	4.2	2.3	0.1	0.5	12.8	24.6
Fall	Personal child	4	9.4	6.6	6.9	4.8	4.8	19.0	19.0
Fall	Personal adult	61	5.1	4.2	4.2	0.7	1.3	13.1	24.0
Spring	Indoor	55	1.5	1.2	1.2	ND	ND	4.5	5.7
Spring	Outdoor	57	2.5	2.0	1.9	0.0	0.3	5.8	12.2
Spring	Personal child	4	6.3	3.2	6.6	2.7	2.7	9.2	9.2
Spring	Personal adult	51	5.5	11.8	3.3	0.7	1.1	11.6	85.3
Summer	Indoor	77	2.1	1.6	1.8	ND	0.2	5.5	7.1
Summer	Outdoor	71	3.0	2.5	2.8	ND	0.7	8.1	15.0
Summer	Personal child	9	6.0	5.6	3.9	0.7	0.7	19.6	19.6
Summer	Personal adult	64	4.7	4.2	3.0	0.2	0.9	12.0	23.1
Winter	Indoor	63	2.0	2.2	1.0	ND	ND	7.3	9.6
Winter	Outdoor	65	3.1	4.2	1.6	ND	0.1	11.2	24.0
Winter	Personal child	4	4.2	2.2	4.1	1.5	1.5	6.9	6.9
Winter	Personal adult	54	4.6	6.1	3.4	0.4	0.6	11.1	44.1

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
Pb									
Fall	Indoor	67	4.3	2.7	4.0	ND	1.0	8.3	15.5
Fall	Outdoor	66	5.9	3.4	5.0	0.6	2.1	11.7	19.0
Fall	Personal child	4	5.9	2.0	5.4	4.1	4.1	8.8	8.8
Fall	Personal adult	61	6.4	4.7	5.1	1.6	2.2	16.3	28.4
Spring	Indoor	55	3.2	1.8	2.9	0.1	0.7	6.3	9.1
Spring	Outdoor	57	4.5	2.9	3.6	1.4	1.6	11.3	15.1
Spring	Personal child	4	7.5	2.1	7.8	4.9	4.9	9.5	9.5
Spring	Personal adult	51	4.4	3.2	3.8	ND	1.3	9.1	18.8
Summer	Indoor	77	3.8	4.5	2.7	ND	0.4	7.4	32.8
Summer	Outdoor	71	4.5	3.3	3.9	0.4	1.2	9.6	23.4
Summer	Personal child	9	6.1	3.7	5.0	1.9	1.9	13.2	13.2
Summer	Personal adult	64	8.8	28.9	3.5	ND	0.5	18.9	232.3
Winter	Indoor	63	2.9	2.3	2.1	0.3	0.6	6.7	13.4
Winter	Outdoor	65	4.8	5.1	3.5	0.4	1.0	10.8	29.1
Winter	Personal child	4	5.2	3.2	4.6	2.0	2.0	9.6	9.6
Winter	Personal adult	54	5.1	4.4	4.4	ND	1.1	10.8	29.3
Pd									
Fall	Indoor	67	0.2	0.4	ND	ND	ND	1.1	1.7
Fall	Outdoor	66	0.3	0.5	0.0	ND	ND	1.3	1.6
Fall	Personal child	4	0.2	0.5	ND	ND	ND	1.0	1.0
Fall	Personal adult	61	0.4	0.6	0.0	ND	ND	1.8	2.5
Spring	Indoor	55	0.4	0.5	ND	ND	ND	1.7	1.9
Spring	Outdoor	57	0.3	0.4	ND	ND	ND	1.2	1.6
Spring	Personal child	4	0.4	0.4	0.3	ND	ND	0.9	0.9
Spring	Personal adult	51	0.6	0.7	0.1	ND	ND	2.1	2.7
Summer	Indoor	77	0.3	0.5	0.1	ND	ND	1.5	2.2
Summer	Outdoor	71	0.4	0.5	0.1	ND	ND	1.2	2.3
Summer	Personal child	9	0.6	0.6	0.6	ND	ND	1.9	1.9
Summer	Personal adult	64	0.5	0.8	0.1	ND	ND	2.5	3.9
Winter	Indoor	63	0.3	0.5	0.0	ND	ND	1.3	2.2
Winter	Outdoor	65	0.2	0.4	ND	ND	ND	1.3	1.7
Winter	Personal child	4	0.1	0.3	ND	ND	ND	0.5	0.5
Winter	Personal adult	54	0.4	0.6	ND	ND	ND	1.7	2.8
P									
Fall	Indoor	67	0.8	2.5	ND	ND	ND	6.9	11.0
Fall	Outdoor	66	0.2	0.7	ND	ND	ND	0.3	4.2
Fall	Personal child	4	ND	ND	ND	ND	ND	ND	ND
Fall	Personal adult	61	2.4	4.6	ND	ND	ND	10.4	22.5
Spring	Indoor	55	1.6	7.7	ND	ND	ND	3.9	51.3
Spring	Outdoor	57	0.0	0.1	ND	ND	ND	ND	0.8
Spring	Personal child	4	4.9	5.9	4.2	ND	ND	11.5	11.5
Spring	Personal adult	51	1.4	4.1	ND	ND	ND	10.5	20.3

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
<i>P (continued)</i>									
Summer	Indoor	77	0.5	2.9	ND	ND	ND	1.9	24.2
Summer	Outdoor	71	0.1	0.6	ND	ND	ND	0.1	3.9
Summer	Personal child	9	4.6	4.8	5.9	ND	ND	13.2	13.2
Summer	Personal adult	64	2.4	10.0	ND	ND	ND	10.3	76.8
Winter	Indoor	63	1.5	5.8	ND	ND	ND	7.2	40.3
Winter	Outdoor	65	0.1	0.6	ND	ND	ND	0.4	3.4
Winter	Personal child	4	2.7	3.7	1.4	ND	ND	8.2	8.2
Winter	Personal adult	54	2.4	4.5	0.2	ND	ND	11.4	20.0
Rb									
Fall	Indoor	67	0.1	0.1	ND	ND	ND	0.4	0.5
Fall	Outdoor	66	0.1	0.2	ND	ND	ND	0.4	1.3
Fall	Personal child	4	0.3	0.4	0.1	ND	ND	0.9	0.9
Fall	Personal adult	61	0.2	0.3	0.0	ND	ND	0.8	1.2
Spring	Indoor	55	0.1	0.1	ND	ND	ND	0.3	0.5
Spring	Outdoor	57	0.2	0.2	0.1	ND	ND	0.6	0.9
Spring	Personal child	4	0.1	0.2	ND	ND	ND	0.4	0.4
Spring	Personal adult	51	0.3	0.4	0.3	ND	ND	1.2	1.6
Summer	Indoor	77	0.1	0.1	ND	ND	ND	0.3	0.4
Summer	Outdoor	71	0.2	0.4	ND	ND	ND	0.7	3.1
Summer	Personal child	9	0.4	0.4	0.5	ND	ND	1.2	1.2
Summer	Personal adult	64	0.2	0.3	0.1	ND	ND	1.1	1.4
Winter	Indoor	63	0.1	0.2	0.1	ND	ND	0.4	0.6
Winter	Outdoor	65	0.1	0.2	ND	ND	ND	0.4	1.2
Winter	Personal child	4	0.5	0.4	0.6	0.0	0.0	1.0	1.0
Winter	Personal adult	54	0.2	0.3	0.2	ND	ND	0.9	1.3
S									
Fall	Indoor	67	821.2	628.0	557.9	183.5	235.8	2335.0	2536.0
Fall	Outdoor	66	1025.2	626.3	830.0	318.7	335.5	2314.6	2618.2
Fall	Personal child	4	608.8	111.6	604.2	500.3	500.3	726.7	726.7
Fall	Personal adult	61	877.8	656.4	620.5	235.1	277.2	2311.1	2678.3
Spring	Indoor	55	874.1	489.9	743.3	107.3	248.4	1893.3	1952.0
Spring	Outdoor	57	1220.5	489.2	1275.4	284.5	400.3	2044.9	2267.3
Spring	Personal child	4	1066.4	265.1	1018.5	840.9	840.9	1387.5	1387.5
Spring	Personal adult	51	844.4	418.7	751.1	254.5	342.8	1695.5	1801.7
Summer	Indoor	77	1067.0	740.2	900.5	150.5	218.6	2622.0	3655.6
Summer	Outdoor	71	1425.4	781.4	1341.8	ND	415.7	2852.4	3812.4
Summer	Personal child	9	923.4	780.6	621.6	268.5	268.5	2672.0	2672.0
Summer	Personal adult	64	1005.6	714.6	811.7	131.1	227.3	2107.0	3577.4
Winter	Indoor	63	646.8	433.4	587.4	120.9	151.1	1452.0	2062.0
Winter	Outdoor	65	883.1	545.9	865.7	114.7	200.1	1794.8	2400.0
Winter	Personal child	4	582.2	164.2	559.5	426.2	426.2	783.4	783.4
Winter	Personal adult	54	654.4	391.2	630.9	149.6	169.5	1290.7	2106.0

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
Sb									
Fall	Indoor	67	1.6	1.7	1.2	ND	ND	3.6	11.2
Fall	Outdoor	66	2.6	2.9	1.8	ND	ND	6.8	17.6
Fall	Personal child	4	1.7	1.3	1.7	0.0	0.0	3.1	3.1
Fall	Personal adult	61	1.8	1.7	1.4	ND	ND	5.5	6.8
Spring	Indoor	55	1.0	1.4	0.5	ND	ND	3.1	8.1
Spring	Outdoor	57	1.4	1.4	0.9	ND	ND	4.4	6.1
Spring	Personal child	4	0.6	0.7	0.5	ND	ND	1.3	1.3
Spring	Personal adult	51	1.9	1.7	1.8	ND	ND	5.1	8.2
Summer	Indoor	77	1.5	2.0	1.2	ND	ND	3.4	15.7
Summer	Outdoor	71	2.3	3.1	1.6	ND	ND	8.7	20.2
Summer	Personal child	9	2.8	5.0	0.6	ND	ND	15.7	15.7
Summer	Personal adult	64	1.5	1.6	1.4	ND	ND	4.5	7.0
Winter	Indoor	63	1.2	1.2	1.0	ND	ND	2.9	4.8
Winter	Outdoor	65	1.7	1.3	1.4	ND	ND	4.2	4.7
Winter	Personal child	4	2.6	2.9	1.9	ND	ND	6.8	6.8
Winter	Personal adult	54	1.8	1.6	1.5	ND	ND	4.8	5.4
Se									
Fall	Indoor	67	0.8	0.6	0.6	ND	0.2	1.8	3.7
Fall	Outdoor	66	1.4	1.4	1.0	ND	0.2	3.2	7.9
Fall	Personal child	4	0.7	0.2	0.8	0.4	0.4	0.9	0.9
Fall	Personal adult	61	0.8	0.6	0.7	ND	ND	1.5	3.7
Spring	Indoor	55	0.4	0.3	0.4	ND	ND	0.9	1.3
Spring	Outdoor	57	0.8	0.5	0.7	0.1	0.2	1.8	2.7
Spring	Personal child	4	0.8	0.5	0.8	0.3	0.3	1.3	1.3
Spring	Personal adult	51	0.5	0.4	0.4	ND	ND	1.4	1.8
Summer	Indoor	77	0.9	0.9	0.6	ND	ND	3.1	3.6
Summer	Outdoor	71	1.3	1.4	0.8	ND	0.1	4.4	6.4
Summer	Personal child	9	0.7	1.0	0.3	ND	ND	3.1	3.1
Summer	Personal adult	64	0.9	0.9	0.6	ND	ND	2.5	4.0
Winter	Indoor	63	0.6	0.8	0.4	ND	ND	1.7	5.1
Winter	Outdoor	65	1.1	1.3	0.7	ND	0.1	3.4	6.4
Winter	Personal child	4	1.0	0.3	0.9	0.6	0.6	1.4	1.4
Winter	Personal adult	54	0.6	0.5	0.4	ND	ND	1.6	2.0
Si									
Fall	Indoor	67	137.8	101.8	95.5	36.1	37.8	344.2	474.1
Fall	Outdoor	66	149.7	245.6	86.9	22.4	38.2	299.3	1750.3
Fall	Personal child	4	332.9	111.3	325.4	214.5	214.5	466.2	466.2
Fall	Personal adult	61	347.4	235.1	260.1	69.5	97.6	729.6	1230.0
Spring	Indoor	55	138.9	87.2	100.5	38.6	45.7	307.6	387.5
Spring	Outdoor	57	215.3	211.9	127.9	31.9	41.0	809.5	936.2
Spring	Personal child	4	430.1	140.4	466.8	233.1	233.1	553.9	553.9
Spring	Personal adult	51	515.5	663.4	343.5	57.9	88.8	1331.1	4492.1

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
<i>Si (continued)</i>									
Summer	Indoor	77	126.2	78.9	109.6	25.1	43.3	276.4	462.7
Summer	Outdoor	71	323.6	402.8	157.3	1.2	60.6	1239.3	2240.8
Summer	Personal child	9	418.7	219.7	389.9	224.7	224.7	901.2	901.2
Summer	Personal adult	64	410.4	379.1	274.6	59.8	107.1	1296.0	1816.1
Winter	Indoor	63	111.1	95.5	91.4	18.1	26.0	262.8	632.0
Winter	Outdoor	65	168.3	333.5	77.2	14.1	23.9	617.6	2363.0
Winter	Personal child	4	336.1	185.4	324.0	169.1	169.1	527.3	527.3
Winter	Personal adult	54	386.7	404.3	218.7	37.0	49.5	1635.8	1796.6
<i>Sn</i>									
Fall	Indoor	67	6.9	16.0	4.4	1.0	1.2	8.0	130.4
Fall	Outdoor	66	8.4	20.4	4.6	ND	0.4	20.9	157.3
Fall	Personal child	4	13.1	11.3	8.2	6.1	6.1	29.9	29.9
Fall	Personal adult	61	8.8	20.5	5.9	0.8	2.1	14.2	162.6
Spring	Indoor	55	3.8	2.1	3.5	0.3	0.8	8.5	10.0
Spring	Outdoor	57	4.7	7.2	3.8	0.6	1.2	8.4	55.4
Spring	Personal child	4	6.3	3.9	5.8	2.7	2.7	11.0	11.0
Spring	Personal adult	51	5.3	2.5	5.3	0.7	1.4	9.0	12.6
Summer	Indoor	77	4.5	3.0	4.0	ND	1.0	10.2	18.6
Summer	Outdoor	71	4.8	3.9	3.8	0.4	0.7	13.2	24.6
Summer	Personal child	9	6.0	2.6	6.0	2.0	2.0	9.5	9.5
Summer	Personal adult	64	6.2	3.7	5.5	0.3	1.1	10.9	22.7
Winter	Indoor	63	4.0	2.1	4.0	ND	0.7	7.6	11.8
Winter	Outdoor	65	4.3	2.7	3.8	ND	0.7	8.2	14.3
Winter	Personal child	4	4.0	3.9	2.6	1.0	1.0	9.7	9.7
Winter	Personal adult	54	5.4	3.4	4.8	ND	1.2	13.8	15.7
<i>Sr</i>									
Fall	Indoor	67	1.2	1.3	0.8	ND	ND	3.4	7.5
Fall	Outdoor	66	1.2	1.5	0.7	ND	0.1	4.8	7.4
Fall	Personal child	4	1.1	0.5	1.2	0.5	0.5	1.5	1.5
Fall	Personal adult	61	2.7	2.8	1.9	ND	0.5	6.8	15.8
Spring	Indoor	55	0.8	0.7	0.7	ND	ND	2.3	2.7
Spring	Outdoor	57	1.2	1.0	0.9	ND	0.1	3.9	4.0
Spring	Personal child	4	1.8	0.8	2.0	0.8	0.8	2.6	2.6
Spring	Personal adult	51	2.2	1.6	2.0	ND	0.4	4.8	9.5
Summer	Indoor	77	0.9	1.5	0.5	ND	ND	2.3	12.2
Summer	Outdoor	71	1.6	2.0	1.2	ND	0.1	4.1	14.8
Summer	Personal child	9	2.2	1.8	1.4	0.5	0.5	6.2	6.2
Summer	Personal adult	64	2.6	2.8	1.4	0.1	0.3	7.5	13.3
Winter	Indoor	63	0.6	0.5	0.5	ND	ND	1.6	2.2
Winter	Outdoor	65	1.1	2.0	0.6	ND	ND	3.5	14.7
Winter	Personal child	4	2.0	2.1	1.6	0.2	0.2	4.8	4.8
Winter	Personal adult	54	2.6	5.1	1.6	ND	0.3	8.5	37.3

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
Ti									
Fall	Indoor	67	7.6	5.4	5.9	0.7	1.6	18.2	27.0
Fall	Outdoor	66	9.4	9.8	6.9	0.6	1.8	23.5	68.2
Fall	Personal child	4	29.7	14.6	31.3	12.2	12.2	44.0	44.0
Fall	Personal adult	61	23.3	15.9	19.0	4.8	7.5	55.4	80.1
Spring	Indoor	55	7.0	6.5	4.8	2.0	2.5	13.0	46.7
Spring	Outdoor	57	10.3	10.3	6.9	ND	1.4	37.6	50.1
Spring	Personal child	4	36.1	14.6	37.1	17.4	17.4	53.0	53.0
Spring	Personal adult	51	24.6	15.8	20.5	3.5	5.9	65.8	71.1
Summer	Indoor	77	8.6	16.8	5.3	ND	1.9	17.1	149.1
Summer	Outdoor	71	14.6	12.8	11.0	ND	2.8	43.1	63.4
Summer	Personal child	9	26.5	11.7	27.9	14.5	14.5	44.7	44.7
Summer	Personal adult	64	23.8	18.3	16.4	4.7	7.7	67.4	76.1
Winter	Indoor	63	5.5	4.5	4.6	0.8	1.2	11.8	26.5
Winter	Outdoor	65	8.6	16.0	5.4	ND	0.4	25.2	123.0
Winter	Personal child	4	23.7	18.5	20.5	6.8	6.8	47.2	47.2
Winter	Personal adult	54	23.6	31.1	15.6	2.7	5.1	63.2	211.3
V									
Fall	Indoor	67	3.0	2.8	2.1	ND	0.1	7.9	13.2
Fall	Outdoor	66	4.3	3.6	3.3	ND	0.5	10.0	20.5
Fall	Personal child	4	1.5	1.4	1.3	ND	ND	3.4	3.4
Fall	Personal adult	61	2.8	2.7	2.1	ND	ND	7.3	12.2
Spring	Indoor	55	3.6	3.0	2.9	ND	ND	10.2	13.2
Spring	Outdoor	57	5.6	4.8	4.2	ND	0.1	15.1	25.3
Spring	Personal child	4	5.6	4.7	6.2	ND	ND	9.9	9.9
Spring	Personal adult	51	3.3	2.9	2.9	ND	ND	9.2	13.8
Summer	Indoor	77	4.6	3.9	3.3	ND	0.4	13.2	20.0
Summer	Outdoor	71	6.8	4.2	6.1	ND	1.2	14.8	19.7
Summer	Personal child	9	3.5	3.7	2.8	ND	ND	11.1	11.1
Summer	Personal adult	64	4.3	3.7	3.1	ND	0.0	12.6	13.9
Winter	Indoor	63	3.6	4.2	2.0	ND	ND	12.7	20.2
Winter	Outdoor	65	6.0	8.1	3.1	ND	0.1	17.9	56.8
Winter	Personal child	4	3.1	0.9	3.5	1.7	1.7	3.7	3.7
Winter	Personal adult	54	3.0	3.0	1.8	ND	ND	10.6	11.5
Y									
Fall	Indoor	67	0.1	0.1	ND	ND	ND	0.4	0.6
Fall	Outdoor	66	0.1	0.1	ND	ND	ND	0.4	0.6
Fall	Personal child	4	0.1	0.1	ND	ND	ND	0.2	0.2
Fall	Personal adult	61	0.1	0.2	ND	ND	ND	0.6	0.7
Spring	Indoor	55	0.1	0.1	ND	ND	ND	0.4	0.5
Spring	Outdoor	57	0.1	0.1	ND	ND	ND	0.3	0.6
Spring	Personal child	4	0.4	0.3	0.4	ND	ND	0.7	0.7
Spring	Personal adult	51	0.2	0.3	ND	ND	ND	0.8	1.0

Table continues on next page

ND = Not detected.

Table C.4 (continued). Indoor, Outdoor, and Personal Concentrations of PM_{2.5} Species (OC, EC, and Elements; All Cities Pooled) with AERS, by Season

Species / Season	Category	N	Mean	SD	Median	Percentile			
						1st	5th	95th	99th
Elements (ng/m³) (continued)									
<i>Y (continued)</i>									
Summer	Indoor	77	0.1	0.1	ND	ND	ND	0.4	0.6
Summer	Outdoor	71	0.1	0.2	ND	ND	ND	0.6	0.8
Summer	Personal child	9	0.1	0.1	ND	ND	ND	0.3	0.3
Summer	Personal adult	64	0.2	0.3	0.1	ND	ND	0.8	1.5
Winter	Indoor	63	0.1	0.2	ND	ND	ND	0.4	0.7
Winter	Outdoor	65	0.1	0.2	ND	ND	ND	0.3	1.6
Winter	Personal child	4	0.1	0.1	0.1	ND	ND	0.3	0.3
Winter	Personal adult	54	0.1	0.2	ND	ND	ND	0.6	1.0
Zn									
Fall	Indoor	67	90.3	399.9	14.3	4.6	5.4	70.6	2895.6
Fall	Outdoor	66	22.9	14.5	18.0	7.3	8.9	52.4	79.4
Fall	Personal child	4	54.7	24.4	48.9	32.6	32.6	88.4	88.4
Fall	Personal adult	61	123.2	381.6	36.1	17.2	20.6	147.7	2587.8
Spring	Indoor	55	98.6	636.8	10.5	1.9	2.7	45.1	4734.9
Spring	Outdoor	57	13.1	8.7	11.0	3.1	3.6	34.9	45.4
Spring	Personal child	4	41.6	11.2	42.9	27.2	27.2	53.4	53.4
Spring	Personal adult	51	120.8	473.9	32.6	8.3	11.9	130.1	3361.7
Summer	Indoor	77	15.6	17.4	11.2	1.4	2.4	50.8	115.0
Summer	Outdoor	71	18.3	12.8	14.9	ND	3.5	50.5	54.5
Summer	Personal child	9	44.1	40.4	36.5	11.3	11.3	148.1	148.1
Summer	Personal adult	64	40.0	24.7	33.2	10.7	14.9	89.0	132.6
Winter	Indoor	63	31.6	81.3	10.5	2.3	3.7	109.5	516.2
Winter	Outdoor	65	43.8	194.6	13.6	1.8	3.9	89.4	1579.0
Winter	Personal child	4	101.6	113.6	49.6	36.0	36.0	271.2	271.2
Winter	Personal adult	54	181.9	592.7	34.0	11.7	14.3	732.2	3277.0
Zr									
Fall	Indoor	67	1.0	1.0	0.8	ND	ND	3.3	4.4
Fall	Outdoor	66	0.8	1.1	0.5	ND	ND	2.8	6.9
Fall	Personal child	4	8.9	4.6	8.1	4.6	4.6	14.8	14.8
Fall	Personal adult	61	8.2	13.7	3.4	ND	0.6	27.3	82.3
Spring	Indoor	55	0.7	0.6	0.7	ND	ND	1.7	2.8
Spring	Outdoor	57	0.6	1.2	0.3	ND	ND	2.0	8.0
Spring	Personal child	4	10.9	9.9	7.6	3.0	3.0	25.3	25.3
Spring	Personal adult	51	14.4	26.9	5.7	ND	0.2	50.7	150.6
Summer	Indoor	77	0.8	0.9	0.6	ND	ND	1.7	7.2
Summer	Outdoor	71	0.7	0.7	0.6	ND	ND	2.0	3.0
Summer	Personal child	9	7.2	5.8	4.1	1.5	1.5	17.2	17.2
Summer	Personal adult	64	11.8	26.1	3.5	ND	0.2	70.1	137.4
Winter	Indoor	63	0.8	1.2	0.7	ND	ND	1.9	8.9
Winter	Outdoor	65	0.7	1.0	0.5	ND	ND	2.9	5.4
Winter	Personal child	4	6.5	2.1	6.5	4.0	4.0	9.2	9.2
Winter	Personal adult	54	8.4	19.9	2.8	ND	0.3	26.4	123.1

ND = Not detected.

Table C.5. Indoor, Outdoor, and Personal Adult Concentrations of PM_{2.5} Mass, by Season

City and Category	Spring					Summer					Fall					Winter					Median <i>P</i> Value ^a				
	<i>n</i>	Mean	SD	Median	<i>n</i>	Mean	SD	Median	<i>n</i>	Mean	SD	Median	<i>n</i>	Mean	SD	Median	<i>n</i>	Mean	SD	Median		<i>n</i>	Mean	SD	Median
Los Angeles																									
Indoor	23	16.7	12.5	14.7	38	17.2	6.23	16.1	37	18.6	10.6	14.8	26	10.8	5.89	9.78	26	10.8	5.89	9.78	26	10.8	5.89	9.78	<0.01
Outdoor	25	16.4	6.9	15.2	34	19.8	10.2	17.3	35	25.2	18.6	19.0	27	13.4	9.62	10.7	27	13.4	9.62	10.7	27	13.4	9.62	10.7	<0.01
Personal Adult	24	28.0	12.5	27.1	29	29.2	13.4	27.4	26	36.1	18.3	32.6	26	23.3	12.1	18.8	26	23.3	12.1	18.8	26	23.3	12.1	18.8	<0.01
Elizabeth																									
Indoor	20	24.7	20.4	18.0	23	16.4	7.40	16.2	29	18.7	15.8	13.9	24	21.5	16.1	14.1	24	21.5	16.1	14.1	24	21.5	16.1	14.1	0.46
Outdoor	20	19.2	7.69	17.2	24	19.5	8.18	18.4	34	18.7	11.1	14.9	25	24.7	13.5	22.5	25	24.7	13.5	22.5	25	24.7	13.5	22.5	0.05
Personal Adult	15	50.6	33.2	34.2	19	42.0	19.3	39.5	27	41.9	29.9	29.7	16	47.5	37.9	36.3	16	47.5	37.9	36.3	16	47.5	37.9	36.3	0.36
Houston																									
Indoor	24	17.0	13.2	12.6	37	16.1	15.3	10.8	19	20.9	11.6	16.1	26	16.0	8.77	13.3	26	16.0	8.77	13.3	26	16.0	8.77	13.3	0.07
Outdoor	23	14.3	5.67	13.5	37	15.4	5.46	15.6	20	17.2	7.49	13.5	30	12.5	3.99	11.7	30	12.5	3.99	11.7	30	12.5	3.99	11.7	0.23
Personal Adult	21	33.3	20.5	29.6	30	28.9	17.0	26.2	23	53.9	31.8	42.5	24	34.9	17.1	32.8	24	34.9	17.1	32.8	24	34.9	17.1	32.8	0.01

^a *P* values based on Kruskal-Wallis test for interseason differences in medians. *P* < 0.05 indicates the difference is significant at $\alpha = 0.05$.

