

United States Environmental Protection Agency
March 1998

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

Appendix A

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually 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, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	776 (4.04)	549 (4.30)	672 (4.44)	765 (4.30)	690 (4.26)
2	736 (3.83)	492 (3.85)	611 (4.04)	690 (3.88)	632 (3.90)
3	653 (3.40)	440 (3.45)	550 (3.64)	572 (3.22)	554 (3.42)
4	623 (3.24)	421 (3.30)	509 (3.36)	563 (3.16)	529 (3.26)
5	539 (2.81)	352 (2.76)	444 (2.94)	480 (2.70)	454 (2.80)
6	506 (2.64)	334 (2.62)	424 (2.80)	449 (2.52)	428 (2.64)
7	620 (3.23)	402 (3.15)	490 (3.24)	518 (2.91)	507 (3.13)
8	1057 (5.50)	661 (5.17)	655 (4.33)	859 (4.83)	807 (4.98)
9	1303 (6.78)	798 (6.25)	767 (5.07)	1094 (6.15)	989 (6.10)
10	1196 (6.22)	761 (5.96)	815 (5.39)	1072 (6.03)	960 (5.92)
11	952 (4.95)	614 (4.81)	727 (4.81)	850 (4.78)	785 (4.84)
12	804 (4.19)	564 (4.42)	652 (4.31)	680 (3.82)	675 (4.16)
13	728 (3.79)	555 (4.35)	616 (4.07)	616 (3.47)	629 (3.88)
14	654 (3.40)	524 (4.10)	597 (3.95)	575 (3.23)	587 (3.62)
15	676 (3.52)	537 (4.21)	624 (4.12)	591 (3.33)	607 (3.74)
16	753 (3.92)	556 (4.35)	647 (4.28)	681 (3.83)	659 (4.06)
17	816 (4.25)	569 (4.46)	651 (4.30)	766 (4.31)	700 (4.32)
18	972 (5.06)	606 (4.75)	678 (4.48)	936 (5.26)	798 (4.92)
19	923 (4.80)	537 (4.21)	658 (4.35)	916 (5.15)	758 (4.68)
20	822 (4.28)	475 (3.72)	655 (4.33)	808 (4.55)	690 (4.25)
21	790 (4.11)	465 (3.64)	652 (4.31)	806 (4.53)	678 (4.18)
22	760 (3.95)	486 (3.80)	661 (4.37)	825 (4.64)	683 (4.21)
23	766 (3.99)	522 (4.09)	682 (4.51)	828 (4.66)	700 (4.32)
24	788 (4.10)	547 (4.28)	689 (4.55)	839 (4.72)	716 (4.41)

Baltimore: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	801 (4.18)	565 (4.32)	678 (4.57)	774 (4.46)	704 (4.38)
2	749 (3.91)	508 (3.89)	603 (4.06)	685 (3.95)	636 (3.95)
3	677 (3.53)	454 (3.48)	539 (3.63)	553 (3.19)	555 (3.45)
4	650 (3.39)	442 (3.38)	499 (3.36)	564 (3.25)	538 (3.34)
5	565 (2.95)	371 (2.84)	440 (2.96)	489 (2.82)	466 (2.90)
6	531 (2.77)	351 (2.69)	437 (2.94)	452 (2.61)	443 (2.75)
7	655 (3.42)	412 (3.16)	475 (3.20)	523 (3.02)	516 (3.21)
8	1039 (5.42)	725 (5.55)	650 (4.38)	887 (5.12)	824 (5.12)
9	1271 (6.63)	842 (6.45)	778 (5.24)	1090 (6.29)	994 (6.18)
10	1195 (6.23)	784 (6.00)	815 (5.49)	1075 (6.20)	967 (6.01)
11	924 (4.82)	608 (4.66)	702 (4.73)	833 (4.81)	766 (4.76)
12	763 (3.98)	524 (4.02)	594 (4.00)	625 (3.61)	626 (3.89)
13	653 (3.41)	508 (3.89)	543 (3.66)	547 (3.15)	562 (3.49)
14	632 (3.30)	520 (3.98)	547 (3.68)	560 (3.23)	564 (3.51)
15	754 (3.94)	647 (4.96)	646 (4.35)	696 (4.01)	686 (4.26)
16	673 (3.51)	544 (4.17)	619 (4.17)	596 (3.44)	608 (3.78)
17	790 (4.12)	580 (4.44)	654 (4.40)	719 (4.15)	685 (4.26)
18	896 (4.68)	613 (4.69)	695 (4.68)	827 (4.77)	758 (4.71)
19	879 (4.59)	529 (4.05)	641 (4.32)	828 (4.78)	719 (4.47)
20	822 (4.29)	466 (3.57)	605 (4.07)	765 (4.42)	664 (4.13)
21	807 (4.21)	460 (3.52)	616 (4.15)	773 (4.46)	664 (4.12)
22	806 (4.20)	490 (3.75)	652 (4.39)	815 (4.70)	691 (4.29)
23	808 (4.22)	559 (4.28)	724 (4.88)	835 (4.82)	732 (4.55)
24	822 (4.29)	559 (4.28)	699 (4.70)	818 (4.72)	724 (4.50)

Baltimore: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	804 (4.27)	565 (4.41)	679 (4.55)	789 (4.54)	709 (4.44)
2	757 (4.02)	507 (3.96)	610 (4.09)	708 (4.07)	645 (4.04)
3	679 (3.60)	458 (3.58)	553 (3.71)	594 (3.42)	571 (3.57)
4	650 (3.45)	438 (3.42)	513 (3.44)	584 (3.36)	546 (3.42)
5	554 (2.94)	361 (2.82)	444 (2.98)	489 (2.81)	462 (2.89)
6	516 (2.74)	339 (2.65)	430 (2.88)	450 (2.59)	434 (2.71)
7	636 (3.37)	397 (3.10)	472 (3.17)	517 (2.97)	505 (3.16)
8	995 (5.28)	672 (5.25)	631 (4.23)	837 (4.81)	783 (4.90)
9	1252 (6.64)	807 (6.30)	768 (5.15)	1064 (6.12)	972 (6.08)
10	1184 (6.28)	768 (6.00)	818 (5.49)	1069 (6.15)	959 (6.00)
11	920 (4.88)	604 (4.72)	706 (4.74)	826 (4.75)	764 (4.78)
12	760 (4.03)	523 (4.08)	598 (4.01)	630 (3.62)	627 (3.92)
13	652 (3.46)	505 (3.94)	550 (3.69)	550 (3.16)	564 (3.53)
14	617 (3.27)	505 (3.95)	552 (3.70)	552 (3.18)	557 (3.48)
15	717 (3.81)	613 (4.78)	650 (4.35)	675 (3.88)	663 (4.15)
16	660 (3.50)	537 (4.20)	632 (4.24)	601 (3.45)	608 (3.80)
17	776 (4.11)	576 (4.50)	655 (4.39)	735 (4.23)	685 (4.29)
18	868 (4.61)	595 (4.65)	685 (4.59)	829 (4.77)	744 (4.66)
19	846 (4.49)	510 (3.99)	635 (4.26)	820 (4.71)	703 (4.40)
20	808 (4.29)	450 (3.52)	606 (4.06)	761 (4.37)	656 (4.10)
21	787 (4.17)	450 (3.52)	627 (4.20)	773 (4.45)	659 (4.12)
22	797 (4.23)	500 (3.90)	667 (4.47)	837 (4.81)	700 (4.38)
23	801 (4.25)	560 (4.38)	727 (4.87)	855 (4.92)	736 (4.60)
24	815 (4.32)	563 (4.40)	707 (4.74)	846 (4.86)	733 (4.58)

Baltimore: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	768 (4.15)	560 (4.45)	675 (4.65)	760 (4.47)	691 (4.41)
2	729 (3.93)	504 (4.00)	611 (4.21)	683 (4.01)	632 (4.03)
3	654 (3.53)	456 (3.62)	557 (3.83)	560 (3.29)	556 (3.55)
4	630 (3.40)	440 (3.49)	511 (3.52)	564 (3.32)	536 (3.42)
5	547 (2.95)	367 (2.92)	446 (3.07)	484 (2.85)	461 (2.94)
6	512 (2.76)	345 (2.74)	425 (2.93)	449 (2.64)	433 (2.76)
7	612 (3.30)	412 (3.27)	488 (3.36)	517 (3.04)	507 (3.24)
8	866 (4.67)	575 (4.57)	568 (3.91)	708 (4.16)	679 (4.33)
9	1207 (6.52)	738 (5.86)	687 (4.73)	996 (5.86)	906 (5.79)
10	1145 (6.18)	764 (6.07)	795 (5.47)	1035 (6.08)	934 (5.97)
11	929 (5.01)	598 (4.75)	695 (4.79)	825 (4.85)	761 (4.86)
12	774 (4.18)	518 (4.11)	593 (4.08)	632 (3.72)	629 (4.02)
13	672 (3.63)	528 (4.19)	561 (3.86)	577 (3.39)	584 (3.73)
14	609 (3.29)	500 (3.97)	543 (3.74)	533 (3.14)	546 (3.49)
15	681 (3.67)	572 (4.54)	619 (4.26)	604 (3.55)	619 (3.95)
16	730 (3.94)	557 (4.42)	620 (4.27)	644 (3.78)	637 (4.07)
17	788 (4.25)	587 (4.66)	660 (4.54)	735 (4.32)	692 (4.42)
18	983 (5.31)	629 (4.99)	680 (4.68)	941 (5.53)	808 (5.16)
19	857 (4.63)	523 (4.15)	616 (4.24)	847 (4.98)	710 (4.54)
20	784 (4.23)	446 (3.54)	578 (3.98)	749 (4.40)	639 (4.08)
21	766 (4.13)	451 (3.58)	615 (4.24)	773 (4.54)	651 (4.16)
22	752 (4.06)	469 (3.72)	633 (4.36)	793 (4.66)	662 (4.23)
23	758 (4.09)	511 (4.06)	670 (4.61)	792 (4.66)	683 (4.36)
24	774 (4.18)	546 (4.34)	679 (4.67)	810 (4.76)	702 (4.49)

Baltimore: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	794 (4.07)	580 (4.34)	682 (4.45)	798 (4.43)	714 (4.31)
2	756 (3.87)	525 (3.94)	625 (4.07)	719 (4.00)	656 (3.97)
3	675 (3.46)	469 (3.51)	559 (3.64)	589 (3.27)	573 (3.46)
4	633 (3.24)	441 (3.31)	512 (3.33)	570 (3.17)	539 (3.26)
5	550 (2.82)	368 (2.76)	447 (2.91)	487 (2.71)	463 (2.80)
6	515 (2.64)	350 (2.62)	437 (2.85)	454 (2.52)	439 (2.65)
7	644 (3.30)	422 (3.17)	497 (3.24)	531 (2.95)	523 (3.16)
8	994 (5.09)	656 (4.92)	627 (4.09)	809 (4.49)	771 (4.66)
9	1257 (6.44)	803 (6.02)	753 (4.90)	1050 (5.83)	964 (5.83)
10	1220 (6.25)	791 (5.93)	833 (5.43)	1086 (6.04)	982 (5.93)
11	981 (5.03)	654 (4.90)	765 (4.99)	880 (4.89)	820 (4.95)
12	848 (4.35)	616 (4.61)	682 (4.45)	729 (4.05)	718 (4.34)
13	761 (3.90)	582 (4.36)	618 (4.02)	642 (3.57)	650 (3.93)
14	667 (3.42)	534 (4.00)	593 (3.86)	572 (3.18)	591 (3.57)
15	695 (3.56)	562 (4.21)	641 (4.17)	596 (3.31)	623 (3.77)
16	768 (3.94)	592 (4.44)	686 (4.47)	686 (3.81)	683 (4.13)
17	867 (4.44)	607 (4.55)	674 (4.39)	799 (4.44)	736 (4.45)
18	955 (4.89)	624 (4.68)	702 (4.57)	905 (5.03)	796 (4.81)
19	937 (4.80)	552 (4.14)	663 (4.32)	907 (5.04)	765 (4.62)
20	850 (4.35)	498 (3.73)	647 (4.22)	824 (4.58)	704 (4.26)
21	784 (4.02)	483 (3.62)	651 (4.24)	802 (4.46)	680 (4.11)
22	769 (3.94)	508 (3.81)	672 (4.38)	845 (4.69)	698 (4.22)
23	791 (4.05)	553 (4.15)	692 (4.51)	858 (4.77)	724 (4.37)
24	807 (4.14)	575 (4.31)	693 (4.52)	860 (4.78)	734 (4.44)

Baltimore: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	783 (4.06)	552 (4.28)	669 (4.41)	771 (4.33)	694 (4.26)
2	743 (3.85)	496 (3.84)	606 (4.00)	690 (3.88)	633 (3.89)
3	661 (3.42)	445 (3.44)	546 (3.60)	568 (3.19)	554 (3.40)
4	634 (3.28)	429 (3.32)	506 (3.34)	567 (3.18)	534 (3.28)
5	546 (2.83)	358 (2.77)	443 (2.92)	484 (2.72)	458 (2.81)
6	515 (2.67)	339 (2.62)	424 (2.80)	452 (2.54)	432 (2.65)
7	625 (3.24)	405 (3.14)	489 (3.22)	519 (2.92)	509 (3.13)
8	1045 (5.41)	669 (5.18)	664 (4.38)	851 (4.78)	806 (4.95)
9	1281 (6.64)	799 (6.19)	774 (5.11)	1077 (6.05)	982 (6.03)
10	1202 (6.23)	772 (5.98)	821 (5.42)	1081 (6.07)	968 (5.94)
11	950 (4.92)	619 (4.80)	732 (4.83)	847 (4.76)	787 (4.83)
12	794 (4.11)	566 (4.39)	656 (4.33)	669 (3.76)	671 (4.12)
13	714 (3.70)	555 (4.30)	618 (4.07)	608 (3.42)	624 (3.83)
14	653 (3.38)	533 (4.13)	604 (3.98)	574 (3.23)	591 (3.63)
15	687 (3.56)	554 (4.29)	623 (4.11)	603 (3.39)	617 (3.79)
16	755 (3.91)	557 (4.31)	642 (4.24)	679 (3.81)	658 (4.04)
17	835 (4.32)	582 (4.51)	658 (4.34)	785 (4.41)	715 (4.39)
18	989 (5.12)	620 (4.80)	683 (4.51)	948 (5.32)	809 (4.97)
19	927 (4.80)	549 (4.25)	666 (4.40)	921 (5.17)	765 (4.70)
20	815 (4.22)	475 (3.68)	656 (4.33)	793 (4.45)	685 (4.20)
21	794 (4.11)	466 (3.61)	650 (4.29)	799 (4.49)	677 (4.16)
22	775 (4.02)	491 (3.80)	652 (4.30)	836 (4.69)	688 (4.23)
23	782 (4.05)	532 (4.12)	690 (4.55)	840 (4.72)	711 (4.37)
24	800 (4.14)	551 (4.27)	687 (4.53)	838 (4.71)	719 (4.42)

Baltimore: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	782 (4.05)	550 (4.29)	680 (4.48)	765 (4.28)	694 (4.26)
2	734 (3.80)	492 (3.84)	614 (4.05)	684 (3.83)	631 (3.87)
3	655 (3.39)	441 (3.44)	551 (3.63)	565 (3.16)	553 (3.39)
4	620 (3.21)	417 (3.25)	504 (3.32)	554 (3.10)	524 (3.21)
5	536 (2.78)	349 (2.72)	440 (2.90)	475 (2.66)	450 (2.76)
6	504 (2.61)	333 (2.60)	429 (2.83)	442 (2.47)	427 (2.62)
7	603 (3.13)	386 (3.01)	483 (3.18)	491 (2.75)	491 (3.01)
8	1066 (5.52)	659 (5.14)	652 (4.29)	869 (4.87)	810 (4.98)
9	1357 (7.03)	818 (6.38)	781 (5.15)	1144 (6.40)	1024 (6.29)
10	1178 (6.10)	751 (5.86)	794 (5.23)	1064 (5.96)	946 (5.81)
11	952 (4.93)	617 (4.81)	710 (4.68)	859 (4.81)	784 (4.81)
12	811 (4.20)	568 (4.43)	643 (4.24)	689 (3.86)	677 (4.16)
13	744 (3.85)	564 (4.40)	613 (4.04)	629 (3.52)	637 (3.91)
14	663 (3.44)	532 (4.15)	599 (3.95)	580 (3.25)	593 (3.64)
15	666 (3.45)	549 (4.28)	649 (4.28)	578 (3.24)	610 (3.75)
16	738 (3.82)	558 (4.35)	648 (4.27)	675 (3.78)	655 (4.02)
17	783 (4.05)	567 (4.42)	646 (4.26)	747 (4.18)	686 (4.21)
18	1003 (5.20)	614 (4.78)	685 (4.51)	969 (5.42)	817 (5.02)
19	951 (4.92)	548 (4.27)	673 (4.44)	945 (5.29)	779 (4.78)
20	842 (4.36)	491 (3.83)	672 (4.43)	842 (4.71)	712 (4.37)
21	807 (4.18)	476 (3.71)	668 (4.40)	828 (4.63)	695 (4.27)
22	757 (3.92)	483 (3.77)	670 (4.42)	813 (4.55)	681 (4.18)
23	754 (3.91)	512 (3.99)	670 (4.41)	810 (4.53)	686 (4.22)
24	801 (4.15)	554 (4.32)	699 (4.61)	847 (4.74)	725 (4.45)

Baltimore: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	764 (3.99)	557 (4.40)	696 (4.65)	767 (4.33)	696 (4.32)
2	731 (3.82)	503 (3.97)	627 (4.19)	702 (3.96)	641 (3.97)
3	653 (3.41)	445 (3.52)	551 (3.68)	577 (3.25)	556 (3.45)
4	630 (3.29)	429 (3.39)	511 (3.41)	575 (3.25)	536 (3.33)
5	547 (2.85)	360 (2.85)	447 (2.98)	494 (2.79)	462 (2.86)
6	513 (2.67)	339 (2.68)	424 (2.83)	459 (2.59)	434 (2.69)
7	591 (3.08)	394 (3.11)	484 (3.23)	503 (2.84)	493 (3.05)
8	1240 (6.47)	704 (5.57)	659 (4.40)	986 (5.56)	896 (5.56)
9	1354 (7.06)	831 (6.57)	785 (5.24)	1148 (6.47)	1028 (6.38)
10	1186 (6.18)	748 (5.91)	812 (5.42)	1061 (5.98)	951 (5.90)
11	929 (4.85)	577 (4.56)	695 (4.64)	812 (4.58)	753 (4.67)
12	757 (3.95)	521 (4.12)	626 (4.18)	623 (3.52)	631 (3.92)
13	706 (3.68)	549 (4.34)	620 (4.14)	607 (3.43)	620 (3.85)
14	624 (3.25)	493 (3.90)	575 (3.84)	544 (3.07)	559 (3.46)
15	637 (3.32)	530 (4.19)	583 (3.90)	586 (3.31)	584 (3.62)
16	697 (3.64)	512 (4.04)	592 (3.95)	628 (3.54)	607 (3.76)
17	793 (4.14)	514 (4.06)	590 (3.94)	705 (3.98)	650 (4.03)
18	997 (5.20)	616 (4.87)	671 (4.48)	985 (5.55)	817 (5.07)
19	919 (4.80)	521 (4.12)	631 (4.21)	877 (4.95)	737 (4.57)
20	856 (4.47)	498 (3.93)	657 (4.39)	845 (4.77)	714 (4.43)
21	802 (4.18)	456 (3.60)	636 (4.25)	804 (4.53)	674 (4.18)
22	745 (3.88)	489 (3.87)	695 (4.64)	808 (4.56)	684 (4.24)
23	737 (3.84)	521 (4.12)	705 (4.71)	810 (4.57)	693 (4.30)
24	763 (3.98)	547 (4.32)	705 (4.70)	822 (4.64)	709 (4.40)

Baltimore: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	764 (3.95)	549 (4.21)	670 (4.37)	756 (4.23)	685 (4.18)
2	725 (3.75)	493 (3.78)	608 (3.96)	681 (3.82)	627 (3.82)
3	652 (3.37)	445 (3.41)	549 (3.58)	565 (3.17)	553 (3.37)
4	627 (3.25)	431 (3.31)	511 (3.33)	565 (3.17)	534 (3.26)
5	544 (2.81)	361 (2.77)	447 (2.92)	484 (2.71)	459 (2.80)
6	510 (2.64)	341 (2.61)	428 (2.79)	450 (2.52)	432 (2.64)
7	605 (3.13)	395 (3.03)	481 (3.14)	504 (2.83)	496 (3.03)
8	1084 (5.61)	673 (5.16)	645 (4.21)	881 (4.94)	820 (5.00)
9	1334 (6.90)	808 (6.19)	754 (4.91)	1116 (6.25)	1002 (6.11)
10	1209 (6.25)	776 (5.95)	823 (5.37)	1082 (6.06)	972 (5.93)
11	964 (4.99)	631 (4.84)	747 (4.87)	865 (4.84)	801 (4.89)
12	821 (4.25)	584 (4.48)	667 (4.35)	696 (3.90)	692 (4.22)
13	731 (3.78)	570 (4.37)	624 (4.07)	624 (3.50)	637 (3.89)
14	647 (3.35)	533 (4.08)	605 (3.95)	571 (3.20)	589 (3.59)
15	707 (3.66)	576 (4.41)	659 (4.30)	623 (3.49)	641 (3.91)
16	818 (4.23)	599 (4.59)	677 (4.41)	741 (4.15)	709 (4.32)
17	850 (4.40)	603 (4.62)	677 (4.42)	800 (4.48)	732 (4.47)
18	977 (5.05)	622 (4.76)	695 (4.53)	937 (5.25)	807 (4.93)
19	946 (4.89)	555 (4.26)	682 (4.45)	925 (5.18)	776 (4.74)
20	820 (4.24)	495 (3.79)	695 (4.53)	796 (4.46)	701 (4.28)
21	768 (3.97)	471 (3.61)	664 (4.33)	780 (4.37)	671 (4.09)
22	727 (3.76)	477 (3.65)	657 (4.28)	790 (4.43)	663 (4.05)
23	741 (3.83)	516 (3.96)	678 (4.42)	801 (4.49)	684 (4.18)
24	765 (3.96)	543 (4.16)	691 (4.51)	812 (4.55)	703 (4.29)

Baltimore: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	919 (4.54)	630 (4.66)	762 (4.82)	877 (4.75)	797 (4.69)
2	848 (4.19)	558 (4.13)	648 (4.10)	770 (4.17)	706 (4.15)
3	731 (3.61)	493 (3.65)	583 (3.69)	630 (3.41)	609 (3.58)
4	663 (3.27)	451 (3.34)	524 (3.31)	594 (3.22)	558 (3.28)
5	546 (2.70)	365 (2.70)	449 (2.84)	486 (2.63)	461 (2.71)
6	508 (2.51)	340 (2.52)	431 (2.73)	444 (2.41)	431 (2.53)
7	642 (3.17)	414 (3.06)	506 (3.20)	526 (2.85)	522 (3.07)
8	917 (4.53)	627 (4.64)	704 (4.45)	730 (3.95)	744 (4.38)
9	1169 (5.77)	801 (5.93)	899 (5.69)	945 (5.12)	953 (5.60)
10	1248 (6.16)	815 (6.03)	925 (5.85)	1103 (5.98)	1022 (6.01)
11	994 (4.91)	688 (5.09)	816 (5.16)	899 (4.87)	849 (4.99)
12	828 (4.09)	578 (4.27)	622 (3.93)	700 (3.79)	681 (4.01)
13	768 (3.79)	594 (4.39)	675 (4.27)	655 (3.55)	673 (3.96)
14	691 (3.41)	553 (4.09)	651 (4.12)	594 (3.22)	622 (3.66)
15	699 (3.45)	545 (4.04)	622 (3.93)	597 (3.23)	616 (3.62)
16	879 (4.34)	596 (4.41)	649 (4.10)	774 (4.20)	724 (4.26)
17	998 (4.93)	668 (4.94)	728 (4.61)	929 (5.03)	830 (4.88)
18	969 (4.79)	599 (4.43)	681 (4.31)	891 (4.83)	785 (4.61)
19	943 (4.66)	512 (3.79)	607 (3.84)	878 (4.76)	735 (4.32)
20	886 (4.38)	483 (3.57)	579 (3.66)	850 (4.61)	699 (4.11)
21	808 (3.99)	464 (3.43)	609 (3.85)	819 (4.44)	675 (3.97)
22	817 (4.03)	550 (4.07)	784 (4.96)	887 (4.81)	760 (4.47)
23	852 (4.21)	575 (4.25)	681 (4.31)	921 (4.99)	757 (4.45)
24	928 (4.58)	615 (4.55)	678 (4.29)	954 (5.17)	793 (4.67)

Baltimore: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	786 (3.84)	561 (4.13)	690 (4.39)	777 (4.12)	703 (4.10)
2	744 (3.64)	504 (3.71)	628 (3.99)	696 (3.69)	643 (3.75)
3	658 (3.21)	443 (3.26)	550 (3.50)	571 (3.03)	555 (3.24)
4	631 (3.08)	426 (3.13)	509 (3.24)	566 (3.00)	533 (3.11)
5	549 (2.68)	358 (2.63)	445 (2.83)	486 (2.58)	459 (2.68)
6	519 (2.54)	346 (2.54)	439 (2.79)	458 (2.43)	440 (2.57)
7	692 (3.38)	452 (3.33)	528 (3.36)	578 (3.07)	562 (3.28)
8	1188 (5.81)	754 (5.55)	745 (4.74)	960 (5.10)	911 (5.31)
9	1430 (6.99)	886 (6.52)	861 (5.48)	1202 (6.38)	1093 (6.38)
10	1306 (6.38)	815 (6.00)	843 (5.36)	1154 (6.12)	1029 (6.00)
11	1041 (5.09)	656 (4.83)	742 (4.72)	912 (4.84)	837 (4.88)
12	876 (4.28)	608 (4.48)	677 (4.31)	736 (3.90)	724 (4.22)
13	808 (3.95)	595 (4.38)	633 (4.02)	677 (3.59)	678 (3.95)
14	730 (3.57)	568 (4.18)	622 (3.95)	631 (3.35)	637 (3.72)
15	735 (3.59)	587 (4.32)	643 (4.09)	656 (3.48)	655 (3.82)
16	802 (3.92)	606 (4.46)	680 (4.32)	743 (3.94)	707 (4.13)
17	950 (4.64)	646 (4.75)	694 (4.41)	896 (4.75)	796 (4.64)
18	1061 (5.18)	677 (4.98)	738 (4.69)	1044 (5.54)	879 (5.13)
19	940 (4.60)	555 (4.09)	675 (4.29)	938 (4.98)	777 (4.53)
20	814 (3.98)	470 (3.46)	646 (4.11)	791 (4.20)	680 (3.97)
21	804 (3.93)	469 (3.45)	637 (4.05)	822 (4.36)	683 (3.98)
22	798 (3.90)	509 (3.74)	687 (4.37)	861 (4.57)	714 (4.16)
23	786 (3.84)	531 (3.91)	692 (4.40)	835 (4.43)	711 (4.15)
24	815 (3.98)	567 (4.17)	721 (4.59)	854 (4.53)	740 (4.31)

Baltimore: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	773 (4.14)	552 (4.44)	678 (4.66)	759 (4.43)	691 (4.40)
2	728 (3.90)	492 (3.96)	604 (4.15)	675 (3.94)	625 (3.98)
3	655 (3.51)	438 (3.52)	539 (3.71)	554 (3.24)	546 (3.48)
4	629 (3.37)	423 (3.40)	499 (3.43)	556 (3.25)	526 (3.36)
5	544 (2.91)	355 (2.85)	437 (3.00)	478 (2.79)	453 (2.89)
6	512 (2.74)	334 (2.68)	417 (2.87)	445 (2.60)	427 (2.72)
7	582 (3.12)	371 (2.98)	459 (3.16)	474 (2.77)	471 (3.00)
8	897 (4.80)	577 (4.64)	574 (3.95)	729 (4.26)	694 (4.42)
9	1187 (6.36)	751 (6.04)	706 (4.86)	1013 (5.91)	913 (5.82)
10	1177 (6.30)	756 (6.08)	802 (5.51)	1063 (6.21)	949 (6.05)
11	929 (4.97)	591 (4.75)	697 (4.79)	821 (4.79)	759 (4.84)
12	790 (4.23)	546 (4.39)	628 (4.32)	660 (3.85)	656 (4.18)
13	694 (3.71)	527 (4.24)	584 (4.02)	581 (3.39)	596 (3.80)
14	646 (3.46)	512 (4.11)	575 (3.95)	556 (3.25)	572 (3.64)
15	658 (3.52)	530 (4.26)	591 (4.06)	561 (3.28)	585 (3.73)
16	719 (3.85)	538 (4.33)	606 (4.17)	639 (3.73)	625 (3.98)
17	831 (4.45)	562 (4.52)	619 (4.25)	771 (4.50)	695 (4.43)
18	896 (4.80)	567 (4.56)	620 (4.26)	848 (4.95)	732 (4.67)
19	875 (4.68)	520 (4.18)	632 (4.34)	865 (5.05)	723 (4.61)
20	806 (4.31)	462 (3.71)	623 (4.28)	776 (4.53)	666 (4.25)
21	793 (4.24)	461 (3.70)	626 (4.30)	801 (4.68)	670 (4.27)
22	783 (4.19)	504 (4.05)	667 (4.59)	846 (4.94)	700 (4.46)
23	780 (4.18)	525 (4.23)	683 (4.70)	831 (4.85)	705 (4.49)
24	797 (4.26)	543 (4.37)	680 (4.67)	826 (4.82)	711 (4.53)

Baltimore: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	784 (4.04)	556 (4.35)	671 (4.46)	773 (4.35)	696 (4.28)
2	734 (3.78)	495 (3.87)	607 (4.04)	687 (3.86)	631 (3.88)
3	654 (3.37)	443 (3.47)	547 (3.64)	565 (3.18)	552 (3.40)
4	623 (3.21)	420 (3.29)	501 (3.33)	557 (3.13)	525 (3.23)
5	541 (2.78)	352 (2.75)	438 (2.91)	479 (2.69)	452 (2.78)
6	513 (2.64)	335 (2.62)	421 (2.80)	450 (2.53)	430 (2.64)
7	614 (3.16)	395 (3.09)	486 (3.24)	503 (2.83)	499 (3.07)
8	1067 (5.49)	666 (5.21)	670 (4.46)	856 (4.81)	814 (5.01)
9	1332 (6.86)	811 (6.34)	792 (5.27)	1117 (6.28)	1012 (6.23)
10	1201 (6.19)	755 (5.90)	794 (5.28)	1069 (6.01)	954 (5.87)
11	943 (4.86)	597 (4.66)	706 (4.70)	833 (4.68)	769 (4.73)
12	801 (4.13)	546 (4.27)	641 (4.26)	663 (3.73)	663 (4.08)
13	739 (3.81)	549 (4.29)	612 (4.07)	610 (3.43)	627 (3.86)
14	677 (3.49)	526 (4.11)	584 (3.89)	589 (3.31)	594 (3.65)
15	682 (3.51)	527 (4.12)	603 (4.01)	584 (3.28)	599 (3.68)
16	727 (3.74)	537 (4.20)	621 (4.13)	650 (3.65)	634 (3.90)
17	858 (4.42)	571 (4.46)	640 (4.26)	780 (4.39)	712 (4.38)
18	1035 (5.33)	637 (4.97)	707 (4.70)	973 (5.47)	838 (5.15)
19	939 (4.84)	547 (4.27)	668 (4.44)	917 (5.16)	767 (4.72)
20	815 (4.19)	464 (3.62)	622 (4.14)	794 (4.46)	673 (4.14)
21	802 (4.13)	472 (3.69)	648 (4.31)	818 (4.60)	685 (4.21)
22	767 (3.95)	493 (3.85)	653 (4.34)	834 (4.69)	687 (4.23)
23	780 (4.02)	546 (4.26)	716 (4.76)	846 (4.75)	722 (4.44)
24	789 (4.07)	556 (4.35)	686 (4.56)	840 (4.72)	718 (4.42)

Baltimore: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	753 (4.07)	542 (4.30)	662 (4.43)	742 (4.41)	675 (4.30)
2	715 (3.87)	494 (3.92)	610 (4.08)	666 (3.96)	621 (3.95)
3	646 (3.49)	444 (3.52)	552 (3.70)	549 (3.26)	547 (3.48)
4	622 (3.36)	431 (3.41)	512 (3.43)	552 (3.28)	529 (3.37)
5	540 (2.92)	361 (2.86)	449 (3.01)	476 (2.83)	456 (2.90)
6	507 (2.74)	340 (2.70)	429 (2.88)	442 (2.63)	429 (2.73)
7	569 (3.08)	377 (2.99)	471 (3.16)	467 (2.78)	471 (3.00)
8	1040 (5.63)	641 (5.08)	596 (3.99)	834 (4.96)	777 (4.95)
9	1148 (6.21)	698 (5.53)	720 (4.82)	908 (5.40)	868 (5.52)
10	1167 (6.32)	710 (5.62)	791 (5.30)	1024 (6.09)	922 (5.87)
11	1050 (5.68)	654 (5.19)	743 (4.97)	892 (5.30)	834 (5.31)
12	859 (4.65)	586 (4.65)	672 (4.50)	668 (3.97)	696 (4.43)
13	784 (4.24)	567 (4.49)	624 (4.18)	623 (3.70)	649 (4.13)
14	639 (3.46)	510 (4.04)	566 (3.79)	549 (3.26)	566 (3.60)
15	628 (3.40)	556 (4.41)	640 (4.28)	557 (3.31)	595 (3.79)
16	704 (3.81)	588 (4.66)	684 (4.58)	665 (3.95)	660 (4.20)
17	757 (4.09)	620 (4.91)	727 (4.87)	708 (4.21)	703 (4.47)
18	839 (4.54)	603 (4.78)	697 (4.66)	818 (4.86)	739 (4.70)
19	815 (4.41)	509 (4.03)	618 (4.14)	807 (4.79)	687 (4.37)
20	718 (3.89)	414 (3.28)	563 (3.77)	685 (4.07)	595 (3.79)
21	742 (4.02)	460 (3.65)	660 (4.42)	787 (4.68)	662 (4.22)
22	735 (3.98)	475 (3.76)	628 (4.20)	816 (4.85)	663 (4.22)
23	746 (4.04)	512 (4.06)	662 (4.43)	803 (4.77)	681 (4.33)
24	755 (4.09)	527 (4.17)	658 (4.40)	792 (4.71)	683 (4.35)

Baltimore: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	775 (3.76)	540 (3.98)	659 (4.21)	754 (3.97)	682 (3.97)
2	726 (3.52)	488 (3.60)	605 (3.87)	679 (3.58)	624 (3.63)
3	653 (3.17)	440 (3.25)	548 (3.50)	568 (2.99)	552 (3.21)
4	628 (3.04)	423 (3.12)	506 (3.24)	563 (2.97)	530 (3.08)
5	543 (2.63)	353 (2.61)	442 (2.82)	481 (2.54)	455 (2.65)
6	518 (2.51)	343 (2.53)	430 (2.75)	457 (2.41)	437 (2.54)
7	739 (3.59)	464 (3.42)	524 (3.35)	610 (3.21)	584 (3.39)
8	1283 (6.22)	816 (6.01)	806 (5.15)	1055 (5.56)	989 (5.75)
9	1467 (7.11)	913 (6.73)	907 (5.80)	1247 (6.57)	1132 (6.59)
10	1321 (6.41)	843 (6.22)	882 (5.64)	1202 (6.33)	1061 (6.17)
11	1045 (5.06)	678 (5.00)	767 (4.90)	940 (4.96)	857 (4.98)
12	886 (4.29)	618 (4.55)	666 (4.26)	756 (3.98)	731 (4.25)
13	806 (3.91)	616 (4.54)	677 (4.33)	682 (3.59)	695 (4.04)
14	739 (3.58)	571 (4.21)	636 (4.07)	637 (3.35)	645 (3.75)
15	714 (3.46)	548 (4.04)	591 (3.78)	621 (3.27)	618 (3.60)
16	751 (3.64)	552 (4.07)	604 (3.86)	683 (3.60)	647 (3.76)
17	900 (4.36)	620 (4.57)	679 (4.34)	853 (4.50)	763 (4.44)
18	1149 (5.57)	684 (5.04)	782 (5.00)	1099 (5.79)	928 (5.40)
19	966 (4.68)	548 (4.04)	651 (4.16)	954 (5.03)	779 (4.53)
20	809 (3.92)	466 (3.44)	630 (4.03)	794 (4.19)	675 (3.92)
21	821 (3.98)	487 (3.59)	678 (4.33)	835 (4.40)	705 (4.10)
22	803 (3.89)	491 (3.62)	653 (4.18)	844 (4.45)	698 (4.06)
23	785 (3.81)	515 (3.80)	644 (4.12)	829 (4.37)	693 (4.03)
24	799 (3.87)	545 (4.02)	675 (4.32)	836 (4.40)	714 (4.15)

Baltimore: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	753 (4.17)	537 (4.52)	656 (4.65)	742 (4.52)	672 (4.45)
2	715 (3.96)	488 (4.10)	599 (4.25)	667 (4.06)	617 (4.08)
3	644 (3.56)	435 (3.66)	540 (3.83)	549 (3.34)	542 (3.58)
4	620 (3.43)	419 (3.52)	498 (3.54)	550 (3.35)	522 (3.45)
5	538 (2.98)	354 (2.98)	446 (3.16)	475 (2.89)	453 (3.00)
6	505 (2.80)	334 (2.81)	425 (3.02)	441 (2.68)	426 (2.82)
7	573 (3.17)	372 (3.13)	464 (3.29)	470 (2.86)	470 (3.11)
8	835 (4.62)	537 (4.52)	554 (3.93)	665 (4.05)	647 (4.28)
9	1136 (6.29)	692 (5.82)	679 (4.82)	931 (5.66)	858 (5.68)
10	1127 (6.24)	702 (5.90)	742 (5.26)	998 (6.07)	891 (5.90)
11	920 (5.09)	570 (4.79)	655 (4.65)	810 (4.93)	738 (4.88)
12	810 (4.48)	543 (4.57)	614 (4.35)	670 (4.07)	659 (4.36)
13	694 (3.84)	496 (4.17)	544 (3.86)	562 (3.42)	573 (3.79)
14	643 (3.56)	488 (4.10)	532 (3.78)	549 (3.34)	553 (3.66)
15	672 (3.72)	511 (4.30)	579 (4.10)	574 (3.50)	584 (3.86)
16	672 (3.72)	495 (4.16)	605 (4.29)	584 (3.55)	589 (3.89)
17	741 (4.10)	487 (4.10)	587 (4.16)	639 (3.89)	613 (4.06)
18	850 (4.71)	534 (4.49)	600 (4.26)	805 (4.90)	697 (4.61)
19	843 (4.67)	502 (4.22)	616 (4.37)	836 (5.09)	699 (4.62)
20	787 (4.36)	458 (3.85)	628 (4.45)	775 (4.71)	662 (4.38)
21	745 (4.12)	452 (3.80)	649 (4.60)	753 (4.58)	649 (4.30)
22	729 (4.04)	460 (3.87)	604 (4.28)	786 (4.78)	645 (4.27)
23	741 (4.10)	491 (4.13)	627 (4.44)	788 (4.80)	662 (4.38)
24	770 (4.26)	534 (4.49)	655 (4.65)	816 (4.97)	694 (4.59)

Baltimore: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	774 (4.04)	548 (4.32)	673 (4.56)	771 (4.38)	691 (4.31)
2	734 (3.83)	493 (3.89)	602 (4.08)	696 (3.95)	631 (3.93)
3	660 (3.44)	444 (3.50)	547 (3.70)	577 (3.28)	557 (3.47)
4	622 (3.25)	418 (3.30)	502 (3.39)	558 (3.17)	525 (3.27)
5	536 (2.80)	348 (2.74)	436 (2.95)	474 (2.69)	448 (2.79)
6	522 (2.72)	334 (2.63)	418 (2.83)	453 (2.57)	431 (2.69)
7	671 (3.50)	423 (3.34)	497 (3.36)	548 (3.11)	534 (3.33)
8	1084 (5.65)	685 (5.40)	656 (4.44)	867 (4.92)	822 (5.12)
9	1262 (6.58)	799 (6.30)	761 (5.15)	1053 (5.98)	968 (6.03)
10	1185 (6.18)	765 (6.03)	808 (5.47)	1052 (5.97)	952 (5.93)
11	960 (5.00)	605 (4.77)	706 (4.77)	843 (4.79)	778 (4.84)
12	795 (4.15)	545 (4.29)	621 (4.20)	664 (3.77)	655 (4.08)
13	752 (3.92)	563 (4.44)	606 (4.10)	631 (3.58)	637 (3.97)
14	690 (3.60)	544 (4.29)	610 (4.13)	603 (3.43)	612 (3.81)
15	679 (3.54)	526 (4.15)	582 (3.94)	593 (3.37)	595 (3.70)
16	720 (3.75)	543 (4.28)	627 (4.24)	641 (3.64)	633 (3.94)
17	806 (4.20)	541 (4.26)	628 (4.25)	710 (4.03)	671 (4.18)
18	939 (4.89)	571 (4.50)	604 (4.09)	884 (5.02)	749 (4.67)
19	901 (4.70)	530 (4.17)	632 (4.27)	892 (5.07)	738 (4.60)
20	783 (4.08)	453 (3.57)	605 (4.10)	773 (4.39)	653 (4.07)
21	781 (4.07)	458 (3.61)	626 (4.24)	813 (4.62)	669 (4.17)
22	789 (4.12)	497 (3.92)	683 (4.62)	863 (4.90)	708 (4.41)
23	757 (3.95)	520 (4.10)	674 (4.56)	820 (4.66)	693 (4.32)
24	775 (4.04)	534 (4.21)	674 (4.56)	827 (4.70)	703 (4.38)

Baltimore: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	763 (4.03)	539 (4.18)	650 (4.24)	756 (4.30)	677 (4.18)
2	715 (3.78)	481 (3.74)	592 (3.86)	667 (3.80)	614 (3.80)
3	646 (3.41)	433 (3.36)	537 (3.50)	551 (3.14)	541 (3.35)
4	622 (3.28)	420 (3.26)	499 (3.25)	554 (3.15)	523 (3.24)
5	540 (2.85)	352 (2.73)	437 (2.85)	476 (2.71)	451 (2.79)
6	520 (2.74)	333 (2.58)	417 (2.72)	449 (2.56)	429 (2.65)
7	630 (3.33)	391 (3.03)	478 (3.11)	510 (2.90)	502 (3.10)
8	903 (4.77)	623 (4.84)	634 (4.13)	770 (4.38)	732 (4.52)
9	1306 (6.89)	831 (6.45)	787 (5.13)	1132 (6.45)	1013 (6.26)
10	1273 (6.72)	810 (6.28)	883 (5.75)	1162 (6.62)	1031 (6.37)
11	990 (5.23)	647 (5.02)	790 (5.15)	869 (4.95)	824 (5.09)
12	835 (4.41)	592 (4.60)	695 (4.53)	684 (3.90)	701 (4.33)
13	692 (3.65)	535 (4.15)	614 (4.00)	569 (3.24)	602 (3.72)
14	708 (3.74)	555 (4.31)	654 (4.26)	594 (3.38)	627 (3.88)
15	740 (3.91)	604 (4.69)	751 (4.89)	646 (3.68)	685 (4.24)
16	763 (4.03)	596 (4.63)	745 (4.86)	713 (4.06)	704 (4.35)
17	908 (4.79)	612 (4.75)	688 (4.48)	850 (4.84)	764 (4.72)
18	832 (4.39)	557 (4.32)	631 (4.11)	805 (4.58)	706 (4.36)
19	811 (4.28)	497 (3.86)	587 (3.83)	819 (4.66)	678 (4.19)
20	783 (4.13)	484 (3.75)	656 (4.27)	816 (4.64)	684 (4.23)
21	691 (3.65)	430 (3.33)	626 (4.08)	692 (3.94)	610 (3.77)
22	715 (3.77)	468 (3.63)	638 (4.15)	773 (4.40)	648 (4.01)
23	768 (4.05)	541 (4.20)	687 (4.47)	845 (4.81)	710 (4.39)
24	789 (4.16)	553 (4.29)	671 (4.37)	860 (4.90)	718 (4.44)

Baltimore: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	753 (4.17)	529 (4.40)	642 (4.49)	741 (4.51)	666 (4.38)
2	715 (3.96)	482 (4.00)	591 (4.14)	666 (4.05)	613 (4.04)
3	646 (3.58)	433 (3.60)	535 (3.75)	549 (3.34)	541 (3.56)
4	622 (3.44)	420 (3.49)	497 (3.48)	552 (3.36)	523 (3.44)
5	540 (2.99)	352 (2.93)	436 (3.05)	476 (2.90)	451 (2.97)
6	507 (2.81)	331 (2.75)	416 (2.92)	442 (2.69)	424 (2.79)
7	572 (3.17)	374 (3.11)	469 (3.28)	471 (2.86)	471 (3.10)
8	858 (4.75)	554 (4.61)	587 (4.11)	678 (4.12)	669 (4.40)
9	1167 (6.46)	700 (5.82)	668 (4.68)	949 (5.77)	870 (5.72)
10	1138 (6.30)	726 (6.04)	765 (5.36)	1020 (6.21)	912 (6.00)
11	958 (5.30)	614 (5.11)	699 (4.89)	863 (5.25)	783 (5.15)
12	800 (4.43)	544 (4.52)	603 (4.22)	671 (4.08)	654 (4.30)
13	805 (4.46)	598 (4.97)	607 (4.25)	694 (4.22)	676 (4.45)
14	697 (3.86)	549 (4.57)	576 (4.03)	620 (3.77)	610 (4.02)
15	651 (3.60)	517 (4.30)	590 (4.13)	558 (3.40)	579 (3.81)
16	675 (3.74)	508 (4.22)	615 (4.31)	597 (3.63)	599 (3.94)
17	665 (3.68)	467 (3.88)	584 (4.09)	577 (3.51)	573 (3.77)
18	782 (4.33)	526 (4.37)	665 (4.65)	710 (4.32)	670 (4.41)
19	838 (4.64)	494 (4.10)	642 (4.49)	814 (4.95)	697 (4.58)
20	729 (4.04)	426 (3.54)	596 (4.17)	700 (4.26)	613 (4.03)
21	728 (4.03)	423 (3.52)	587 (4.11)	732 (4.45)	617 (4.06)
22	710 (3.93)	447 (3.72)	618 (4.33)	764 (4.65)	635 (4.18)
23	756 (4.19)	504 (4.18)	658 (4.61)	800 (4.87)	680 (4.47)
24	751 (4.16)	512 (4.25)	636 (4.45)	790 (4.81)	672 (4.42)

Baltimore: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	766 (3.27)	540 (3.45)	652 (3.53)	756 (3.55)	678 (3.44)
2	751 (3.21)	490 (3.14)	599 (3.24)	685 (3.22)	631 (3.20)
3	653 (2.79)	445 (2.85)	548 (2.97)	569 (2.67)	554 (2.81)
4	626 (2.67)	427 (2.73)	506 (2.74)	561 (2.64)	530 (2.69)
5	542 (2.31)	356 (2.28)	442 (2.40)	479 (2.25)	455 (2.31)
6	520 (2.22)	347 (2.22)	429 (2.33)	464 (2.18)	440 (2.23)
7	886 (3.78)	507 (3.24)	529 (2.87)	724 (3.40)	661 (3.36)
8	1496 (6.39)	1014 (6.49)	983 (5.33)	1242 (5.83)	1182 (6.01)
9	1918 (8.19)	1190 (7.61)	1199 (6.50)	1600 (7.52)	1475 (7.49)
10	1547 (6.61)	987 (6.32)	1109 (6.01)	1340 (6.30)	1245 (6.32)
11	1265 (5.40)	831 (5.32)	993 (5.38)	1049 (4.93)	1034 (5.25)
12	1041 (4.44)	766 (4.90)	883 (4.79)	814 (3.82)	875 (4.45)
13	972 (4.15)	720 (4.61)	810 (4.39)	806 (3.79)	826 (4.20)
14	919 (3.93)	692 (4.43)	795 (4.31)	754 (3.54)	790 (4.01)
15	897 (3.83)	724 (4.64)	853 (4.62)	806 (3.79)	820 (4.17)
16	975 (4.16)	746 (4.77)	934 (5.06)	897 (4.22)	888 (4.51)
17	1238 (5.29)	827 (5.29)	890 (4.83)	1192 (5.60)	1036 (5.26)
18	1113 (4.75)	770 (4.93)	859 (4.65)	1158 (5.44)	975 (4.95)
19	977 (4.17)	659 (4.22)	847 (4.59)	1027 (4.82)	878 (4.46)
20	857 (3.66)	519 (3.32)	823 (4.46)	829 (3.89)	757 (3.85)
21	856 (3.65)	481 (3.08)	684 (3.71)	881 (4.14)	725 (3.68)
22	890 (3.80)	512 (3.28)	717 (3.89)	910 (4.27)	757 (3.85)
23	867 (3.70)	539 (3.45)	716 (3.88)	885 (4.16)	752 (3.82)
24	848 (3.62)	536 (3.43)	650 (3.52)	859 (4.04)	723 (3.67)

Baltimore: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	768 (3.77)	550 (4.05)	681 (4.29)	756 (4.03)	689 (4.02)
2	728 (3.57)	494 (3.63)	612 (3.86)	680 (3.62)	628 (3.66)
3	655 (3.22)	444 (3.27)	548 (3.46)	564 (3.00)	553 (3.22)
4	630 (3.09)	431 (3.17)	511 (3.22)	564 (3.00)	534 (3.11)
5	542 (2.66)	360 (2.65)	447 (2.82)	481 (2.56)	457 (2.67)
6	508 (2.49)	340 (2.50)	427 (2.69)	447 (2.38)	430 (2.51)
7	615 (3.02)	396 (2.91)	483 (3.04)	507 (2.70)	500 (2.92)
8	1124 (5.51)	717 (5.27)	677 (4.27)	933 (4.97)	862 (5.03)
9	1485 (7.29)	872 (6.41)	789 (4.98)	1237 (6.58)	1094 (6.38)
10	1251 (6.14)	794 (5.84)	838 (5.29)	1115 (5.94)	999 (5.83)
11	983 (4.82)	646 (4.75)	757 (4.78)	891 (4.74)	819 (4.78)
12	852 (4.18)	603 (4.43)	676 (4.27)	725 (3.86)	714 (4.16)
13	754 (3.70)	601 (4.42)	662 (4.18)	653 (3.48)	667 (3.89)
14	712 (3.50)	569 (4.18)	644 (4.07)	618 (3.29)	636 (3.71)
15	795 (3.90)	631 (4.64)	716 (4.52)	702 (3.73)	711 (4.15)
16	977 (4.79)	677 (4.98)	730 (4.60)	884 (4.71)	816 (4.76)
17	1030 (5.06)	678 (4.99)	721 (4.55)	952 (5.07)	845 (4.93)
18	1071 (5.26)	663 (4.88)	728 (4.59)	1041 (5.54)	875 (5.11)
19	1011 (4.96)	572 (4.21)	692 (4.37)	977 (5.20)	813 (4.74)
20	839 (4.12)	515 (3.79)	724 (4.57)	831 (4.42)	727 (4.24)
21	771 (3.79)	470 (3.46)	680 (4.29)	775 (4.13)	674 (3.93)
22	752 (3.69)	501 (3.69)	702 (4.43)	822 (4.37)	694 (4.05)
23	752 (3.69)	529 (3.89)	703 (4.44)	819 (4.36)	701 (4.09)
24	772 (3.79)	543 (4.00)	701 (4.42)	813 (4.33)	707 (4.13)

Baltimore: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	754 (4.15)	533 (4.33)	647 (4.46)	743 (4.45)	669 (4.34)
2	717 (3.95)	484 (3.93)	595 (4.10)	670 (4.01)	616 (4.00)
3	646 (3.56)	436 (3.54)	539 (3.72)	555 (3.32)	544 (3.53)
4	623 (3.43)	423 (3.44)	502 (3.46)	556 (3.33)	526 (3.41)
5	540 (2.97)	354 (2.88)	439 (3.03)	478 (2.86)	452 (2.94)
6	518 (2.85)	338 (2.75)	420 (2.90)	452 (2.71)	432 (2.80)
7	589 (3.24)	379 (3.08)	470 (3.24)	482 (2.89)	480 (3.11)
8	979 (5.39)	642 (5.22)	630 (4.34)	802 (4.80)	762 (4.95)
9	1224 (6.74)	742 (6.03)	703 (4.85)	998 (5.97)	916 (5.94)
10	1152 (6.34)	735 (5.98)	772 (5.32)	1024 (6.13)	920 (5.97)
11	906 (4.99)	620 (5.04)	759 (5.23)	827 (4.95)	778 (5.05)
12	772 (4.25)	554 (4.51)	660 (4.55)	650 (3.89)	659 (4.28)
13	712 (3.92)	559 (4.55)	606 (4.18)	619 (3.71)	624 (4.05)
14	614 (3.38)	501 (4.07)	571 (3.94)	532 (3.18)	554 (3.60)
15	607 (3.34)	519 (4.22)	599 (4.13)	549 (3.29)	569 (3.69)
16	635 (3.50)	513 (4.17)	601 (4.14)	592 (3.54)	585 (3.80)
17	726 (4.00)	519 (4.22)	589 (4.06)	664 (3.98)	624 (4.05)
18	882 (4.85)	555 (4.52)	614 (4.23)	812 (4.86)	715 (4.64)
19	845 (4.65)	520 (4.23)	622 (4.29)	851 (5.09)	709 (4.60)
20	779 (4.29)	456 (3.71)	627 (4.32)	760 (4.55)	655 (4.25)
21	733 (4.04)	436 (3.55)	617 (4.25)	734 (4.40)	630 (4.09)
22	717 (3.95)	455 (3.70)	611 (4.21)	772 (4.62)	639 (4.15)
23	730 (4.02)	500 (4.07)	660 (4.55)	778 (4.66)	667 (4.33)
24	765 (4.21)	525 (4.27)	653 (4.50)	799 (4.78)	685 (4.45)

Baltimore: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	779 (4.00)	554 (4.28)	675 (4.45)	767 (4.29)	694 (4.24)
2	735 (3.77)	498 (3.84)	611 (4.03)	687 (3.84)	633 (3.87)
3	657 (3.37)	445 (3.44)	548 (3.62)	567 (3.17)	554 (3.39)
4	629 (3.22)	428 (3.30)	507 (3.35)	563 (3.15)	531 (3.25)
5	544 (2.79)	358 (2.76)	443 (2.93)	482 (2.70)	457 (2.79)
6	515 (2.64)	340 (2.62)	427 (2.82)	452 (2.53)	433 (2.65)
7	635 (3.26)	409 (3.15)	491 (3.24)	524 (2.93)	514 (3.14)
8	1067 (5.48)	670 (5.17)	654 (4.32)	863 (4.82)	812 (4.96)
9	1316 (6.75)	808 (6.23)	770 (5.08)	1103 (6.16)	998 (6.10)
10	1222 (6.27)	774 (5.97)	818 (5.40)	1090 (6.09)	975 (5.96)
11	975 (5.00)	624 (4.81)	728 (4.81)	863 (4.82)	797 (4.87)
12	827 (4.24)	573 (4.42)	653 (4.31)	691 (3.86)	685 (4.19)
13	753 (3.86)	563 (4.34)	614 (4.06)	629 (3.52)	639 (3.91)
14	683 (3.51)	537 (4.14)	598 (3.95)	592 (3.31)	602 (3.68)
15	696 (3.57)	553 (4.26)	626 (4.13)	605 (3.38)	620 (3.79)
16	757 (3.88)	565 (4.36)	648 (4.28)	684 (3.82)	663 (4.05)
17	862 (4.42)	589 (4.54)	659 (4.35)	795 (4.45)	726 (4.43)
18	991 (5.09)	620 (4.78)	685 (4.52)	945 (5.28)	810 (4.95)
19	923 (4.73)	542 (4.18)	659 (4.35)	908 (5.08)	758 (4.63)
20	809 (4.15)	474 (3.66)	650 (4.29)	787 (4.40)	680 (4.15)
21	787 (4.04)	469 (3.62)	650 (4.29)	800 (4.47)	677 (4.13)
22	768 (3.94)	491 (3.79)	661 (4.36)	829 (4.63)	687 (4.20)
23	772 (3.96)	527 (4.07)	684 (4.52)	828 (4.63)	703 (4.30)
24	792 (4.06)	552 (4.26)	689 (4.55)	834 (4.66)	717 (4.38)

Boston: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	598 (3.36)	500 (3.73)	518 (3.99)	550 (3.66)	541 (3.66)
2	497 (2.80)	404 (3.02)	398 (3.07)	462 (3.08)	440 (2.98)
3	436 (2.45)	339 (2.53)	330 (2.54)	389 (2.59)	373 (2.53)
4	433 (2.44)	305 (2.28)	307 (2.37)	370 (2.46)	354 (2.39)
5	306 (1.72)	221 (1.65)	214 (1.65)	254 (1.69)	249 (1.68)
6	278 (1.56)	204 (1.53)	187 (1.44)	237 (1.58)	227 (1.53)
7	374 (2.10)	294 (2.19)	268 (2.07)	318 (2.12)	313 (2.12)
8	756 (4.25)	537 (4.01)	492 (3.79)	580 (3.86)	590 (4.00)
9	946 (5.32)	643 (4.80)	592 (4.57)	727 (4.84)	726 (4.91)
10	943 (5.31)	654 (4.89)	624 (4.82)	745 (4.96)	741 (5.01)
11	847 (4.76)	637 (4.75)	609 (4.70)	676 (4.50)	691 (4.68)
12	818 (4.60)	642 (4.79)	610 (4.71)	666 (4.44)	683 (4.63)
13	830 (4.67)	676 (5.05)	623 (4.81)	685 (4.56)	703 (4.76)
14	805 (4.53)	651 (4.86)	612 (4.72)	659 (4.39)	681 (4.61)
15	847 (4.77)	669 (5.00)	632 (4.88)	697 (4.64)	711 (4.81)
16	946 (5.32)	724 (5.41)	678 (5.23)	791 (5.26)	784 (5.31)
17	987 (5.56)	748 (5.58)	705 (5.44)	846 (5.63)	821 (5.56)
18	1122 (6.31)	786 (5.87)	739 (5.70)	966 (6.43)	902 (6.11)
19	1100 (6.19)	740 (5.53)	712 (5.49)	935 (6.22)	871 (5.90)
20	938 (5.28)	667 (4.98)	683 (5.27)	818 (5.45)	776 (5.25)
21	831 (4.68)	622 (4.64)	640 (4.94)	738 (4.91)	707 (4.79)
22	760 (4.28)	598 (4.46)	608 (4.69)	654 (4.36)	655 (4.43)
23	713 (4.01)	573 (4.28)	602 (4.64)	639 (4.25)	631 (4.27)
24	661 (3.72)	556 (4.15)	581 (4.48)	618 (4.11)	604 (4.09)

Boston: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	694 (3.80)	554 (3.95)	627 (4.56)	604 (4.12)	620 (4.08)
2	599 (3.28)	472 (3.36)	475 (3.45)	542 (3.69)	522 (3.44)
3	554 (3.03)	429 (3.05)	405 (2.94)	463 (3.16)	462 (3.05)
4	592 (3.24)	406 (2.89)	370 (2.69)	478 (3.26)	461 (3.04)
5	369 (2.02)	262 (1.87)	235 (1.71)	290 (1.97)	289 (1.90)
6	298 (1.63)	227 (1.61)	190 (1.38)	250 (1.70)	241 (1.59)
7	358 (1.96)	277 (1.97)	230 (1.67)	300 (2.04)	291 (1.92)
8	615 (3.37)	522 (3.71)	462 (3.36)	518 (3.53)	529 (3.48)
9	860 (4.71)	653 (4.65)	589 (4.28)	678 (4.62)	694 (4.57)
10	938 (5.13)	665 (4.74)	624 (4.53)	726 (4.94)	737 (4.86)
11	835 (4.57)	627 (4.47)	583 (4.23)	635 (4.32)	669 (4.41)
12	816 (4.46)	602 (4.28)	542 (3.93)	579 (3.95)	634 (4.17)
13	756 (4.14)	613 (4.37)	566 (4.11)	555 (3.78)	622 (4.10)
14	767 (4.20)	653 (4.64)	602 (4.37)	601 (4.10)	655 (4.32)
15	854 (4.68)	794 (5.65)	746 (5.42)	758 (5.16)	788 (5.19)
16	815 (4.46)	723 (5.14)	731 (5.31)	648 (4.41)	729 (4.80)
17	970 (5.31)	765 (5.45)	755 (5.49)	756 (5.15)	811 (5.34)
18	1024 (5.60)	816 (5.81)	821 (5.96)	819 (5.58)	869 (5.73)
19	1102 (6.03)	757 (5.39)	754 (5.48)	842 (5.73)	863 (5.68)
20	1021 (5.59)	695 (4.95)	721 (5.24)	812 (5.53)	811 (5.35)
21	952 (5.21)	660 (4.70)	684 (4.97)	778 (5.30)	768 (5.06)
22	907 (4.97)	645 (4.59)	670 (4.87)	699 (4.76)	730 (4.81)
23	828 (4.53)	636 (4.52)	717 (5.21)	692 (4.72)	718 (4.73)
24	746 (4.08)	597 (4.25)	669 (4.86)	657 (4.47)	667 (4.39)

Boston: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	640 (3.70)	525 (3.93)	554 (4.28)	581 (4.00)	575 (3.96)
2	538 (3.11)	432 (3.23)	422 (3.26)	501 (3.44)	473 (3.26)
3	486 (2.81)	378 (2.83)	357 (2.76)	430 (2.96)	413 (2.84)
4	497 (2.87)	345 (2.58)	328 (2.54)	414 (2.85)	396 (2.72)
5	334 (1.93)	238 (1.78)	221 (1.71)	271 (1.86)	266 (1.83)
6	291 (1.68)	212 (1.59)	188 (1.45)	243 (1.67)	233 (1.61)
7	382 (2.21)	284 (2.12)	244 (1.88)	313 (2.15)	305 (2.10)
8	655 (3.79)	524 (3.92)	475 (3.67)	535 (3.68)	547 (3.76)
9	879 (5.08)	638 (4.78)	588 (4.55)	688 (4.73)	698 (4.80)
10	928 (5.37)	652 (4.88)	614 (4.74)	735 (5.05)	731 (5.04)
11	815 (4.72)	616 (4.61)	580 (4.48)	647 (4.45)	664 (4.57)
12	782 (4.52)	591 (4.43)	546 (4.22)	603 (4.14)	630 (4.34)
13	735 (4.25)	607 (4.54)	557 (4.30)	590 (4.06)	622 (4.28)
14	740 (4.28)	619 (4.63)	569 (4.40)	613 (4.21)	635 (4.37)
15	820 (4.74)	734 (5.50)	683 (5.28)	750 (5.15)	746 (5.14)
16	787 (4.55)	692 (5.18)	683 (5.28)	670 (4.61)	707 (4.87)
17	907 (5.24)	735 (5.50)	705 (5.45)	778 (5.35)	781 (5.37)
18	954 (5.52)	760 (5.69)	751 (5.80)	828 (5.69)	823 (5.66)
19	1017 (5.88)	701 (5.25)	691 (5.34)	828 (5.69)	808 (5.57)
20	962 (5.56)	645 (4.82)	652 (5.04)	792 (5.45)	762 (5.25)
21	865 (5.00)	613 (4.59)	628 (4.85)	740 (5.09)	711 (4.90)
22	824 (4.77)	625 (4.68)	630 (4.87)	684 (4.70)	690 (4.75)
23	758 (4.38)	616 (4.61)	664 (5.13)	673 (4.63)	677 (4.66)
24	699 (4.04)	579 (4.33)	614 (4.74)	641 (4.41)	633 (4.36)

Boston: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	596 (3.54)	502 (3.95)	534 (4.35)	546 (3.87)	544 (3.90)
2	503 (2.99)	410 (3.22)	408 (3.33)	468 (3.31)	447 (3.20)
3	450 (2.67)	356 (2.80)	346 (2.82)	397 (2.81)	387 (2.77)
4	460 (2.73)	325 (2.55)	319 (2.60)	389 (2.75)	373 (2.67)
5	315 (1.87)	228 (1.79)	217 (1.77)	259 (1.84)	254 (1.82)
6	278 (1.65)	206 (1.62)	183 (1.49)	237 (1.68)	226 (1.61)
7	351 (2.08)	281 (2.21)	252 (2.05)	308 (2.18)	298 (2.13)
8	588 (3.49)	437 (3.44)	400 (3.26)	464 (3.29)	472 (3.37)
9	872 (5.18)	572 (4.50)	510 (4.16)	653 (4.63)	651 (4.66)
10	869 (5.16)	622 (4.89)	597 (4.87)	692 (4.90)	694 (4.97)
11	818 (4.86)	592 (4.66)	554 (4.52)	629 (4.46)	648 (4.63)
12	791 (4.70)	571 (4.49)	526 (4.29)	595 (4.22)	620 (4.44)
13	737 (4.38)	610 (4.80)	560 (4.56)	607 (4.30)	628 (4.49)
14	718 (4.26)	596 (4.69)	553 (4.51)	583 (4.13)	612 (4.38)
15	791 (4.69)	672 (5.28)	631 (5.14)	677 (4.79)	692 (4.95)
16	878 (5.22)	694 (5.46)	650 (5.30)	718 (5.09)	735 (5.26)
17	913 (5.42)	734 (5.77)	703 (5.73)	778 (5.52)	781 (5.59)
18	1071 (6.36)	764 (6.00)	713 (5.81)	930 (6.59)	869 (6.22)
19	995 (5.91)	687 (5.40)	666 (5.43)	837 (5.93)	796 (5.69)
20	900 (5.35)	609 (4.79)	608 (4.95)	764 (5.42)	720 (5.15)
21	811 (4.82)	580 (4.56)	596 (4.86)	720 (5.10)	676 (4.84)
22	770 (4.57)	569 (4.48)	575 (4.68)	638 (4.52)	637 (4.56)
23	720 (4.28)	557 (4.38)	590 (4.81)	622 (4.40)	622 (4.45)
24	646 (3.84)	544 (4.28)	578 (4.72)	602 (4.26)	593 (4.24)

Boston: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	602 (3.41)	511 (3.79)	533 (4.07)	565 (3.80)	553 (3.74)
2	505 (2.86)	419 (3.10)	413 (3.15)	481 (3.23)	454 (3.08)
3	450 (2.55)	355 (2.63)	342 (2.61)	405 (2.72)	388 (2.62)
4	448 (2.54)	317 (2.35)	314 (2.40)	381 (2.56)	365 (2.47)
5	313 (1.77)	226 (1.67)	216 (1.65)	258 (1.73)	253 (1.71)
6	278 (1.58)	208 (1.54)	189 (1.44)	238 (1.60)	228 (1.54)
7	384 (2.18)	299 (2.22)	267 (2.04)	322 (2.16)	318 (2.15)
8	692 (3.92)	520 (3.85)	476 (3.64)	535 (3.60)	555 (3.76)
9	894 (5.06)	631 (4.67)	583 (4.46)	685 (4.60)	697 (4.72)
10	949 (5.37)	655 (4.85)	625 (4.77)	736 (4.95)	740 (5.01)
11	848 (4.80)	645 (4.77)	620 (4.74)	677 (4.55)	697 (4.72)
12	822 (4.65)	660 (4.88)	619 (4.73)	681 (4.58)	695 (4.70)
13	840 (4.76)	680 (5.03)	615 (4.70)	680 (4.57)	703 (4.76)
14	810 (4.59)	648 (4.80)	605 (4.62)	634 (4.26)	674 (4.56)
15	855 (4.84)	673 (4.98)	643 (4.91)	683 (4.59)	713 (4.83)
16	930 (5.27)	741 (5.49)	718 (5.48)	764 (5.13)	788 (5.33)
17	1015 (5.75)	762 (5.64)	715 (5.46)	849 (5.70)	835 (5.65)
18	1051 (5.95)	764 (5.66)	739 (5.65)	898 (6.04)	862 (5.84)
19	1096 (6.20)	734 (5.43)	706 (5.39)	905 (6.08)	859 (5.81)
20	942 (5.34)	678 (5.02)	680 (5.20)	823 (5.53)	780 (5.28)
21	807 (4.57)	623 (4.61)	646 (4.94)	734 (4.93)	702 (4.75)
22	752 (4.26)	603 (4.46)	617 (4.71)	663 (4.45)	658 (4.46)
23	718 (4.06)	590 (4.37)	618 (4.72)	654 (4.40)	645 (4.36)
24	659 (3.73)	565 (4.18)	591 (4.51)	628 (4.22)	611 (4.13)

Boston: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	605 (3.40)	501 (3.73)	518 (3.98)	554 (3.69)	544 (3.67)
2	506 (2.84)	407 (3.03)	398 (3.06)	468 (3.11)	444 (3.00)
3	442 (2.48)	343 (2.55)	331 (2.55)	394 (2.62)	377 (2.55)
4	444 (2.49)	312 (2.32)	311 (2.39)	378 (2.51)	361 (2.43)
5	310 (1.74)	224 (1.66)	215 (1.65)	258 (1.71)	251 (1.70)
6	281 (1.58)	206 (1.54)	187 (1.43)	240 (1.60)	228 (1.54)
7	372 (2.09)	291 (2.16)	262 (2.02)	319 (2.12)	311 (2.10)
8	743 (4.18)	537 (4.00)	497 (3.81)	573 (3.81)	587 (3.96)
9	934 (5.25)	640 (4.77)	594 (4.57)	717 (4.77)	720 (4.86)
10	951 (5.34)	661 (4.92)	629 (4.83)	751 (4.99)	747 (5.04)
11	849 (4.77)	638 (4.75)	612 (4.70)	674 (4.48)	692 (4.68)
12	809 (4.54)	639 (4.76)	611 (4.69)	655 (4.35)	678 (4.58)
13	809 (4.55)	667 (4.97)	622 (4.78)	668 (4.44)	691 (4.67)
14	794 (4.46)	653 (4.86)	618 (4.74)	655 (4.36)	679 (4.59)
15	844 (4.74)	679 (5.05)	639 (4.91)	707 (4.70)	717 (4.84)
16	948 (5.32)	719 (5.35)	673 (5.17)	786 (5.23)	781 (5.27)
17	998 (5.61)	751 (5.59)	708 (5.44)	859 (5.71)	828 (5.59)
18	1128 (6.34)	798 (5.94)	749 (5.75)	972 (6.47)	911 (6.15)
19	1094 (6.14)	749 (5.58)	726 (5.58)	934 (6.21)	875 (5.91)
20	934 (5.24)	663 (4.93)	685 (5.26)	806 (5.36)	771 (5.21)
21	839 (4.71)	621 (4.62)	638 (4.90)	737 (4.90)	708 (4.78)
22	773 (4.34)	602 (4.48)	606 (4.66)	662 (4.41)	660 (4.46)
23	727 (4.08)	579 (4.31)	608 (4.67)	648 (4.31)	640 (4.32)
24	670 (3.76)	557 (4.14)	581 (4.46)	621 (4.13)	607 (4.10)

Boston: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	606 (3.38)	505 (3.72)	523 (3.98)	553 (3.63)	546 (3.65)
2	501 (2.79)	408 (3.01)	404 (3.07)	464 (3.05)	444 (2.97)
3	440 (2.45)	344 (2.54)	336 (2.56)	391 (2.57)	378 (2.52)
4	436 (2.43)	307 (2.26)	308 (2.34)	371 (2.44)	355 (2.37)
5	307 (1.71)	221 (1.63)	214 (1.63)	254 (1.67)	249 (1.66)
6	278 (1.55)	205 (1.51)	191 (1.45)	236 (1.55)	227 (1.52)
7	372 (2.07)	284 (2.10)	263 (2.00)	306 (2.01)	306 (2.05)
8	771 (4.30)	537 (3.96)	487 (3.71)	591 (3.88)	596 (3.98)
9	1001 (5.58)	664 (4.90)	601 (4.58)	768 (5.05)	758 (5.07)
10	929 (5.18)	647 (4.77)	615 (4.68)	741 (4.87)	732 (4.90)
11	843 (4.70)	647 (4.77)	614 (4.68)	684 (4.50)	697 (4.66)
12	828 (4.62)	654 (4.82)	616 (4.69)	682 (4.48)	694 (4.64)
13	852 (4.75)	696 (5.13)	636 (4.84)	704 (4.63)	721 (4.82)
14	821 (4.58)	669 (4.93)	627 (4.77)	674 (4.43)	697 (4.66)
15	836 (4.66)	690 (5.09)	674 (5.13)	691 (4.54)	722 (4.83)
16	918 (5.12)	730 (5.38)	688 (5.24)	788 (5.18)	781 (5.22)
17	940 (5.24)	746 (5.50)	711 (5.41)	829 (5.44)	806 (5.39)
18	1173 (6.54)	800 (5.90)	743 (5.66)	1010 (6.63)	931 (6.22)
19	1144 (6.38)	758 (5.59)	727 (5.54)	975 (6.40)	900 (6.02)
20	952 (5.31)	686 (5.06)	703 (5.35)	849 (5.58)	797 (5.33)
21	852 (4.75)	638 (4.71)	658 (5.01)	757 (4.97)	726 (4.85)
22	763 (4.26)	599 (4.41)	616 (4.69)	649 (4.27)	656 (4.39)
23	704 (3.92)	566 (4.17)	593 (4.52)	628 (4.12)	622 (4.16)
24	671 (3.74)	563 (4.15)	588 (4.48)	627 (4.12)	612 (4.09)

Boston: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	593 (3.30)	505 (3.79)	539 (4.16)	553 (3.68)	547 (3.70)
2	497 (2.76)	408 (3.07)	411 (3.17)	473 (3.15)	447 (3.02)
3	439 (2.44)	344 (2.59)	336 (2.59)	397 (2.64)	379 (2.56)
4	444 (2.47)	313 (2.35)	315 (2.43)	385 (2.56)	364 (2.46)
5	312 (1.74)	225 (1.69)	218 (1.68)	262 (1.74)	254 (1.71)
6	280 (1.56)	205 (1.54)	187 (1.44)	242 (1.61)	228 (1.54)
7	343 (1.91)	280 (2.10)	260 (2.00)	305 (2.03)	297 (2.00)
8	921 (5.13)	580 (4.36)	494 (3.81)	677 (4.50)	667 (4.50)
9	986 (5.49)	673 (5.06)	618 (4.77)	765 (5.09)	760 (5.13)
10	947 (5.27)	643 (4.83)	624 (4.81)	740 (4.92)	738 (4.98)
11	853 (4.75)	609 (4.57)	585 (4.51)	648 (4.31)	673 (4.54)
12	795 (4.42)	602 (4.52)	584 (4.50)	617 (4.11)	649 (4.38)
13	828 (4.61)	673 (5.06)	641 (4.95)	682 (4.53)	705 (4.76)
14	798 (4.44)	618 (4.64)	589 (4.54)	637 (4.23)	660 (4.46)
15	765 (4.26)	646 (4.86)	608 (4.69)	680 (4.52)	674 (4.55)
16	910 (5.07)	680 (5.11)	643 (4.96)	744 (4.95)	744 (5.02)
17	1030 (5.73)	710 (5.34)	660 (5.09)	811 (5.39)	802 (5.41)
18	1169 (6.51)	808 (6.07)	754 (5.81)	1019 (6.78)	936 (6.32)
19	1120 (6.24)	737 (5.54)	700 (5.40)	914 (6.08)	867 (5.86)
20	961 (5.35)	702 (5.28)	709 (5.47)	850 (5.66)	805 (5.44)
21	879 (4.89)	623 (4.68)	637 (4.91)	748 (4.98)	721 (4.87)
22	760 (4.23)	599 (4.50)	635 (4.89)	647 (4.31)	660 (4.46)
23	694 (3.86)	567 (4.26)	619 (4.77)	627 (4.17)	626 (4.23)
24	644 (3.58)	556 (4.18)	603 (4.65)	609 (4.05)	603 (4.07)

Boston: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	587 (3.31)	490 (3.67)	510 (3.92)	540 (3.61)	531 (3.60)
2	488 (2.75)	396 (2.96)	392 (3.01)	455 (3.04)	433 (2.93)
3	434 (2.44)	336 (2.52)	327 (2.52)	387 (2.58)	371 (2.51)
4	436 (2.46)	306 (2.29)	307 (2.36)	372 (2.48)	355 (2.40)
5	307 (1.73)	221 (1.65)	214 (1.65)	256 (1.71)	249 (1.69)
6	277 (1.56)	202 (1.51)	186 (1.43)	238 (1.59)	226 (1.53)
7	361 (2.03)	279 (2.08)	252 (1.94)	309 (2.06)	300 (2.03)
8	779 (4.39)	537 (4.01)	476 (3.66)	596 (3.98)	596 (4.04)
9	978 (5.51)	640 (4.79)	571 (4.39)	743 (4.96)	732 (4.96)
10	945 (5.32)	643 (4.81)	613 (4.72)	740 (4.94)	734 (4.97)
11	850 (4.79)	636 (4.75)	614 (4.72)	674 (4.50)	693 (4.69)
12	824 (4.64)	647 (4.84)	616 (4.74)	673 (4.49)	689 (4.67)
13	818 (4.61)	676 (5.06)	627 (4.82)	679 (4.53)	699 (4.74)
14	784 (4.42)	645 (4.82)	613 (4.71)	644 (4.30)	671 (4.54)
15	863 (4.86)	690 (5.16)	657 (5.05)	721 (4.81)	732 (4.96)
16	1014 (5.71)	765 (5.72)	705 (5.42)	845 (5.64)	831 (5.63)
17	1001 (5.64)	765 (5.72)	728 (5.60)	861 (5.75)	838 (5.68)
18	1106 (6.24)	785 (5.87)	747 (5.75)	949 (6.34)	896 (6.07)
19	1117 (6.29)	751 (5.62)	730 (5.61)	936 (6.25)	883 (5.98)
20	928 (5.23)	675 (5.05)	714 (5.49)	804 (5.37)	780 (5.28)
21	802 (4.52)	614 (4.59)	646 (4.96)	716 (4.78)	694 (4.70)
22	722 (4.07)	574 (4.29)	594 (4.57)	625 (4.18)	629 (4.26)
23	687 (3.87)	557 (4.17)	593 (4.56)	618 (4.12)	614 (4.16)
24	638 (3.60)	541 (4.05)	574 (4.42)	598 (3.99)	588 (3.98)

Boston: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	704 (3.72)	570 (4.08)	586 (4.37)	634 (4.03)	623 (4.02)
2	585 (3.10)	462 (3.31)	438 (3.27)	537 (3.41)	505 (3.26)
3	503 (2.66)	387 (2.77)	365 (2.72)	446 (2.83)	425 (2.74)
4	471 (2.49)	333 (2.38)	323 (2.41)	400 (2.54)	382 (2.46)
5	315 (1.67)	230 (1.65)	219 (1.63)	262 (1.66)	256 (1.65)
6	278 (1.47)	206 (1.48)	187 (1.39)	237 (1.50)	227 (1.46)
7	390 (2.06)	289 (2.07)	258 (1.92)	324 (2.06)	315 (2.03)
8	654 (3.46)	479 (3.43)	479 (3.57)	493 (3.13)	526 (3.39)
9	868 (4.59)	641 (4.59)	675 (5.03)	635 (4.03)	704 (4.54)
10	1010 (5.34)	706 (5.06)	700 (5.22)	777 (4.93)	797 (5.15)
11	868 (4.59)	696 (4.99)	687 (5.12)	722 (4.58)	743 (4.79)
12	839 (4.44)	652 (4.68)	587 (4.38)	683 (4.34)	690 (4.45)
13	886 (4.69)	702 (5.03)	662 (4.93)	718 (4.56)	741 (4.79)
14	857 (4.53)	662 (4.74)	629 (4.69)	685 (4.35)	707 (4.57)
15	872 (4.61)	662 (4.74)	613 (4.58)	706 (4.48)	713 (4.60)
16	1126 (5.96)	776 (5.56)	680 (5.07)	901 (5.72)	870 (5.62)
17	1167 (6.17)	832 (5.97)	762 (5.69)	997 (6.33)	939 (6.06)
18	1140 (6.03)	775 (5.55)	737 (5.50)	928 (5.89)	894 (5.77)
19	1175 (6.22)	713 (5.11)	659 (4.92)	920 (5.84)	866 (5.59)
20	1004 (5.31)	685 (4.91)	647 (4.83)	870 (5.52)	801 (5.17)
21	861 (4.56)	618 (4.43)	616 (4.60)	761 (4.83)	713 (4.61)
22	801 (4.24)	637 (4.56)	677 (5.05)	703 (4.46)	704 (4.55)
23	769 (4.07)	619 (4.44)	618 (4.61)	706 (4.49)	678 (4.38)
24	759 (4.01)	621 (4.45)	602 (4.49)	707 (4.49)	672 (4.34)

Boston: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	614 (3.22)	516 (3.60)	546 (3.98)	564 (3.53)	560 (3.55)
2	515 (2.70)	420 (2.94)	420 (3.06)	477 (2.99)	458 (2.91)
3	452 (2.37)	351 (2.46)	340 (2.48)	399 (2.50)	386 (2.45)
4	455 (2.39)	319 (2.23)	317 (2.31)	386 (2.41)	369 (2.34)
5	318 (1.67)	228 (1.59)	218 (1.59)	261 (1.64)	256 (1.63)
6	285 (1.50)	213 (1.49)	196 (1.43)	244 (1.53)	234 (1.49)
7	418 (2.20)	332 (2.32)	300 (2.18)	356 (2.23)	351 (2.23)
8	844 (4.43)	607 (4.24)	563 (4.10)	640 (4.01)	662 (4.21)
9	1050 (5.51)	713 (4.98)	660 (4.81)	798 (4.99)	804 (5.11)
10	1051 (5.52)	716 (5.01)	658 (4.80)	808 (5.06)	807 (5.13)
11	942 (4.94)	686 (4.79)	630 (4.59)	733 (4.59)	747 (4.74)
12	901 (4.73)	691 (4.83)	638 (4.65)	720 (4.51)	737 (4.68)
13	935 (4.91)	725 (5.07)	647 (4.71)	744 (4.66)	762 (4.84)
14	908 (4.77)	706 (4.93)	646 (4.71)	721 (4.52)	745 (4.73)
15	900 (4.73)	725 (5.07)	675 (4.92)	755 (4.73)	763 (4.85)
16	975 (5.12)	779 (5.44)	727 (5.30)	838 (5.25)	829 (5.26)
17	1116 (5.86)	837 (5.85)	758 (5.52)	963 (6.03)	918 (5.83)
18	1195 (6.27)	875 (6.11)	821 (5.98)	1058 (6.63)	986 (6.26)
19	1121 (5.88)	765 (5.35)	741 (5.40)	955 (5.98)	895 (5.68)
20	950 (4.99)	671 (4.69)	692 (5.04)	812 (5.08)	781 (4.96)
21	857 (4.50)	636 (4.44)	645 (4.70)	758 (4.75)	723 (4.59)
22	809 (4.25)	629 (4.40)	642 (4.68)	689 (4.31)	692 (4.39)
23	745 (3.91)	591 (4.13)	623 (4.54)	653 (4.09)	653 (4.14)
24	693 (3.64)	580 (4.05)	618 (4.50)	638 (3.99)	632 (4.01)

Boston: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	602 (3.47)	505 (3.88)	532 (4.23)	551 (3.79)	547 (3.81)
2	504 (2.90)	409 (3.14)	405 (3.23)	466 (3.20)	446 (3.10)
3	450 (2.59)	348 (2.67)	336 (2.67)	394 (2.71)	382 (2.66)
4	453 (2.61)	318 (2.44)	314 (2.50)	382 (2.63)	367 (2.55)
5	314 (1.81)	226 (1.73)	215 (1.71)	258 (1.77)	253 (1.76)
6	281 (1.62)	205 (1.57)	183 (1.46)	237 (1.63)	226 (1.58)
7	345 (1.99)	264 (2.03)	237 (1.88)	289 (1.99)	283 (1.97)
8	628 (3.61)	458 (3.51)	419 (3.34)	488 (3.36)	498 (3.46)
9	841 (4.84)	594 (4.56)	545 (4.33)	665 (4.57)	660 (4.60)
10	931 (5.36)	641 (4.92)	607 (4.83)	738 (5.08)	728 (5.07)
11	848 (4.88)	616 (4.73)	581 (4.62)	652 (4.48)	674 (4.69)
12	819 (4.71)	621 (4.77)	578 (4.60)	646 (4.44)	665 (4.63)
13	796 (4.58)	636 (4.88)	585 (4.65)	640 (4.40)	664 (4.62)
14	800 (4.61)	636 (4.88)	592 (4.71)	640 (4.40)	666 (4.64)
15	822 (4.73)	670 (5.14)	633 (5.03)	666 (4.58)	697 (4.85)
16	891 (5.13)	704 (5.40)	660 (5.25)	739 (5.08)	748 (5.21)
17	1007 (5.79)	732 (5.62)	674 (5.36)	850 (5.85)	815 (5.67)
18	1013 (5.83)	720 (5.53)	675 (5.37)	874 (6.01)	820 (5.71)
19	1048 (6.04)	709 (5.44)	687 (5.46)	882 (6.07)	831 (5.78)
20	936 (5.39)	653 (5.01)	665 (5.29)	798 (5.49)	762 (5.31)
21	848 (4.88)	618 (4.75)	632 (5.03)	746 (5.13)	710 (4.95)
22	783 (4.51)	617 (4.73)	629 (5.01)	673 (4.63)	675 (4.70)
23	735 (4.23)	575 (4.41)	606 (4.82)	648 (4.46)	641 (4.46)
24	675 (3.88)	554 (4.25)	581 (4.62)	618 (4.25)	607 (4.22)

Boston: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	614 (3.37)	515 (3.82)	540 (4.14)	562 (3.73)	558 (3.73)
2	510 (2.80)	416 (3.09)	413 (3.17)	474 (3.14)	453 (3.03)
3	451 (2.48)	355 (2.63)	345 (2.64)	399 (2.65)	387 (2.59)
4	455 (2.50)	320 (2.37)	316 (2.42)	385 (2.55)	369 (2.47)
5	314 (1.73)	226 (1.68)	216 (1.66)	259 (1.72)	254 (1.70)
6	283 (1.55)	208 (1.54)	186 (1.42)	240 (1.59)	229 (1.53)
7	368 (2.02)	286 (2.12)	261 (2.00)	307 (2.04)	305 (2.04)
8	765 (4.20)	537 (3.98)	496 (3.80)	573 (3.80)	592 (3.96)
9	975 (5.35)	646 (4.79)	592 (4.54)	740 (4.91)	737 (4.93)
10	950 (5.22)	642 (4.76)	602 (4.62)	738 (4.89)	732 (4.90)
11	845 (4.64)	613 (4.54)	579 (4.44)	654 (4.34)	672 (4.50)
12	823 (4.52)	614 (4.55)	579 (4.44)	638 (4.23)	663 (4.44)
13	854 (4.69)	666 (4.93)	610 (4.68)	670 (4.44)	699 (4.68)
14	836 (4.59)	647 (4.80)	596 (4.57)	668 (4.43)	686 (4.59)
15	861 (4.72)	652 (4.83)	610 (4.68)	687 (4.55)	702 (4.70)
16	918 (5.04)	694 (5.15)	660 (5.06)	748 (4.96)	754 (5.05)
17	1057 (5.80)	758 (5.62)	698 (5.35)	864 (5.73)	843 (5.64)
18	1215 (6.67)	842 (6.24)	789 (6.05)	1009 (6.69)	963 (6.44)
19	1139 (6.25)	762 (5.65)	738 (5.66)	942 (6.25)	894 (5.98)
20	951 (5.22)	663 (4.92)	673 (5.16)	815 (5.40)	775 (5.19)
21	861 (4.73)	639 (4.74)	658 (5.05)	759 (5.03)	729 (4.88)
22	778 (4.27)	617 (4.57)	630 (4.83)	667 (4.42)	672 (4.50)
23	730 (4.01)	598 (4.43)	645 (4.95)	656 (4.35)	657 (4.40)
24	665 (3.65)	572 (4.24)	608 (4.66)	625 (4.14)	617 (4.13)

Boston: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	583 (3.42)	499 (3.72)	526 (3.98)	534 (3.73)	535 (3.69)
2	487 (2.85)	408 (3.05)	411 (3.10)	452 (3.15)	439 (3.03)
3	432 (2.53)	347 (2.59)	343 (2.59)	383 (2.67)	376 (2.60)
4	436 (2.56)	318 (2.37)	324 (2.45)	370 (2.59)	362 (2.50)
5	307 (1.80)	229 (1.71)	225 (1.70)	253 (1.77)	253 (1.75)
6	276 (1.62)	209 (1.56)	193 (1.46)	234 (1.64)	228 (1.57)
7	336 (1.97)	271 (2.03)	251 (1.90)	286 (2.00)	286 (1.97)
8	721 (4.23)	520 (3.88)	450 (3.40)	563 (3.93)	563 (3.88)
9	872 (5.12)	578 (4.31)	551 (4.16)	623 (4.35)	655 (4.52)
10	953 (5.59)	604 (4.51)	577 (4.36)	725 (5.06)	714 (4.93)
11	938 (5.50)	694 (5.18)	640 (4.84)	730 (5.09)	750 (5.17)
12	900 (5.28)	714 (5.33)	678 (5.12)	674 (4.70)	741 (5.11)
13	953 (5.59)	736 (5.49)	673 (5.09)	714 (4.99)	768 (5.30)
14	814 (4.77)	653 (4.87)	619 (4.68)	641 (4.48)	681 (4.70)
15	762 (4.47)	690 (5.15)	688 (5.20)	656 (4.58)	699 (4.82)
16	825 (4.84)	743 (5.54)	737 (5.57)	755 (5.27)	765 (5.28)
17	898 (5.27)	829 (6.19)	850 (6.42)	788 (5.50)	841 (5.80)
18	934 (5.48)	795 (5.93)	817 (6.18)	842 (5.88)	847 (5.84)
19	979 (5.74)	716 (5.34)	723 (5.46)	826 (5.77)	810 (5.59)
20	844 (4.95)	587 (4.38)	601 (4.54)	717 (5.00)	686 (4.74)
21	765 (4.49)	580 (4.33)	620 (4.69)	715 (4.99)	670 (4.62)
22	713 (4.18)	575 (4.29)	576 (4.36)	638 (4.45)	625 (4.31)
23	686 (4.03)	560 (4.18)	587 (4.44)	617 (4.31)	612 (4.23)
24	634 (3.72)	542 (4.04)	573 (4.33)	588 (4.10)	584 (4.03)

Boston: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	602 (3.15)	498 (3.52)	514 (3.82)	545 (3.39)	539 (3.44)
2	493 (2.58)	402 (2.84)	398 (2.95)	457 (2.85)	437 (2.78)
3	435 (2.28)	340 (2.40)	330 (2.45)	389 (2.42)	373 (2.38)
4	437 (2.29)	308 (2.17)	310 (2.30)	373 (2.32)	357 (2.27)
5	309 (1.62)	222 (1.57)	215 (1.60)	256 (1.59)	250 (1.60)
6	283 (1.48)	212 (1.50)	194 (1.44)	242 (1.51)	233 (1.48)
7	470 (2.46)	354 (2.50)	312 (2.32)	386 (2.41)	380 (2.43)
8	917 (4.79)	655 (4.62)	609 (4.52)	709 (4.42)	722 (4.60)
9	1073 (5.61)	720 (5.08)	670 (4.97)	828 (5.16)	822 (5.24)
10	1037 (5.42)	719 (5.07)	668 (4.96)	832 (5.18)	813 (5.18)
11	918 (4.80)	692 (4.88)	638 (4.74)	747 (4.65)	748 (4.77)
12	884 (4.62)	695 (4.90)	627 (4.65)	731 (4.56)	734 (4.68)
13	907 (4.74)	735 (5.19)	669 (4.97)	745 (4.64)	763 (4.87)
14	905 (4.73)	695 (4.91)	630 (4.67)	724 (4.52)	738 (4.70)
15	881 (4.60)	679 (4.79)	608 (4.51)	723 (4.50)	722 (4.60)
16	928 (4.85)	713 (5.03)	647 (4.80)	781 (4.87)	767 (4.89)
17	1085 (5.67)	812 (5.73)	757 (5.61)	933 (5.81)	896 (5.71)
18	1369 (7.15)	888 (6.27)	826 (6.13)	1144 (7.13)	1056 (6.73)
19	1162 (6.08)	760 (5.36)	714 (5.30)	981 (6.11)	903 (5.76)
20	931 (4.87)	658 (4.65)	672 (4.98)	811 (5.05)	767 (4.89)
21	871 (4.55)	653 (4.61)	676 (5.02)	767 (4.78)	741 (4.72)
22	823 (4.30)	621 (4.38)	619 (4.60)	680 (4.24)	685 (4.37)
23	739 (3.86)	580 (4.09)	592 (4.39)	645 (4.02)	639 (4.07)
24	671 (3.51)	558 (3.94)	577 (4.28)	618 (3.85)	606 (3.86)

Boston: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	583 (3.42)	492 (3.92)	516 (4.25)	534 (3.79)	531 (3.81)
2	486 (2.85)	402 (3.20)	401 (3.30)	452 (3.21)	435 (3.12)
3	430 (2.52)	339 (2.70)	332 (2.74)	382 (2.71)	371 (2.66)
4	433 (2.54)	307 (2.45)	309 (2.55)	369 (2.61)	354 (2.54)
5	306 (1.79)	222 (1.77)	217 (1.78)	253 (1.79)	249 (1.79)
6	276 (1.62)	205 (1.63)	188 (1.55)	234 (1.66)	226 (1.62)
7	341 (2.00)	269 (2.14)	248 (2.04)	289 (2.05)	287 (2.05)
8	609 (3.57)	443 (3.53)	416 (3.43)	461 (3.27)	482 (3.45)
9	844 (4.95)	561 (4.47)	524 (4.32)	630 (4.46)	639 (4.58)
10	915 (5.37)	612 (4.87)	578 (4.76)	703 (4.98)	701 (5.03)
11	848 (4.98)	600 (4.78)	557 (4.59)	657 (4.65)	665 (4.77)
12	856 (5.02)	631 (5.02)	584 (4.81)	669 (4.74)	684 (4.91)
13	831 (4.88)	622 (4.95)	562 (4.62)	640 (4.53)	663 (4.75)
14	820 (4.81)	619 (4.93)	562 (4.63)	646 (4.58)	661 (4.74)
15	866 (5.08)	641 (5.11)	590 (4.86)	696 (4.93)	698 (5.00)
16	886 (5.20)	648 (5.16)	622 (5.12)	702 (4.97)	714 (5.12)
17	971 (5.70)	672 (5.35)	629 (5.18)	753 (5.34)	755 (5.41)
18	978 (5.74)	677 (5.39)	641 (5.28)	845 (5.99)	785 (5.62)
19	1014 (5.95)	685 (5.46)	668 (5.50)	859 (6.09)	806 (5.78)
20	906 (5.32)	640 (5.10)	656 (5.40)	796 (5.64)	749 (5.37)
21	786 (4.61)	605 (4.82)	640 (5.27)	703 (4.98)	683 (4.90)
22	727 (4.27)	579 (4.61)	579 (4.76)	623 (4.42)	627 (4.49)
23	691 (4.05)	544 (4.33)	561 (4.62)	611 (4.33)	601 (4.31)
24	638 (3.75)	541 (4.31)	564 (4.64)	602 (4.26)	586 (4.20)

Boston: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	597 (3.35)	494 (3.72)	513 (4.00)	554 (3.72)	539 (3.67)
2	495 (2.78)	402 (3.02)	395 (3.08)	468 (3.14)	440 (2.99)
3	439 (2.46)	342 (2.57)	330 (2.57)	396 (2.66)	376 (2.56)
4	437 (2.45)	306 (2.30)	307 (2.40)	372 (2.50)	355 (2.42)
5	307 (1.72)	219 (1.65)	212 (1.65)	253 (1.70)	247 (1.68)
6	290 (1.62)	206 (1.55)	184 (1.43)	243 (1.63)	230 (1.57)
7	416 (2.33)	318 (2.39)	283 (2.21)	343 (2.31)	340 (2.31)
8	789 (4.42)	575 (4.32)	532 (4.15)	590 (3.96)	621 (4.22)
9	925 (5.19)	654 (4.92)	619 (4.83)	702 (4.71)	724 (4.93)
10	943 (5.28)	655 (4.92)	631 (4.92)	729 (4.89)	739 (5.02)
11	873 (4.89)	626 (4.71)	592 (4.62)	669 (4.49)	689 (4.69)
12	809 (4.53)	615 (4.62)	580 (4.52)	638 (4.29)	660 (4.49)
13	864 (4.84)	685 (5.15)	624 (4.87)	696 (4.67)	716 (4.87)
14	859 (4.82)	671 (5.04)	627 (4.89)	689 (4.62)	711 (4.83)
15	856 (4.80)	650 (4.89)	600 (4.68)	699 (4.69)	700 (4.76)
16	910 (5.10)	704 (5.29)	674 (5.26)	745 (5.00)	758 (5.15)
17	1030 (5.78)	743 (5.59)	701 (5.47)	814 (5.47)	821 (5.59)
18	1081 (6.06)	745 (5.60)	673 (5.25)	920 (6.17)	854 (5.81)
19	1066 (5.97)	728 (5.48)	691 (5.39)	910 (6.11)	848 (5.77)
20	897 (5.03)	639 (4.81)	649 (5.06)	790 (5.31)	743 (5.06)
21	812 (4.55)	607 (4.56)	623 (4.86)	748 (5.02)	697 (4.74)
22	789 (4.42)	604 (4.54)	612 (4.77)	684 (4.59)	672 (4.57)
23	704 (3.95)	570 (4.29)	603 (4.70)	633 (4.25)	627 (4.27)
24	651 (3.65)	542 (4.08)	567 (4.42)	611 (4.10)	593 (4.03)

Boston: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	586 (3.37)	487 (3.66)	503 (3.85)	541 (3.65)	529 (3.61)
2	486 (2.80)	395 (2.97)	389 (2.98)	452 (3.05)	430 (2.94)
3	432 (2.48)	336 (2.52)	326 (2.49)	383 (2.58)	369 (2.52)
4	436 (2.51)	308 (2.31)	308 (2.35)	370 (2.50)	355 (2.43)
5	306 (1.76)	222 (1.67)	214 (1.63)	253 (1.71)	248 (1.70)
6	289 (1.66)	206 (1.55)	183 (1.40)	240 (1.62)	229 (1.57)
7	390 (2.24)	284 (2.13)	252 (1.93)	317 (2.14)	310 (2.12)
8	613 (3.52)	483 (3.63)	466 (3.56)	509 (3.43)	517 (3.53)
9	929 (5.34)	662 (4.97)	615 (4.71)	745 (5.02)	737 (5.03)
10	1011 (5.81)	700 (5.26)	667 (5.10)	818 (5.51)	798 (5.45)
11	912 (5.24)	668 (5.02)	653 (4.99)	720 (4.86)	738 (5.04)
12	882 (5.07)	686 (5.16)	657 (5.03)	688 (4.64)	728 (4.97)
13	797 (4.58)	656 (4.93)	618 (4.73)	632 (4.26)	675 (4.61)
14	902 (5.18)	693 (5.21)	657 (5.02)	697 (4.70)	736 (5.03)
15	935 (5.38)	731 (5.49)	730 (5.59)	764 (5.15)	789 (5.39)
16	942 (5.42)	741 (5.57)	741 (5.67)	817 (5.51)	810 (5.53)
17	1069 (6.15)	778 (5.85)	718 (5.49)	923 (6.22)	871 (5.95)
18	914 (5.25)	691 (5.19)	677 (5.18)	824 (5.55)	776 (5.30)
19	943 (5.42)	669 (5.03)	645 (4.94)	822 (5.54)	769 (5.25)
20	860 (4.95)	651 (4.89)	683 (5.22)	802 (5.41)	749 (5.11)
21	715 (4.11)	562 (4.23)	603 (4.61)	640 (4.31)	630 (4.30)
22	705 (4.05)	570 (4.28)	588 (4.50)	608 (4.10)	617 (4.22)
23	697 (4.01)	583 (4.38)	618 (4.73)	642 (4.33)	635 (4.34)
24	643 (3.70)	544 (4.09)	565 (4.32)	625 (4.22)	594 (4.06)

Boston: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	585 (3.49)	482 (3.86)	501 (4.13)	534 (3.83)	525 (3.80)
2	488 (2.91)	396 (3.17)	391 (3.22)	453 (3.25)	432 (3.12)
3	433 (2.59)	337 (2.70)	327 (2.70)	384 (2.75)	370 (2.68)
4	438 (2.62)	310 (2.48)	309 (2.55)	372 (2.66)	357 (2.58)
5	307 (1.83)	223 (1.78)	214 (1.76)	253 (1.82)	249 (1.80)
6	276 (1.65)	204 (1.63)	183 (1.51)	234 (1.68)	224 (1.62)
7	335 (2.00)	267 (2.13)	247 (2.04)	286 (2.05)	284 (2.05)
8	620 (3.70)	449 (3.59)	429 (3.53)	465 (3.33)	490 (3.54)
9	853 (5.09)	569 (4.55)	517 (4.26)	636 (4.55)	643 (4.65)
10	889 (5.31)	617 (4.94)	588 (4.85)	705 (5.05)	699 (5.06)
11	840 (5.01)	628 (5.02)	584 (4.81)	679 (4.86)	682 (4.93)
12	818 (4.89)	617 (4.93)	557 (4.59)	658 (4.71)	662 (4.79)
13	891 (5.32)	710 (5.67)	610 (5.03)	754 (5.40)	740 (5.36)
14	844 (5.04)	678 (5.42)	610 (5.03)	702 (5.03)	708 (5.12)
15	820 (4.90)	641 (5.12)	607 (5.01)	665 (4.76)	683 (4.94)
16	865 (5.17)	648 (5.18)	630 (5.19)	701 (5.02)	710 (5.14)
17	854 (5.10)	630 (5.04)	614 (5.06)	673 (4.82)	692 (5.01)
18	896 (5.35)	651 (5.21)	673 (5.55)	749 (5.36)	742 (5.36)
19	1026 (6.13)	662 (5.30)	655 (5.40)	838 (6.00)	795 (5.75)
20	848 (5.06)	597 (4.77)	619 (5.10)	726 (5.20)	697 (5.04)
21	767 (4.58)	567 (4.53)	583 (4.80)	685 (4.90)	650 (4.70)
22	716 (4.28)	550 (4.40)	562 (4.63)	607 (4.35)	609 (4.40)
23	707 (4.22)	552 (4.42)	578 (4.76)	620 (4.44)	614 (4.44)
24	629 (3.76)	521 (4.16)	542 (4.47)	585 (4.19)	569 (4.12)

Boston: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	587 (2.68)	484 (2.96)	500 (3.15)	540 (2.98)	527 (2.92)
2	511 (2.33)	401 (2.45)	388 (2.45)	462 (2.55)	440 (2.44)
3	433 (1.97)	337 (2.06)	327 (2.06)	389 (2.15)	371 (2.06)
4	434 (1.98)	305 (1.87)	306 (1.93)	370 (2.04)	354 (1.96)
5	306 (1.40)	220 (1.34)	213 (1.34)	253 (1.40)	248 (1.37)
6	281 (1.28)	207 (1.26)	188 (1.18)	245 (1.35)	230 (1.27)
7	585 (2.67)	376 (2.30)	291 (1.83)	465 (2.57)	429 (2.38)
8	1024 (4.67)	808 (4.94)	774 (4.88)	808 (4.47)	853 (4.73)
9	1489 (6.79)	992 (6.07)	930 (5.86)	1085 (5.99)	1122 (6.22)
10	1299 (5.92)	952 (5.82)	909 (5.73)	970 (5.36)	1032 (5.72)
11	1215 (5.54)	908 (5.55)	879 (5.54)	910 (5.03)	977 (5.41)
12	1151 (5.25)	936 (5.72)	902 (5.68)	854 (4.72)	960 (5.32)
13	1187 (5.41)	892 (5.45)	811 (5.11)	901 (4.98)	946 (5.24)
14	1185 (5.40)	867 (5.30)	792 (4.99)	885 (4.89)	931 (5.16)
15	1094 (4.99)	875 (5.35)	847 (5.34)	915 (5.05)	932 (5.16)
16	1191 (5.43)	948 (5.80)	937 (5.90)	1002 (5.53)	1019 (5.64)
17	1370 (6.25)	997 (6.09)	915 (5.77)	1221 (6.74)	1125 (6.23)
18	1148 (5.23)	942 (5.76)	925 (5.83)	1117 (6.17)	1033 (5.72)
19	1087 (4.96)	879 (5.37)	948 (5.98)	1006 (5.56)	980 (5.43)
20	972 (4.43)	676 (4.13)	747 (4.71)	832 (4.60)	806 (4.47)
21	904 (4.12)	607 (3.71)	597 (3.76)	796 (4.40)	725 (4.02)
22	921 (4.20)	617 (3.77)	602 (3.79)	737 (4.07)	718 (3.98)
23	826 (3.77)	583 (3.57)	592 (3.73)	694 (3.83)	673 (3.73)
24	728 (3.32)	548 (3.35)	546 (3.44)	643 (3.55)	616 (3.41)

Boston: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	591 (3.13)	491 (3.50)	511 (3.79)	542 (3.41)	533 (3.43)
2	494 (2.62)	398 (2.84)	394 (2.92)	457 (2.87)	435 (2.80)
3	440 (2.33)	338 (2.41)	328 (2.43)	388 (2.45)	373 (2.40)
4	439 (2.33)	307 (2.19)	307 (2.27)	373 (2.35)	356 (2.29)
5	307 (1.63)	221 (1.58)	214 (1.59)	254 (1.60)	249 (1.60)
6	277 (1.47)	202 (1.44)	186 (1.38)	236 (1.49)	225 (1.45)
7	374 (1.98)	281 (2.01)	253 (1.88)	313 (1.97)	305 (1.96)
8	784 (4.15)	561 (4.01)	500 (3.70)	621 (3.91)	616 (3.96)
9	1100 (5.82)	697 (4.98)	600 (4.45)	827 (5.21)	805 (5.18)
10	979 (5.19)	660 (4.71)	624 (4.62)	763 (4.80)	756 (4.86)
11	863 (4.57)	650 (4.64)	629 (4.67)	690 (4.35)	707 (4.55)
12	860 (4.56)	670 (4.78)	633 (4.69)	703 (4.43)	716 (4.60)
13	834 (4.42)	707 (5.05)	666 (4.93)	707 (4.45)	728 (4.68)
14	875 (4.63)	692 (4.94)	648 (4.80)	703 (4.43)	729 (4.69)
15	975 (5.17)	758 (5.41)	713 (5.28)	811 (5.11)	814 (5.23)
16	1223 (6.48)	878 (6.27)	772 (5.72)	1008 (6.35)	969 (6.23)
17	1195 (6.33)	860 (6.14)	785 (5.82)	1014 (6.39)	963 (6.19)
18	1233 (6.53)	846 (6.04)	791 (5.86)	1051 (6.62)	979 (6.30)
19	1203 (6.37)	785 (5.61)	748 (5.54)	999 (6.29)	933 (6.00)
20	929 (4.92)	692 (4.94)	736 (5.45)	826 (5.20)	795 (5.11)
21	817 (4.33)	613 (4.38)	651 (4.83)	716 (4.51)	699 (4.49)
22	743 (3.93)	595 (4.25)	626 (4.64)	649 (4.09)	653 (4.20)
23	695 (3.68)	565 (4.03)	605 (4.49)	629 (3.96)	623 (4.01)
24	647 (3.43)	541 (3.86)	574 (4.25)	601 (3.78)	590 (3.80)

Boston: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	586 (3.54)	485 (3.81)	505 (4.06)	536 (3.83)	528 (3.79)
2	489 (2.96)	397 (3.11)	392 (3.15)	455 (3.25)	433 (3.11)
3	435 (2.63)	338 (2.65)	328 (2.63)	385 (2.75)	371 (2.67)
4	440 (2.66)	310 (2.43)	309 (2.49)	374 (2.67)	358 (2.57)
5	308 (1.86)	222 (1.74)	214 (1.72)	254 (1.82)	249 (1.79)
6	284 (1.72)	206 (1.62)	184 (1.48)	241 (1.72)	229 (1.64)
7	350 (2.12)	270 (2.12)	245 (1.97)	295 (2.10)	290 (2.08)
8	677 (4.10)	513 (4.03)	473 (3.80)	535 (3.82)	549 (3.94)
9	908 (5.49)	611 (4.79)	560 (4.50)	670 (4.79)	686 (4.93)
10	910 (5.50)	630 (4.94)	597 (4.80)	707 (5.05)	710 (5.10)
11	776 (4.69)	622 (4.88)	615 (4.94)	637 (4.55)	662 (4.75)
12	775 (4.69)	618 (4.85)	597 (4.79)	625 (4.46)	653 (4.69)
13	783 (4.74)	660 (5.18)	608 (4.88)	671 (4.79)	680 (4.89)
14	748 (4.53)	617 (4.84)	584 (4.69)	604 (4.31)	638 (4.58)
15	730 (4.42)	623 (4.89)	607 (4.88)	635 (4.54)	649 (4.66)
16	762 (4.61)	645 (5.06)	634 (5.10)	672 (4.80)	678 (4.87)
17	879 (5.32)	689 (5.41)	649 (5.21)	740 (5.28)	738 (5.30)
18	993 (6.01)	709 (5.57)	664 (5.34)	841 (6.01)	801 (5.76)
19	988 (5.98)	707 (5.55)	695 (5.58)	856 (6.12)	811 (5.83)
20	888 (5.37)	634 (4.98)	655 (5.26)	772 (5.52)	737 (5.29)
21	776 (4.69)	583 (4.57)	610 (4.90)	686 (4.90)	664 (4.77)
22	720 (4.35)	566 (4.44)	574 (4.61)	614 (4.39)	618 (4.44)
23	683 (4.13)	550 (4.31)	585 (4.70)	604 (4.31)	605 (4.35)
24	646 (3.90)	537 (4.22)	562 (4.52)	594 (4.24)	585 (4.20)

Boston: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	603 (3.33)	503 (3.72)	526 (4.03)	553 (3.65)	546 (3.65)
2	502 (2.77)	408 (3.02)	404 (3.10)	466 (3.08)	445 (2.98)
3	444 (2.45)	346 (2.56)	335 (2.57)	394 (2.60)	379 (2.54)
4	446 (2.46)	313 (2.32)	312 (2.39)	378 (2.50)	362 (2.42)
5	311 (1.72)	224 (1.66)	216 (1.65)	257 (1.70)	252 (1.69)
6	282 (1.56)	207 (1.53)	188 (1.44)	240 (1.58)	229 (1.53)
7	384 (2.12)	295 (2.18)	265 (2.03)	323 (2.13)	316 (2.12)
8	762 (4.21)	539 (3.98)	489 (3.75)	581 (3.84)	592 (3.96)
9	963 (5.32)	648 (4.79)	591 (4.54)	734 (4.85)	733 (4.91)
10	973 (5.37)	663 (4.91)	625 (4.80)	758 (5.01)	754 (5.05)
11	878 (4.85)	645 (4.77)	608 (4.66)	687 (4.54)	704 (4.71)
12	849 (4.69)	650 (4.80)	608 (4.66)	676 (4.46)	695 (4.65)
13	868 (4.79)	684 (5.06)	621 (4.76)	695 (4.59)	717 (4.80)
14	849 (4.69)	664 (4.91)	614 (4.71)	679 (4.48)	701 (4.69)
15	867 (4.78)	681 (5.04)	640 (4.91)	710 (4.69)	724 (4.85)
16	942 (5.20)	728 (5.38)	685 (5.25)	786 (5.19)	785 (5.25)
17	1042 (5.75)	768 (5.68)	715 (5.48)	874 (5.77)	849 (5.68)
18	1134 (6.26)	796 (5.89)	747 (5.73)	969 (6.40)	910 (6.09)
19	1099 (6.07)	740 (5.47)	714 (5.48)	924 (6.10)	868 (5.81)
20	929 (5.13)	661 (4.89)	683 (5.24)	802 (5.30)	768 (5.14)
21	831 (4.59)	622 (4.60)	644 (4.94)	739 (4.88)	709 (4.74)
22	771 (4.26)	602 (4.45)	613 (4.70)	659 (4.36)	661 (4.42)
23	720 (3.98)	577 (4.26)	608 (4.66)	641 (4.23)	636 (4.26)
24	664 (3.67)	558 (4.12)	587 (4.50)	618 (4.08)	606 (4.06)

Chicago: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	422 (3.44)	446 (4.03)	475 (4.28)	427 (3.52)	443 (3.80)
2	354 (2.89)	413 (3.73)	421 (3.80)	426 (3.51)	404 (3.47)
3	331 (2.69)	366 (3.31)	354 (3.19)	370 (3.05)	355 (3.05)
4	279 (2.27)	329 (2.97)	314 (2.83)	341 (2.81)	316 (2.71)
5	270 (2.20)	291 (2.63)	281 (2.53)	309 (2.55)	288 (2.47)
6	277 (2.25)	281 (2.54)	276 (2.49)	301 (2.48)	284 (2.44)
7	373 (3.03)	358 (3.23)	352 (3.18)	370 (3.05)	363 (3.12)
8	612 (4.98)	559 (5.05)	572 (5.15)	626 (5.16)	592 (5.09)
9	721 (5.87)	614 (5.55)	632 (5.70)	740 (6.10)	677 (5.81)
10	683 (5.56)	576 (5.21)	600 (5.41)	710 (5.86)	642 (5.52)
11	614 (5.00)	518 (4.68)	533 (4.80)	625 (5.15)	572 (4.92)
12	549 (4.48)	498 (4.50)	486 (4.38)	555 (4.57)	522 (4.49)
13	552 (4.49)	489 (4.42)	476 (4.29)	513 (4.23)	507 (4.36)
14	534 (4.35)	463 (4.19)	457 (4.12)	462 (3.81)	479 (4.11)
15	570 (4.64)	467 (4.22)	469 (4.22)	481 (3.96)	496 (4.26)
16	604 (4.92)	493 (4.46)	492 (4.43)	535 (4.42)	531 (4.56)
17	612 (4.99)	511 (4.62)	501 (4.52)	559 (4.61)	546 (4.69)
18	680 (5.54)	542 (4.90)	510 (4.59)	632 (5.21)	591 (5.07)
19	664 (5.41)	512 (4.63)	480 (4.33)	612 (5.05)	567 (4.87)
20	606 (4.94)	479 (4.33)	478 (4.30)	564 (4.65)	531 (4.57)
21	558 (4.55)	462 (4.18)	480 (4.33)	549 (4.52)	512 (4.40)
22	494 (4.03)	464 (4.19)	480 (4.32)	507 (4.18)	486 (4.18)
23	471 (3.83)	469 (4.24)	483 (4.35)	469 (3.87)	473 (4.06)
24	446 (3.63)	463 (4.19)	492 (4.44)	445 (3.67)	462 (3.97)

Chicago: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	430 (3.69)	420 (4.07)	460 (4.26)	417 (3.60)	432 (3.89)
2	352 (3.01)	381 (3.69)	400 (3.71)	404 (3.49)	384 (3.47)
3	321 (2.75)	340 (3.30)	342 (3.17)	357 (3.08)	340 (3.07)
4	284 (2.43)	307 (2.97)	308 (2.86)	336 (2.90)	309 (2.79)
5	277 (2.37)	274 (2.65)	276 (2.55)	307 (2.66)	284 (2.56)
6	281 (2.41)	262 (2.54)	269 (2.49)	301 (2.60)	279 (2.51)
7	370 (3.17)	328 (3.18)	319 (2.96)	371 (3.20)	347 (3.13)
8	528 (4.53)	540 (5.23)	566 (5.25)	581 (5.02)	554 (5.00)
9	672 (5.76)	594 (5.75)	631 (5.85)	698 (6.03)	649 (5.85)
10	676 (5.79)	551 (5.34)	589 (5.46)	692 (5.98)	627 (5.66)
11	583 (5.00)	478 (4.63)	510 (4.72)	596 (5.15)	542 (4.89)
12	529 (4.53)	438 (4.24)	446 (4.13)	523 (4.52)	484 (4.36)
13	482 (4.13)	423 (4.10)	439 (4.07)	460 (3.97)	451 (4.07)
14	487 (4.17)	433 (4.19)	439 (4.07)	446 (3.86)	451 (4.07)
15	546 (4.68)	512 (4.97)	520 (4.81)	525 (4.54)	526 (4.74)
16	516 (4.42)	443 (4.30)	492 (4.56)	468 (4.05)	480 (4.33)
17	572 (4.90)	475 (4.60)	499 (4.62)	528 (4.56)	518 (4.67)
18	580 (4.97)	499 (4.83)	521 (4.83)	554 (4.78)	538 (4.85)
19	596 (5.11)	454 (4.40)	456 (4.22)	549 (4.74)	514 (4.63)
20	591 (5.06)	427 (4.13)	432 (4.00)	530 (4.58)	495 (4.46)
21	565 (4.84)	415 (4.02)	438 (4.06)	528 (4.57)	487 (4.39)
22	516 (4.42)	433 (4.19)	466 (4.32)	507 (4.38)	480 (4.33)
23	464 (3.98)	461 (4.47)	501 (4.64)	463 (4.00)	472 (4.26)
24	452 (3.87)	432 (4.19)	474 (4.39)	431 (3.72)	447 (4.03)

Chicago: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	427 (3.68)	430 (4.13)	445 (4.24)	430 (3.72)	433 (3.93)
2	362 (3.12)	399 (3.83)	391 (3.73)	421 (3.64)	393 (3.57)
3	331 (2.85)	360 (3.46)	347 (3.31)	371 (3.21)	352 (3.20)
4	289 (2.49)	325 (3.13)	316 (3.01)	349 (3.01)	320 (2.90)
5	283 (2.44)	283 (2.71)	280 (2.68)	315 (2.72)	290 (2.64)
6	282 (2.43)	272 (2.61)	272 (2.60)	303 (2.62)	282 (2.56)
7	373 (3.21)	325 (3.12)	310 (2.95)	361 (3.12)	342 (3.11)
8	515 (4.44)	506 (4.85)	517 (4.93)	543 (4.69)	520 (4.72)
9	657 (5.65)	577 (5.54)	600 (5.72)	670 (5.80)	626 (5.68)
10	683 (5.88)	565 (5.43)	592 (5.65)	698 (6.03)	634 (5.76)
11	600 (5.16)	496 (4.77)	523 (5.00)	621 (5.37)	560 (5.08)
12	543 (4.67)	456 (4.37)	453 (4.33)	542 (4.69)	498 (4.52)
13	501 (4.31)	437 (4.20)	437 (4.17)	464 (4.02)	460 (4.17)
14	497 (4.28)	434 (4.17)	428 (4.08)	442 (3.82)	450 (4.09)
15	546 (4.70)	498 (4.78)	494 (4.71)	509 (4.40)	511 (4.64)
16	510 (4.39)	439 (4.21)	476 (4.54)	467 (4.04)	473 (4.29)
17	554 (4.77)	469 (4.50)	477 (4.55)	520 (4.50)	505 (4.58)
18	560 (4.82)	492 (4.72)	490 (4.68)	546 (4.72)	522 (4.74)
19	568 (4.89)	455 (4.37)	434 (4.14)	540 (4.67)	499 (4.53)
20	587 (5.05)	425 (4.09)	409 (3.90)	527 (4.56)	487 (4.42)
21	546 (4.70)	419 (4.02)	416 (3.97)	518 (4.48)	474 (4.31)
22	502 (4.32)	448 (4.30)	446 (4.26)	501 (4.33)	474 (4.30)
23	457 (3.93)	464 (4.45)	474 (4.52)	467 (4.04)	465 (4.22)
24	443 (3.81)	440 (4.23)	453 (4.33)	440 (3.80)	444 (4.03)

Chicago: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	402 (3.56)	419 (4.15)	446 (4.43)	399 (3.58)	416 (3.91)
2	335 (2.97)	382 (3.79)	388 (3.86)	390 (3.50)	374 (3.52)
3	308 (2.73)	343 (3.40)	338 (3.36)	342 (3.07)	333 (3.13)
4	272 (2.41)	309 (3.07)	301 (2.99)	323 (2.90)	301 (2.83)
5	266 (2.36)	276 (2.73)	269 (2.68)	296 (2.66)	277 (2.60)
6	268 (2.38)	263 (2.61)	259 (2.58)	289 (2.60)	270 (2.54)
7	337 (2.98)	329 (3.26)	315 (3.13)	342 (3.07)	330 (3.11)
8	464 (4.11)	439 (4.35)	442 (4.39)	479 (4.30)	456 (4.29)
9	653 (5.79)	526 (5.21)	526 (5.23)	646 (5.80)	588 (5.52)
10	631 (5.60)	540 (5.35)	573 (5.69)	648 (5.82)	598 (5.62)
11	595 (5.27)	475 (4.70)	496 (4.93)	599 (5.38)	541 (5.09)
12	543 (4.81)	443 (4.39)	434 (4.31)	529 (4.75)	487 (4.58)
13	494 (4.38)	448 (4.43)	438 (4.35)	468 (4.20)	462 (4.34)
14	481 (4.26)	420 (4.16)	418 (4.16)	428 (3.84)	436 (4.10)
15	532 (4.71)	461 (4.57)	466 (4.63)	476 (4.27)	483 (4.54)
16	570 (5.06)	455 (4.51)	465 (4.62)	509 (4.57)	500 (4.69)
17	566 (5.02)	486 (4.81)	491 (4.88)	528 (4.74)	517 (4.86)
18	630 (5.58)	519 (5.14)	479 (4.76)	612 (5.49)	560 (5.26)
19	558 (4.95)	461 (4.57)	430 (4.28)	535 (4.81)	496 (4.66)
20	547 (4.85)	413 (4.09)	390 (3.88)	500 (4.49)	462 (4.34)
21	512 (4.54)	413 (4.09)	404 (4.02)	495 (4.44)	456 (4.28)
22	467 (4.14)	419 (4.15)	416 (4.13)	469 (4.21)	443 (4.16)
23	438 (3.88)	431 (4.27)	435 (4.33)	434 (3.90)	435 (4.08)
24	410 (3.64)	424 (4.20)	442 (4.39)	405 (3.64)	420 (3.95)

Chicago: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	416 (3.45)	442 (4.08)	464 (4.24)	423 (3.55)	436 (3.81)
2	352 (2.91)	413 (3.81)	417 (3.81)	423 (3.55)	401 (3.51)
3	327 (2.71)	367 (3.38)	354 (3.24)	370 (3.11)	355 (3.10)
4	279 (2.31)	324 (2.99)	313 (2.86)	338 (2.84)	314 (2.74)
5	274 (2.27)	287 (2.64)	280 (2.56)	309 (2.59)	287 (2.51)
6	276 (2.29)	278 (2.56)	276 (2.52)	299 (2.51)	282 (2.47)
7	378 (3.13)	353 (3.25)	346 (3.16)	371 (3.12)	362 (3.16)
8	557 (4.61)	520 (4.79)	543 (4.96)	567 (4.77)	547 (4.78)
9	681 (5.64)	583 (5.37)	612 (5.58)	688 (5.78)	641 (5.60)
10	691 (5.72)	566 (5.22)	596 (5.44)	703 (5.91)	639 (5.58)
11	617 (5.11)	521 (4.80)	541 (4.94)	632 (5.31)	577 (5.05)
12	556 (4.60)	512 (4.72)	497 (4.54)	573 (4.81)	534 (4.67)
13	564 (4.67)	484 (4.47)	473 (4.32)	522 (4.38)	511 (4.46)
14	543 (4.49)	447 (4.12)	453 (4.14)	459 (3.86)	475 (4.15)
15	576 (4.77)	458 (4.22)	472 (4.31)	479 (4.02)	496 (4.33)
16	598 (4.95)	486 (4.48)	511 (4.67)	525 (4.41)	530 (4.63)
17	625 (5.18)	502 (4.63)	496 (4.53)	566 (4.76)	547 (4.78)
18	625 (5.18)	514 (4.74)	496 (4.53)	586 (4.92)	555 (4.85)
19	646 (5.35)	489 (4.51)	462 (4.22)	591 (4.97)	547 (4.78)
20	597 (4.94)	467 (4.30)	459 (4.19)	557 (4.68)	520 (4.54)
21	529 (4.38)	450 (4.15)	466 (4.26)	523 (4.40)	492 (4.30)
22	475 (3.93)	461 (4.25)	468 (4.28)	494 (4.15)	474 (4.15)
23	458 (3.79)	470 (4.33)	478 (4.37)	466 (3.92)	468 (4.09)
24	434 (3.59)	457 (4.21)	477 (4.36)	438 (3.68)	451 (3.95)

Chicago: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	424 (3.47)	440 (4.02)	469 (4.23)	427 (3.53)	440 (3.80)
2	358 (2.93)	407 (3.72)	416 (3.75)	426 (3.53)	402 (3.47)
3	330 (2.70)	363 (3.31)	353 (3.18)	370 (3.07)	354 (3.06)
4	282 (2.31)	328 (2.99)	315 (2.85)	345 (2.86)	318 (2.74)
5	272 (2.23)	289 (2.64)	282 (2.54)	311 (2.57)	289 (2.49)
6	279 (2.29)	279 (2.55)	276 (2.49)	304 (2.52)	285 (2.46)
7	369 (3.02)	352 (3.21)	345 (3.11)	368 (3.05)	359 (3.10)
8	598 (4.90)	553 (5.04)	573 (5.17)	615 (5.09)	585 (5.05)
9	708 (5.80)	605 (5.52)	631 (5.70)	725 (6.01)	667 (5.77)
10	687 (5.63)	576 (5.26)	603 (5.44)	713 (5.91)	645 (5.57)
11	612 (5.02)	515 (4.70)	535 (4.83)	622 (5.16)	571 (4.93)
12	542 (4.44)	491 (4.48)	489 (4.41)	547 (4.54)	517 (4.47)
13	535 (4.38)	481 (4.38)	476 (4.30)	501 (4.15)	498 (4.30)
14	523 (4.28)	461 (4.20)	462 (4.17)	457 (3.79)	475 (4.11)
15	563 (4.62)	468 (4.27)	473 (4.27)	483 (4.00)	497 (4.29)
16	602 (4.93)	483 (4.41)	486 (4.38)	532 (4.40)	525 (4.54)
17	612 (5.01)	510 (4.65)	500 (4.51)	561 (4.65)	545 (4.71)
18	676 (5.54)	541 (4.93)	514 (4.63)	631 (5.23)	590 (5.10)
19	651 (5.33)	511 (4.66)	487 (4.40)	604 (5.01)	563 (4.86)
20	598 (4.90)	468 (4.27)	475 (4.29)	552 (4.57)	523 (4.52)
21	561 (4.60)	452 (4.13)	475 (4.28)	546 (4.52)	508 (4.39)
22	499 (4.09)	459 (4.19)	475 (4.29)	510 (4.23)	486 (4.20)
23	474 (3.89)	469 (4.28)	484 (4.37)	472 (3.91)	475 (4.10)
24	449 (3.68)	457 (4.17)	487 (4.39)	445 (3.69)	460 (3.97)

Chicago: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	426 (3.47)	448 (4.02)	483 (4.30)	432 (3.52)	447 (3.81)
2	353 (2.88)	412 (3.71)	427 (3.80)	426 (3.47)	405 (3.45)
3	330 (2.68)	366 (3.29)	359 (3.19)	371 (3.03)	357 (3.04)
4	276 (2.25)	325 (2.92)	314 (2.80)	340 (2.77)	314 (2.68)
5	267 (2.17)	287 (2.58)	281 (2.50)	307 (2.51)	286 (2.44)
6	275 (2.23)	279 (2.50)	280 (2.49)	300 (2.45)	283 (2.42)
7	369 (3.00)	346 (3.11)	349 (3.10)	362 (2.96)	356 (3.04)
8	619 (5.04)	563 (5.06)	572 (5.09)	639 (5.22)	598 (5.10)
9	757 (6.16)	634 (5.69)	644 (5.73)	782 (6.38)	704 (6.00)
10	666 (5.42)	570 (5.12)	593 (5.28)	703 (5.74)	633 (5.40)
11	606 (4.93)	521 (4.68)	537 (4.77)	626 (5.11)	572 (4.88)
12	550 (4.47)	501 (4.50)	490 (4.36)	562 (4.59)	526 (4.48)
13	560 (4.56)	497 (4.46)	484 (4.30)	528 (4.31)	517 (4.41)
14	539 (4.38)	470 (4.22)	467 (4.15)	471 (3.85)	486 (4.15)
15	556 (4.53)	476 (4.28)	497 (4.42)	476 (3.89)	501 (4.28)
16	581 (4.73)	497 (4.46)	499 (4.44)	528 (4.31)	526 (4.49)
17	578 (4.70)	510 (4.58)	507 (4.51)	541 (4.41)	534 (4.55)
18	706 (5.74)	552 (4.96)	512 (4.56)	658 (5.37)	606 (5.17)
19	689 (5.60)	525 (4.72)	491 (4.37)	636 (5.19)	585 (4.99)
20	611 (4.97)	493 (4.43)	492 (4.37)	580 (4.73)	544 (4.64)
21	568 (4.62)	473 (4.25)	497 (4.42)	563 (4.59)	525 (4.48)
22	495 (4.03)	460 (4.13)	487 (4.33)	507 (4.14)	487 (4.15)
23	462 (3.76)	458 (4.12)	479 (4.26)	462 (3.77)	465 (3.97)
24	452 (3.67)	468 (4.21)	501 (4.46)	452 (3.69)	468 (3.99)

Chicago: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	414 (3.35)	458 (4.10)	491 (4.42)	425 (3.46)	447 (3.82)
2	344 (2.79)	424 (3.80)	430 (3.87)	426 (3.47)	406 (3.46)
3	323 (2.62)	371 (3.33)	355 (3.19)	371 (3.02)	355 (3.03)
4	275 (2.23)	334 (2.99)	313 (2.82)	344 (2.80)	317 (2.70)
5	267 (2.16)	296 (2.65)	280 (2.52)	313 (2.55)	289 (2.47)
6	273 (2.21)	283 (2.54)	273 (2.46)	305 (2.48)	284 (2.42)
7	345 (2.80)	350 (3.14)	345 (3.10)	356 (2.89)	349 (2.98)
8	743 (6.02)	612 (5.48)	584 (5.25)	750 (6.10)	672 (5.73)
9	757 (6.14)	655 (5.87)	668 (6.01)	790 (6.43)	718 (6.12)
10	683 (5.54)	580 (5.20)	603 (5.42)	713 (5.80)	645 (5.50)
11	623 (5.05)	495 (4.44)	512 (4.60)	618 (5.03)	562 (4.79)
12	535 (4.34)	468 (4.19)	465 (4.18)	529 (4.31)	499 (4.26)
13	543 (4.40)	500 (4.48)	488 (4.39)	509 (4.14)	510 (4.35)
14	523 (4.24)	451 (4.04)	439 (3.95)	452 (3.68)	466 (3.97)
15	508 (4.12)	465 (4.17)	451 (4.06)	461 (3.75)	471 (4.02)
16	579 (4.69)	474 (4.24)	469 (4.22)	511 (4.16)	508 (4.33)
17	642 (5.20)	486 (4.36)	475 (4.27)	562 (4.57)	541 (4.61)
18	702 (5.69)	571 (5.11)	525 (4.72)	667 (5.43)	616 (5.26)
19	687 (5.57)	501 (4.49)	475 (4.27)	627 (5.10)	572 (4.88)
20	623 (5.05)	502 (4.50)	497 (4.47)	597 (4.86)	555 (4.73)
21	583 (4.73)	466 (4.18)	477 (4.29)	567 (4.62)	523 (4.46)
22	487 (3.95)	475 (4.25)	499 (4.49)	503 (4.09)	491 (4.19)
23	448 (3.63)	474 (4.24)	495 (4.45)	456 (3.71)	468 (3.99)
24	429 (3.48)	469 (4.20)	509 (4.58)	434 (3.53)	460 (3.93)

Chicago: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	409 (3.39)	426 (3.95)	460 (4.17)	409 (3.43)	426 (3.72)
2	341 (2.84)	392 (3.64)	407 (3.69)	405 (3.40)	387 (3.38)
3	319 (2.65)	352 (3.26)	348 (3.15)	357 (3.00)	344 (3.01)
4	275 (2.28)	318 (2.95)	312 (2.83)	334 (2.81)	310 (2.71)
5	268 (2.22)	283 (2.62)	280 (2.54)	305 (2.56)	284 (2.48)
6	272 (2.26)	271 (2.51)	272 (2.47)	298 (2.50)	278 (2.43)
7	350 (2.91)	332 (3.07)	326 (2.96)	351 (2.95)	340 (2.97)
8	606 (5.04)	538 (4.99)	541 (4.91)	622 (5.22)	577 (5.04)
9	728 (6.05)	596 (5.52)	604 (5.48)	740 (6.21)	667 (5.83)
10	677 (5.62)	561 (5.19)	590 (5.35)	699 (5.87)	632 (5.52)
11	611 (5.07)	512 (4.74)	538 (4.88)	623 (5.23)	571 (4.99)
12	550 (4.57)	497 (4.60)	495 (4.49)	560 (4.70)	526 (4.59)
13	540 (4.48)	484 (4.48)	484 (4.39)	510 (4.28)	504 (4.41)
14	514 (4.27)	453 (4.20)	464 (4.20)	454 (3.81)	471 (4.12)
15	571 (4.74)	477 (4.41)	489 (4.43)	495 (4.16)	508 (4.44)
16	639 (5.31)	510 (4.73)	513 (4.65)	570 (4.78)	558 (4.87)
17	613 (5.09)	515 (4.77)	519 (4.71)	565 (4.74)	553 (4.83)
18	658 (5.47)	532 (4.93)	516 (4.68)	616 (5.17)	580 (5.07)
19	664 (5.51)	508 (4.71)	492 (4.46)	608 (5.11)	568 (4.96)
20	589 (4.90)	472 (4.37)	495 (4.49)	544 (4.56)	525 (4.59)
21	528 (4.39)	445 (4.12)	479 (4.34)	516 (4.33)	492 (4.30)
22	458 (3.80)	435 (4.03)	460 (4.17)	472 (3.96)	456 (3.99)
23	438 (3.64)	446 (4.13)	468 (4.24)	441 (3.71)	448 (3.92)
24	420 (3.49)	439 (4.07)	476 (4.31)	418 (3.51)	439 (3.83)

Chicago: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	483 (3.79)	490 (4.38)	511 (4.59)	498 (3.97)	495 (4.17)
2	404 (3.17)	440 (3.94)	433 (3.90)	472 (3.76)	438 (3.68)
3	349 (2.74)	383 (3.43)	367 (3.30)	398 (3.17)	374 (3.14)
4	293 (2.30)	335 (3.00)	320 (2.88)	356 (2.83)	326 (2.74)
5	269 (2.11)	285 (2.55)	280 (2.52)	307 (2.44)	285 (2.40)
6	272 (2.13)	271 (2.43)	270 (2.43)	295 (2.35)	277 (2.33)
7	375 (2.95)	348 (3.11)	332 (2.99)	372 (2.96)	357 (3.00)
8	526 (4.13)	499 (4.47)	532 (4.79)	531 (4.23)	522 (4.39)
9	660 (5.18)	595 (5.32)	689 (6.20)	652 (5.19)	649 (5.46)
10	736 (5.78)	606 (5.43)	655 (5.89)	746 (5.94)	686 (5.77)
11	623 (4.89)	563 (5.04)	590 (5.31)	657 (5.23)	608 (5.12)
12	565 (4.43)	497 (4.44)	477 (4.29)	576 (4.58)	528 (4.44)
13	587 (4.61)	513 (4.59)	501 (4.51)	545 (4.34)	536 (4.51)
14	568 (4.46)	471 (4.22)	461 (4.15)	492 (3.92)	498 (4.19)
15	582 (4.57)	454 (4.07)	445 (4.00)	499 (3.97)	495 (4.16)
16	712 (5.59)	512 (4.58)	479 (4.31)	623 (4.96)	581 (4.89)
17	709 (5.57)	563 (5.04)	524 (4.71)	661 (5.26)	614 (5.16)
18	673 (5.28)	514 (4.60)	491 (4.42)	619 (4.93)	574 (4.83)
19	691 (5.43)	469 (4.20)	428 (3.85)	613 (4.88)	550 (4.62)
20	630 (4.95)	461 (4.12)	431 (3.88)	588 (4.68)	527 (4.43)
21	552 (4.33)	441 (3.95)	436 (3.93)	541 (4.31)	492 (4.14)
22	499 (3.91)	489 (4.38)	500 (4.50)	520 (4.14)	502 (4.22)
23	482 (3.78)	484 (4.34)	476 (4.28)	497 (3.95)	485 (4.07)
24	501 (3.93)	488 (4.37)	488 (4.39)	501 (3.99)	495 (4.16)

Chicago: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	426 (3.27)	454 (3.91)	482 (4.16)	430 (3.35)	448 (3.65)
2	359 (2.76)	419 (3.61)	426 (3.68)	428 (3.33)	408 (3.33)
3	330 (2.54)	366 (3.16)	352 (3.04)	369 (2.87)	355 (2.89)
4	283 (2.17)	330 (2.85)	314 (2.71)	344 (2.67)	318 (2.59)
5	276 (2.12)	293 (2.53)	281 (2.43)	313 (2.43)	291 (2.37)
6	283 (2.17)	288 (2.49)	284 (2.45)	306 (2.38)	290 (2.37)
7	407 (3.13)	394 (3.40)	387 (3.34)	408 (3.17)	399 (3.25)
8	680 (5.23)	616 (5.32)	644 (5.55)	690 (5.37)	658 (5.36)
9	798 (6.13)	667 (5.75)	698 (6.02)	813 (6.33)	744 (6.07)
10	769 (5.91)	611 (5.27)	640 (5.52)	783 (6.09)	701 (5.71)
11	680 (5.22)	542 (4.68)	556 (4.80)	684 (5.33)	616 (5.02)
12	604 (4.64)	526 (4.53)	514 (4.43)	603 (4.69)	561 (4.58)
13	620 (4.76)	516 (4.45)	497 (4.29)	568 (4.43)	550 (4.49)
14	603 (4.64)	493 (4.25)	483 (4.17)	516 (4.02)	524 (4.27)
15	598 (4.59)	500 (4.31)	501 (4.32)	519 (4.04)	529 (4.32)
16	619 (4.75)	527 (4.54)	526 (4.53)	565 (4.40)	559 (4.56)
17	689 (5.29)	564 (4.86)	535 (4.62)	641 (4.99)	607 (4.95)
18	712 (5.47)	598 (5.15)	558 (4.81)	685 (5.33)	638 (5.20)
19	662 (5.08)	524 (4.52)	488 (4.21)	620 (4.83)	573 (4.67)
20	603 (4.63)	472 (4.07)	470 (4.06)	555 (4.32)	525 (4.28)
21	563 (4.32)	464 (4.00)	471 (4.06)	553 (4.31)	513 (4.18)
22	514 (3.95)	484 (4.17)	494 (4.26)	524 (4.08)	504 (4.11)
23	481 (3.69)	474 (4.09)	487 (4.20)	475 (3.70)	479 (3.91)
24	461 (3.54)	476 (4.10)	506 (4.36)	455 (3.54)	474 (3.87)

Chicago: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	416 (3.52)	435 (4.15)	467 (4.43)	417 (3.58)	434 (3.90)
2	349 (2.95)	398 (3.79)	408 (3.87)	412 (3.53)	392 (3.52)
3	325 (2.74)	353 (3.36)	345 (3.28)	361 (3.10)	346 (3.11)
4	281 (2.37)	319 (3.04)	308 (2.93)	338 (2.90)	312 (2.80)
5	272 (2.30)	283 (2.69)	276 (2.62)	307 (2.63)	284 (2.56)
6	277 (2.34)	271 (2.58)	267 (2.53)	299 (2.56)	278 (2.50)
7	346 (2.92)	318 (3.03)	310 (2.94)	339 (2.91)	328 (2.95)
8	508 (4.29)	473 (4.50)	481 (4.57)	523 (4.49)	496 (4.46)
9	638 (5.39)	561 (5.35)	576 (5.47)	663 (5.68)	610 (5.48)
10	676 (5.71)	564 (5.37)	582 (5.53)	699 (5.99)	630 (5.66)
11	613 (5.18)	493 (4.70)	515 (4.89)	616 (5.28)	559 (5.03)
12	554 (4.68)	480 (4.57)	467 (4.44)	552 (4.73)	513 (4.61)
13	532 (4.50)	460 (4.38)	450 (4.27)	493 (4.23)	484 (4.35)
14	533 (4.51)	448 (4.26)	443 (4.21)	460 (3.95)	471 (4.23)
15	553 (4.68)	453 (4.31)	470 (4.46)	470 (4.03)	486 (4.37)
16	574 (4.86)	463 (4.41)	474 (4.50)	512 (4.39)	506 (4.54)
17	618 (5.23)	492 (4.69)	471 (4.47)	567 (4.86)	537 (4.82)
18	607 (5.13)	489 (4.66)	459 (4.36)	575 (4.93)	532 (4.78)
19	610 (5.15)	481 (4.58)	452 (4.29)	570 (4.89)	528 (4.74)
20	589 (4.98)	452 (4.30)	447 (4.24)	540 (4.63)	507 (4.55)
21	554 (4.68)	444 (4.23)	452 (4.30)	538 (4.61)	497 (4.47)
22	494 (4.17)	466 (4.43)	479 (4.54)	507 (4.35)	486 (4.37)
23	467 (3.94)	459 (4.38)	467 (4.43)	465 (3.99)	464 (4.17)
24	445 (3.76)	444 (4.23)	468 (4.44)	437 (3.75)	449 (4.03)

Chicago: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	425 (3.42)	448 (4.09)	473 (4.33)	429 (3.52)	444 (3.82)
2	353 (2.83)	410 (3.74)	415 (3.80)	422 (3.46)	400 (3.44)
3	327 (2.63)	365 (3.33)	353 (3.23)	367 (3.00)	353 (3.04)
4	278 (2.24)	325 (2.97)	309 (2.83)	339 (2.78)	313 (2.69)
5	271 (2.18)	288 (2.63)	276 (2.53)	308 (2.52)	286 (2.46)
6	280 (2.25)	279 (2.55)	271 (2.48)	302 (2.48)	283 (2.43)
7	371 (2.98)	347 (3.17)	342 (3.13)	362 (2.97)	355 (3.05)
8	623 (5.00)	557 (5.08)	571 (5.23)	626 (5.13)	594 (5.11)
9	745 (5.99)	618 (5.64)	626 (5.73)	758 (6.21)	687 (5.90)
10	693 (5.57)	563 (5.14)	582 (5.33)	713 (5.84)	638 (5.48)
11	616 (4.95)	493 (4.50)	509 (4.66)	618 (5.06)	559 (4.81)
12	556 (4.47)	473 (4.32)	464 (4.25)	552 (4.52)	511 (4.39)
13	568 (4.57)	476 (4.34)	467 (4.27)	521 (4.27)	508 (4.37)
14	554 (4.45)	458 (4.18)	441 (4.04)	479 (3.92)	482 (4.15)
15	576 (4.63)	452 (4.12)	446 (4.08)	485 (3.97)	489 (4.21)
16	587 (4.71)	469 (4.28)	470 (4.30)	517 (4.24)	510 (4.39)
17	654 (5.26)	507 (4.63)	488 (4.47)	588 (4.81)	559 (4.80)
18	728 (5.85)	566 (5.16)	533 (4.88)	673 (5.52)	625 (5.37)
19	675 (5.43)	515 (4.70)	482 (4.42)	622 (5.10)	573 (4.93)
20	601 (4.83)	465 (4.24)	451 (4.13)	556 (4.55)	518 (4.45)
21	565 (4.54)	467 (4.26)	476 (4.36)	554 (4.54)	515 (4.43)
22	492 (3.95)	470 (4.29)	483 (4.42)	507 (4.15)	488 (4.20)
23	467 (3.75)	483 (4.41)	500 (4.57)	471 (3.86)	480 (4.13)
24	439 (3.53)	465 (4.25)	495 (4.53)	440 (3.60)	460 (3.95)

Chicago: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	406 (3.48)	429 (4.01)	474 (4.22)	406 (3.52)	429 (3.80)
2	340 (2.91)	400 (3.75)	428 (3.81)	404 (3.50)	393 (3.49)
3	318 (2.72)	359 (3.36)	366 (3.26)	356 (3.09)	350 (3.10)
4	274 (2.35)	325 (3.05)	328 (2.93)	334 (2.89)	316 (2.80)
5	267 (2.29)	289 (2.70)	294 (2.62)	304 (2.64)	288 (2.56)
6	272 (2.33)	276 (2.58)	284 (2.53)	296 (2.57)	282 (2.50)
7	334 (2.86)	324 (3.04)	331 (2.95)	332 (2.88)	330 (2.93)
8	580 (4.97)	514 (4.82)	520 (4.63)	605 (5.24)	555 (4.92)
9	664 (5.69)	531 (4.97)	579 (5.16)	649 (5.63)	605 (5.37)
10	689 (5.91)	532 (4.98)	539 (4.80)	696 (6.03)	614 (5.44)
11	686 (5.88)	536 (5.02)	548 (4.89)	692 (6.00)	616 (5.46)
12	616 (5.29)	510 (4.78)	550 (4.90)	598 (5.19)	569 (5.04)
13	637 (5.46)	503 (4.71)	523 (4.66)	560 (4.85)	555 (4.93)
14	534 (4.58)	452 (4.24)	473 (4.21)	456 (3.95)	478 (4.24)
15	503 (4.31)	474 (4.44)	518 (4.61)	446 (3.87)	485 (4.30)
16	520 (4.46)	504 (4.72)	536 (4.78)	496 (4.30)	514 (4.56)
17	554 (4.75)	541 (5.07)	612 (5.45)	519 (4.50)	557 (4.94)
18	556 (4.77)	535 (5.01)	570 (5.08)	536 (4.65)	549 (4.87)
19	570 (4.89)	476 (4.46)	491 (4.37)	529 (4.59)	516 (4.58)
20	531 (4.55)	406 (3.81)	414 (3.69)	480 (4.16)	458 (4.06)
21	500 (4.29)	438 (4.10)	453 (4.03)	502 (4.35)	473 (4.20)
22	452 (3.87)	438 (4.11)	449 (4.00)	479 (4.15)	455 (4.03)
23	440 (3.77)	448 (4.20)	467 (4.17)	445 (3.86)	450 (3.99)
24	419 (3.59)	435 (4.07)	475 (4.24)	415 (3.60)	436 (3.87)

Chicago: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	424 (3.24)	438 (3.78)	471 (4.07)	426 (3.29)	440 (3.58)
2	349 (2.66)	407 (3.52)	419 (3.62)	419 (3.23)	399 (3.24)
3	328 (2.50)	364 (3.15)	355 (3.06)	368 (2.84)	354 (2.88)
4	280 (2.14)	328 (2.84)	315 (2.72)	343 (2.65)	317 (2.57)
5	272 (2.08)	290 (2.51)	281 (2.43)	311 (2.40)	288 (2.35)
6	280 (2.14)	287 (2.48)	286 (2.46)	307 (2.37)	290 (2.36)
7	443 (3.38)	413 (3.57)	407 (3.51)	441 (3.41)	426 (3.46)
8	726 (5.55)	670 (5.80)	695 (5.99)	751 (5.80)	711 (5.78)
9	806 (6.16)	686 (5.93)	707 (6.10)	836 (6.46)	759 (6.17)
10	747 (5.70)	628 (5.43)	646 (5.57)	785 (6.06)	701 (5.70)
11	656 (5.01)	554 (4.79)	563 (4.86)	678 (5.24)	613 (4.98)
12	587 (4.48)	525 (4.54)	509 (4.39)	602 (4.65)	556 (4.52)
13	598 (4.56)	520 (4.50)	513 (4.42)	562 (4.34)	548 (4.46)
14	599 (4.58)	485 (4.20)	471 (4.07)	518 (3.99)	518 (4.21)
15	585 (4.47)	463 (4.01)	457 (3.94)	502 (3.87)	501 (4.08)
16	587 (4.48)	479 (4.14)	477 (4.11)	528 (4.07)	517 (4.21)
17	664 (5.07)	553 (4.78)	544 (4.69)	610 (4.71)	592 (4.82)
18	818 (6.25)	614 (5.31)	562 (4.85)	748 (5.77)	685 (5.57)
19	696 (5.32)	522 (4.51)	481 (4.15)	640 (4.94)	584 (4.75)
20	596 (4.55)	468 (4.05)	468 (4.04)	553 (4.27)	521 (4.24)
21	582 (4.44)	480 (4.15)	508 (4.38)	568 (4.39)	534 (4.35)
22	535 (4.08)	470 (4.06)	489 (4.22)	534 (4.12)	507 (4.12)
23	486 (3.71)	462 (4.00)	477 (4.11)	478 (3.69)	476 (3.87)
24	453 (3.45)	458 (3.96)	488 (4.21)	448 (3.46)	462 (3.76)

Chicago: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	408 (3.50)	429 (4.19)	466 (4.48)	409 (3.59)	428 (3.92)
2	341 (2.93)	399 (3.90)	419 (4.03)	408 (3.58)	392 (3.59)
3	320 (2.74)	356 (3.48)	355 (3.41)	358 (3.15)	347 (3.18)
4	275 (2.36)	320 (3.13)	314 (3.02)	335 (2.94)	311 (2.85)
5	268 (2.30)	286 (2.79)	283 (2.72)	305 (2.68)	285 (2.62)
6	273 (2.34)	274 (2.68)	276 (2.65)	297 (2.61)	280 (2.57)
7	340 (2.92)	325 (3.17)	325 (3.13)	337 (2.97)	332 (3.04)
8	492 (4.22)	458 (4.48)	485 (4.66)	500 (4.40)	484 (4.43)
9	640 (5.50)	532 (5.20)	557 (5.35)	644 (5.66)	593 (5.44)
10	661 (5.67)	531 (5.19)	557 (5.35)	672 (5.90)	605 (5.54)
11	608 (5.22)	483 (4.72)	492 (4.73)	609 (5.36)	548 (5.02)
12	574 (4.93)	482 (4.71)	470 (4.52)	566 (4.97)	523 (4.79)
13	553 (4.74)	441 (4.31)	434 (4.17)	496 (4.36)	480 (4.40)
14	541 (4.64)	435 (4.25)	425 (4.09)	460 (4.04)	465 (4.26)
15	572 (4.91)	448 (4.38)	442 (4.26)	482 (4.24)	486 (4.45)
16	563 (4.83)	441 (4.31)	455 (4.38)	483 (4.24)	485 (4.45)
17	604 (5.19)	445 (4.35)	450 (4.33)	518 (4.55)	504 (4.62)
18	589 (5.06)	470 (4.60)	445 (4.28)	550 (4.84)	513 (4.70)
19	596 (5.11)	469 (4.58)	450 (4.33)	552 (4.86)	516 (4.73)
20	572 (4.91)	455 (4.45)	452 (4.35)	532 (4.67)	503 (4.61)
21	523 (4.49)	441 (4.31)	474 (4.56)	510 (4.49)	487 (4.46)
22	467 (4.01)	435 (4.25)	456 (4.39)	480 (4.22)	459 (4.21)
23	449 (3.85)	435 (4.25)	444 (4.28)	447 (3.93)	444 (4.07)
24	425 (3.64)	442 (4.32)	471 (4.53)	426 (3.74)	441 (4.04)

Chicago: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	417 (3.41)	441 (4.06)	465 (4.23)	424 (3.51)	437 (3.79)
2	347 (2.84)	408 (3.76)	414 (3.76)	423 (3.50)	398 (3.45)
3	327 (2.67)	366 (3.36)	351 (3.19)	371 (3.07)	354 (3.07)
4	277 (2.26)	324 (2.98)	310 (2.82)	340 (2.81)	313 (2.71)
5	268 (2.19)	285 (2.62)	275 (2.51)	306 (2.54)	284 (2.46)
6	288 (2.35)	278 (2.56)	270 (2.46)	309 (2.56)	286 (2.48)
7	404 (3.30)	375 (3.45)	371 (3.37)	400 (3.31)	387 (3.36)
8	635 (5.19)	577 (5.31)	617 (5.61)	643 (5.32)	618 (5.36)
9	704 (5.75)	611 (5.63)	663 (6.03)	720 (5.96)	675 (5.85)
10	682 (5.57)	568 (5.23)	614 (5.58)	702 (5.81)	641 (5.56)
11	630 (5.15)	499 (4.59)	524 (4.77)	627 (5.20)	570 (4.94)
12	541 (4.42)	469 (4.32)	467 (4.25)	543 (4.50)	505 (4.38)
13	568 (4.64)	488 (4.49)	479 (4.36)	528 (4.38)	516 (4.47)
14	564 (4.61)	475 (4.37)	468 (4.26)	487 (4.03)	498 (4.32)
15	565 (4.61)	454 (4.17)	446 (4.06)	482 (3.99)	486 (4.21)
16	579 (4.73)	473 (4.35)	490 (4.46)	510 (4.23)	513 (4.44)
17	640 (5.23)	491 (4.51)	499 (4.54)	557 (4.61)	546 (4.73)
18	656 (5.36)	503 (4.63)	467 (4.25)	609 (5.04)	558 (4.84)
19	637 (5.21)	494 (4.55)	464 (4.22)	595 (4.93)	548 (4.74)
20	571 (4.67)	453 (4.17)	446 (4.06)	534 (4.42)	501 (4.34)
21	539 (4.41)	451 (4.15)	457 (4.16)	541 (4.48)	497 (4.31)
22	507 (4.14)	471 (4.33)	477 (4.34)	525 (4.35)	495 (4.29)
23	458 (3.75)	462 (4.26)	480 (4.37)	462 (3.82)	466 (4.04)
24	435 (3.55)	449 (4.14)	475 (4.32)	435 (3.60)	449 (3.89)

Chicago: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	412 (3.43)	433 (3.92)	456 (4.10)	419 (3.50)	430 (3.73)
2	346 (2.88)	400 (3.62)	409 (3.68)	415 (3.46)	393 (3.40)
3	324 (2.70)	359 (3.25)	348 (3.14)	365 (3.04)	349 (3.03)
4	277 (2.31)	325 (2.94)	312 (2.81)	340 (2.84)	314 (2.72)
5	270 (2.25)	287 (2.60)	278 (2.51)	309 (2.58)	286 (2.48)
6	288 (2.40)	277 (2.51)	270 (2.43)	309 (2.57)	286 (2.48)
7	384 (3.20)	345 (3.12)	331 (2.98)	376 (3.13)	359 (3.11)
8	499 (4.16)	518 (4.70)	535 (4.82)	539 (4.50)	523 (4.54)
9	708 (5.89)	637 (5.77)	656 (5.90)	747 (6.22)	687 (5.95)
10	736 (6.12)	621 (5.63)	630 (5.67)	775 (6.46)	691 (5.99)
11	655 (5.45)	551 (5.00)	555 (5.00)	665 (5.54)	606 (5.26)
12	600 (4.99)	522 (4.73)	523 (4.71)	586 (4.89)	558 (4.83)
13	538 (4.48)	468 (4.24)	478 (4.30)	492 (4.10)	494 (4.28)
14	607 (5.05)	492 (4.46)	495 (4.45)	505 (4.21)	524 (4.54)
15	624 (5.19)	523 (4.74)	538 (4.84)	530 (4.42)	553 (4.80)
16	595 (4.95)	525 (4.75)	529 (4.76)	544 (4.53)	548 (4.75)
17	663 (5.51)	538 (4.88)	508 (4.57)	613 (5.11)	580 (5.03)
18	556 (4.63)	484 (4.38)	466 (4.20)	536 (4.47)	510 (4.42)
19	558 (4.64)	458 (4.15)	436 (3.92)	533 (4.44)	496 (4.30)
20	546 (4.54)	479 (4.34)	476 (4.28)	534 (4.45)	508 (4.41)
21	487 (4.05)	413 (3.75)	446 (4.02)	479 (4.00)	456 (3.96)
22	460 (3.82)	440 (3.98)	463 (4.16)	475 (3.96)	459 (3.98)
23	455 (3.79)	479 (4.34)	499 (4.49)	466 (3.88)	475 (4.11)
24	428 (3.56)	462 (4.18)	474 (4.27)	441 (3.68)	451 (3.91)

Chicago: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	411 (3.54)	427 (4.13)	452 (4.36)	414 (3.61)	426 (3.89)
2	345 (2.97)	400 (3.87)	409 (3.94)	415 (3.62)	393 (3.59)
3	324 (2.79)	359 (3.47)	348 (3.36)	365 (3.18)	349 (3.19)
4	277 (2.38)	324 (3.14)	312 (3.01)	340 (2.97)	314 (2.86)
5	270 (2.32)	287 (2.77)	278 (2.68)	309 (2.70)	286 (2.61)
6	274 (2.36)	274 (2.65)	270 (2.60)	300 (2.62)	280 (2.56)
7	342 (2.94)	328 (3.18)	326 (3.15)	340 (2.96)	334 (3.05)
8	515 (4.43)	473 (4.58)	499 (4.81)	520 (4.54)	502 (4.58)
9	664 (5.71)	541 (5.23)	560 (5.40)	670 (5.84)	608 (5.56)
10	650 (5.59)	546 (5.28)	569 (5.49)	680 (5.93)	611 (5.58)
11	614 (5.28)	513 (4.96)	516 (4.98)	635 (5.54)	569 (5.20)
12	556 (4.78)	479 (4.63)	451 (4.35)	560 (4.89)	511 (4.67)
13	596 (5.13)	519 (5.02)	472 (4.55)	571 (4.98)	539 (4.92)
14	562 (4.83)	485 (4.70)	463 (4.46)	496 (4.32)	501 (4.58)
15	553 (4.76)	449 (4.34)	452 (4.36)	467 (4.07)	480 (4.38)
16	556 (4.79)	448 (4.33)	454 (4.38)	485 (4.23)	486 (4.44)
17	538 (4.63)	421 (4.07)	435 (4.19)	469 (4.09)	465 (4.25)
18	553 (4.75)	457 (4.42)	459 (4.43)	507 (4.42)	494 (4.51)
19	612 (5.27)	461 (4.46)	436 (4.20)	557 (4.85)	516 (4.71)
20	544 (4.68)	424 (4.10)	425 (4.10)	499 (4.35)	473 (4.32)
21	517 (4.45)	417 (4.03)	430 (4.15)	508 (4.43)	468 (4.27)
22	464 (3.99)	427 (4.13)	441 (4.25)	476 (4.15)	452 (4.13)
23	465 (4.00)	449 (4.34)	461 (4.44)	461 (4.02)	459 (4.19)
24	422 (3.63)	430 (4.16)	452 (4.36)	421 (3.67)	431 (3.94)

Chicago: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	411 (2.74)	424 (3.26)	451 (3.36)	414 (2.84)	425 (3.04)
2	367 (2.45)	395 (3.04)	406 (3.02)	426 (2.92)	399 (2.85)
3	324 (2.16)	358 (2.75)	351 (2.62)	363 (2.49)	349 (2.49)
4	277 (1.85)	321 (2.47)	313 (2.33)	337 (2.31)	312 (2.23)
5	270 (1.80)	283 (2.18)	279 (2.08)	307 (2.10)	285 (2.04)
6	277 (1.85)	282 (2.17)	277 (2.07)	306 (2.10)	286 (2.04)
7	524 (3.49)	435 (3.34)	376 (2.80)	524 (3.60)	464 (3.32)
8	809 (5.39)	782 (6.01)	875 (6.52)	854 (5.86)	830 (5.93)
9	1104 (7.37)	874 (6.72)	964 (7.18)	1096 (7.52)	1010 (7.21)
10	954 (6.37)	760 (5.84)	857 (6.39)	945 (6.48)	879 (6.28)
11	854 (5.70)	695 (5.35)	740 (5.52)	836 (5.73)	781 (5.58)
12	773 (5.16)	649 (4.99)	717 (5.34)	719 (4.93)	714 (5.10)
13	783 (5.22)	619 (4.76)	626 (4.67)	679 (4.66)	676 (4.83)
14	797 (5.31)	590 (4.53)	605 (4.51)	643 (4.41)	658 (4.70)
15	710 (4.74)	607 (4.67)	638 (4.75)	623 (4.28)	644 (4.60)
16	749 (5.00)	643 (4.94)	680 (5.07)	674 (4.63)	686 (4.90)
17	837 (5.58)	690 (5.30)	651 (4.85)	792 (5.44)	742 (5.30)
18	684 (4.56)	650 (5.00)	633 (4.72)	695 (4.76)	665 (4.75)
19	633 (4.23)	605 (4.65)	633 (4.71)	627 (4.30)	625 (4.46)
20	626 (4.17)	494 (3.80)	512 (3.82)	575 (3.94)	552 (3.94)
21	597 (3.98)	461 (3.55)	447 (3.33)	581 (3.99)	521 (3.73)
22	598 (3.99)	474 (3.64)	468 (3.49)	578 (3.96)	529 (3.78)
23	542 (3.62)	470 (3.61)	466 (3.47)	516 (3.54)	498 (3.56)
24	491 (3.28)	446 (3.43)	453 (3.38)	469 (3.22)	465 (3.32)

Chicago: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	411 (3.23)	427 (3.80)	461 (4.05)	410 (3.27)	427 (3.57)
2	346 (2.71)	392 (3.49)	408 (3.59)	406 (3.24)	388 (3.24)
3	322 (2.53)	351 (3.12)	348 (3.06)	359 (2.86)	345 (2.88)
4	278 (2.18)	318 (2.83)	312 (2.75)	335 (2.67)	311 (2.60)
5	267 (2.10)	281 (2.50)	280 (2.46)	303 (2.42)	283 (2.36)
6	272 (2.14)	270 (2.40)	272 (2.39)	296 (2.36)	278 (2.32)
7	360 (2.83)	333 (2.97)	327 (2.88)	358 (2.85)	345 (2.88)
8	609 (4.78)	563 (5.01)	565 (4.97)	640 (5.10)	594 (4.96)
9	817 (6.41)	638 (5.68)	631 (5.54)	825 (6.58)	728 (6.08)
10	701 (5.51)	572 (5.09)	597 (5.25)	723 (5.76)	648 (5.41)
11	617 (4.85)	524 (4.67)	549 (4.82)	633 (5.04)	581 (4.85)
12	571 (4.48)	513 (4.57)	507 (4.46)	580 (4.62)	543 (4.54)
13	547 (4.29)	509 (4.53)	511 (4.49)	524 (4.18)	523 (4.36)
14	576 (4.52)	482 (4.29)	488 (4.29)	499 (3.98)	511 (4.27)
15	641 (5.03)	521 (4.64)	527 (4.63)	556 (4.43)	561 (4.68)
16	765 (6.01)	580 (5.17)	559 (4.92)	678 (5.40)	645 (5.39)
17	729 (5.72)	576 (5.13)	558 (4.91)	669 (5.33)	633 (5.29)
18	724 (5.68)	573 (5.10)	543 (4.77)	674 (5.37)	628 (5.25)
19	723 (5.67)	529 (4.71)	503 (4.43)	653 (5.20)	602 (5.03)
20	589 (4.62)	488 (4.34)	511 (4.49)	555 (4.42)	535 (4.47)
21	536 (4.21)	444 (3.96)	482 (4.24)	518 (4.13)	495 (4.14)
22	469 (3.68)	455 (4.05)	483 (4.25)	485 (3.87)	473 (3.95)
23	441 (3.46)	455 (4.05)	477 (4.19)	447 (3.56)	455 (3.80)
24	427 (3.35)	439 (3.91)	475 (4.17)	422 (3.36)	441 (3.68)

Chicago: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	409 (3.59)	424 (4.08)	451 (4.26)	410 (3.61)	424 (3.88)
2	343 (3.01)	396 (3.80)	405 (3.82)	410 (3.61)	389 (3.56)
3	322 (2.83)	355 (3.41)	346 (3.27)	361 (3.18)	346 (3.16)
4	276 (2.43)	322 (3.09)	310 (2.93)	337 (2.97)	311 (2.85)
5	269 (2.36)	285 (2.74)	277 (2.62)	307 (2.70)	284 (2.60)
6	281 (2.47)	277 (2.66)	270 (2.55)	305 (2.69)	283 (2.59)
7	351 (3.08)	327 (3.15)	321 (3.03)	347 (3.05)	336 (3.08)
8	549 (4.82)	525 (5.05)	546 (5.15)	574 (5.06)	549 (5.02)
9	694 (6.09)	569 (5.47)	601 (5.67)	692 (6.10)	639 (5.84)
10	663 (5.82)	546 (5.25)	578 (5.46)	681 (6.00)	617 (5.64)
11	566 (4.97)	509 (4.89)	541 (5.11)	591 (5.21)	552 (5.05)
12	525 (4.60)	481 (4.62)	480 (4.54)	534 (4.70)	505 (4.62)
13	518 (4.55)	485 (4.66)	469 (4.43)	501 (4.42)	493 (4.51)
14	499 (4.38)	435 (4.18)	438 (4.13)	433 (3.82)	451 (4.12)
15	486 (4.27)	442 (4.25)	451 (4.25)	430 (3.79)	452 (4.13)
16	486 (4.27)	442 (4.24)	458 (4.33)	449 (3.95)	459 (4.19)
17	549 (4.82)	455 (4.37)	461 (4.36)	500 (4.40)	491 (4.49)
18	608 (5.34)	476 (4.57)	457 (4.31)	566 (4.98)	526 (4.81)
19	579 (5.09)	480 (4.61)	466 (4.40)	551 (4.85)	519 (4.74)
20	566 (4.97)	447 (4.30)	448 (4.23)	526 (4.63)	496 (4.54)
21	518 (4.55)	423 (4.06)	446 (4.21)	504 (4.44)	473 (4.32)
22	461 (4.05)	429 (4.12)	445 (4.20)	474 (4.18)	452 (4.14)
23	443 (3.89)	441 (4.24)	460 (4.34)	442 (3.89)	446 (4.08)
24	431 (3.79)	436 (4.19)	465 (4.39)	425 (3.75)	439 (4.02)

Chicago: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	420 (3.39)	439 (4.00)	469 (4.26)	422 (3.47)	438 (3.76)
2	350 (2.83)	405 (3.69)	415 (3.76)	418 (3.43)	397 (3.41)
3	325 (2.63)	360 (3.28)	351 (3.19)	365 (3.00)	350 (3.01)
4	279 (2.25)	324 (2.95)	312 (2.83)	339 (2.78)	314 (2.70)
5	271 (2.19)	286 (2.61)	279 (2.53)	308 (2.53)	286 (2.46)
6	279 (2.25)	277 (2.53)	274 (2.49)	302 (2.48)	283 (2.43)
7	376 (3.04)	352 (3.21)	345 (3.13)	373 (3.06)	361 (3.11)
8	610 (4.93)	548 (5.00)	560 (5.08)	621 (5.10)	585 (5.03)
9	728 (5.89)	608 (5.54)	624 (5.67)	741 (6.08)	675 (5.81)
10	706 (5.70)	577 (5.26)	600 (5.44)	724 (5.95)	651 (5.60)
11	634 (5.12)	518 (4.73)	534 (4.84)	641 (5.27)	582 (5.00)
12	572 (4.63)	499 (4.55)	488 (4.43)	572 (4.70)	533 (4.58)
13	578 (4.68)	491 (4.48)	477 (4.33)	531 (4.36)	519 (4.46)
14	563 (4.55)	469 (4.27)	460 (4.18)	483 (3.97)	493 (4.24)
15	578 (4.67)	471 (4.30)	473 (4.30)	493 (4.05)	504 (4.33)
16	600 (4.85)	490 (4.47)	494 (4.48)	535 (4.39)	529 (4.55)
17	642 (5.19)	516 (4.71)	504 (4.58)	584 (4.79)	561 (4.83)
18	678 (5.48)	540 (4.93)	510 (4.63)	635 (5.22)	591 (5.08)
19	650 (5.25)	503 (4.58)	475 (4.31)	602 (4.94)	557 (4.79)
20	588 (4.76)	464 (4.23)	467 (4.24)	544 (4.47)	516 (4.43)
21	548 (4.43)	454 (4.14)	472 (4.29)	537 (4.41)	502 (4.32)
22	491 (3.97)	459 (4.18)	474 (4.30)	503 (4.13)	481 (4.14)
23	463 (3.74)	463 (4.22)	477 (4.33)	463 (3.81)	467 (4.01)
24	440 (3.56)	454 (4.14)	483 (4.39)	438 (3.60)	454 (3.90)

Denver: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	609 (3.62)	367 (3.88)	443 (4.10)	640 (3.81)	514 (3.82)
2	544 (3.23)	321 (3.41)	371 (3.43)	546 (3.25)	445 (3.31)
3	455 (2.70)	281 (2.98)	290 (2.68)	424 (2.53)	362 (2.69)
4	416 (2.47)	237 (2.51)	250 (2.31)	374 (2.23)	319 (2.37)
5	347 (2.06)	202 (2.14)	208 (1.92)	318 (1.89)	269 (2.00)
6	322 (1.91)	203 (2.15)	203 (1.88)	287 (1.71)	253 (1.88)
7	458 (2.72)	312 (3.30)	289 (2.67)	388 (2.31)	361 (2.69)
8	1043 (6.20)	650 (6.88)	640 (5.92)	887 (5.28)	804 (5.97)
9	1408 (8.37)	752 (7.97)	831 (7.68)	1295 (7.71)	1070 (7.95)
10	1178 (7.00)	595 (6.30)	722 (6.68)	1164 (6.93)	914 (6.79)
11	784 (4.66)	453 (4.80)	535 (4.94)	788 (4.69)	640 (4.75)
12	590 (3.51)	400 (4.24)	427 (3.95)	562 (3.35)	495 (3.67)
13	527 (3.13)	381 (4.04)	378 (3.49)	460 (2.74)	436 (3.24)
14	485 (2.88)	349 (3.70)	333 (3.08)	404 (2.40)	392 (2.92)
15	489 (2.91)	334 (3.54)	329 (3.05)	411 (2.44)	390 (2.90)
16	531 (3.15)	354 (3.75)	370 (3.42)	463 (2.76)	429 (3.19)
17	585 (3.48)	388 (4.11)	416 (3.85)	603 (3.59)	498 (3.70)
18	819 (4.87)	421 (4.46)	467 (4.32)	962 (5.73)	667 (4.95)
19	975 (5.80)	388 (4.11)	469 (4.34)	1140 (6.79)	743 (5.52)
20	958 (5.70)	366 (3.87)	516 (4.77)	1131 (6.74)	743 (5.52)
21	916 (5.44)	394 (4.18)	586 (5.42)	1035 (6.16)	733 (5.44)
22	858 (5.10)	432 (4.57)	618 (5.71)	908 (5.40)	704 (5.23)
23	803 (4.78)	443 (4.69)	593 (5.48)	845 (5.03)	671 (4.98)
24	720 (4.28)	418 (4.43)	531 (4.91)	759 (4.52)	607 (4.51)

Denver: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	722 (3.45)	482 (3.93)	548 (3.97)	720 (3.70)	618 (3.72)
2	669 (3.19)	420 (3.43)	447 (3.25)	574 (2.95)	527 (3.18)
3	512 (2.44)	358 (2.93)	331 (2.40)	442 (2.27)	410 (2.47)
4	474 (2.26)	289 (2.36)	291 (2.11)	408 (2.10)	365 (2.20)
5	391 (1.87)	237 (1.94)	220 (1.60)	339 (1.74)	297 (1.79)
6	379 (1.81)	234 (1.91)	218 (1.58)	293 (1.50)	281 (1.69)
7	604 (2.88)	373 (3.04)	316 (2.29)	420 (2.16)	427 (2.57)
8	1251 (5.98)	824 (6.73)	798 (5.79)	972 (4.99)	960 (5.78)
9	1705 (8.14)	971 (7.93)	1030 (7.47)	1380 (7.09)	1270 (7.65)
10	1391 (6.64)	780 (6.37)	885 (6.42)	1219 (6.26)	1068 (6.43)
11	943 (4.50)	575 (4.70)	657 (4.77)	825 (4.24)	750 (4.52)
12	736 (3.51)	477 (3.89)	532 (3.86)	611 (3.14)	588 (3.54)
13	642 (3.06)	446 (3.65)	465 (3.37)	500 (2.57)	513 (3.09)
14	628 (3.00)	453 (3.70)	410 (2.97)	477 (2.45)	491 (2.96)
15	712 (3.40)	529 (4.32)	467 (3.39)	576 (2.96)	570 (3.44)
16	646 (3.08)	460 (3.76)	527 (3.82)	528 (2.71)	540 (3.25)
17	778 (3.71)	557 (4.55)	633 (4.59)	802 (4.12)	692 (4.17)
18	976 (4.66)	602 (4.92)	722 (5.24)	1177 (6.05)	869 (5.24)
19	1221 (5.83)	520 (4.25)	634 (4.60)	1407 (7.23)	945 (5.70)
20	1279 (6.11)	454 (3.71)	596 (4.33)	1450 (7.45)	944 (5.69)
21	1231 (5.88)	489 (4.00)	720 (5.22)	1292 (6.64)	933 (5.62)
22	1146 (5.47)	556 (4.54)	823 (5.97)	1139 (5.86)	916 (5.52)
23	1018 (4.86)	597 (4.88)	837 (6.07)	1047 (5.38)	875 (5.27)
24	886 (4.23)	561 (4.58)	680 (4.93)	864 (4.44)	748 (4.50)

Denver: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	675 (3.82)	375 (3.83)	481 (4.27)	715 (4.06)	561 (3.99)
2	605 (3.43)	321 (3.27)	395 (3.51)	594 (3.37)	478 (3.40)
3	522 (2.96)	292 (2.98)	320 (2.84)	486 (2.76)	405 (2.88)
4	480 (2.72)	260 (2.64)	274 (2.43)	432 (2.46)	361 (2.57)
5	391 (2.22)	213 (2.17)	223 (1.98)	356 (2.02)	295 (2.10)
6	357 (2.03)	216 (2.21)	212 (1.88)	311 (1.77)	274 (1.95)
7	530 (3.00)	322 (3.28)	279 (2.47)	426 (2.42)	388 (2.76)
8	1040 (5.90)	692 (7.05)	664 (5.90)	916 (5.20)	827 (5.88)
9	1486 (8.42)	830 (8.46)	908 (8.07)	1372 (7.79)	1148 (8.16)
10	1285 (7.29)	671 (6.84)	779 (6.92)	1235 (7.02)	992 (7.05)
11	847 (4.80)	484 (4.93)	561 (4.99)	805 (4.57)	674 (4.79)
12	609 (3.45)	405 (4.13)	425 (3.78)	545 (3.10)	496 (3.52)
13	509 (2.89)	375 (3.82)	369 (3.28)	420 (2.39)	418 (2.97)
14	489 (2.77)	353 (3.59)	329 (2.92)	392 (2.23)	390 (2.77)
15	534 (3.03)	377 (3.85)	359 (3.19)	460 (2.61)	432 (3.07)
16	477 (2.70)	342 (3.49)	374 (3.32)	419 (2.38)	403 (2.86)
17	575 (3.26)	402 (4.09)	433 (3.85)	607 (3.45)	504 (3.58)
18	714 (4.04)	424 (4.32)	488 (4.34)	886 (5.03)	628 (4.46)
19	916 (5.19)	374 (3.81)	454 (4.03)	1124 (6.38)	717 (5.09)
20	997 (5.65)	344 (3.51)	468 (4.15)	1197 (6.80)	751 (5.34)
21	978 (5.54)	385 (3.92)	570 (5.06)	1118 (6.35)	762 (5.42)
22	952 (5.39)	446 (4.55)	649 (5.76)	1008 (5.72)	763 (5.43)
23	882 (5.00)	477 (4.86)	667 (5.92)	941 (5.35)	742 (5.27)
24	793 (4.49)	434 (4.42)	580 (5.15)	839 (4.77)	661 (4.70)

Denver: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	632 (3.66)	383 (3.92)	465 (4.24)	657 (3.87)	534 (3.89)
2	569 (3.29)	333 (3.41)	384 (3.51)	547 (3.22)	458 (3.33)
3	476 (2.76)	289 (2.96)	304 (2.77)	435 (2.56)	376 (2.74)
4	439 (2.54)	249 (2.55)	260 (2.37)	394 (2.32)	335 (2.44)
5	361 (2.09)	207 (2.12)	211 (1.93)	330 (1.94)	277 (2.02)
6	334 (1.93)	205 (2.10)	199 (1.82)	290 (1.71)	257 (1.87)
7	485 (2.81)	324 (3.32)	284 (2.59)	393 (2.32)	371 (2.70)
8	880 (5.10)	588 (6.02)	549 (5.01)	723 (4.26)	684 (4.98)
9	1445 (8.36)	774 (7.93)	811 (7.39)	1259 (7.41)	1071 (7.80)
10	1219 (7.06)	649 (6.65)	768 (7.01)	1165 (6.86)	950 (6.91)
11	836 (4.84)	477 (4.89)	557 (5.08)	798 (4.70)	667 (4.85)
12	629 (3.64)	401 (4.11)	424 (3.87)	564 (3.32)	504 (3.67)
13	535 (3.10)	392 (4.02)	387 (3.53)	450 (2.65)	440 (3.21)
14	483 (2.80)	356 (3.64)	337 (3.07)	397 (2.34)	393 (2.86)
15	519 (3.00)	373 (3.82)	358 (3.27)	444 (2.61)	423 (3.08)
16	550 (3.18)	369 (3.78)	388 (3.54)	478 (2.82)	446 (3.25)
17	610 (3.53)	427 (4.37)	463 (4.22)	632 (3.72)	533 (3.88)
18	881 (5.10)	475 (4.87)	509 (4.64)	1058 (6.23)	731 (5.32)
19	959 (5.55)	401 (4.10)	473 (4.32)	1141 (6.72)	743 (5.41)
20	975 (5.65)	351 (3.59)	459 (4.19)	1166 (6.86)	738 (5.37)
21	962 (5.57)	402 (4.12)	570 (5.20)	1081 (6.36)	753 (5.48)
22	910 (5.27)	445 (4.55)	628 (5.72)	942 (5.55)	731 (5.32)
23	839 (4.86)	457 (4.68)	618 (5.64)	872 (5.13)	697 (5.07)
24	744 (4.31)	437 (4.48)	557 (5.08)	771 (4.54)	627 (4.56)

Denver: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	636 (3.66)	388 (3.94)	466 (4.12)	679 (3.91)	542 (3.88)
2	575 (3.31)	340 (3.46)	392 (3.47)	571 (3.29)	469 (3.36)
3	478 (2.75)	294 (2.99)	306 (2.71)	449 (2.59)	382 (2.73)
4	431 (2.48)	247 (2.51)	261 (2.31)	389 (2.24)	332 (2.38)
5	360 (2.07)	209 (2.12)	214 (1.90)	330 (1.90)	278 (1.99)
6	334 (1.92)	212 (2.16)	211 (1.87)	295 (1.70)	263 (1.88)
7	501 (2.88)	328 (3.34)	300 (2.66)	414 (2.38)	385 (2.76)
8	1010 (5.81)	639 (6.50)	636 (5.63)	850 (4.90)	783 (5.61)
9	1428 (8.22)	767 (7.81)	852 (7.54)	1293 (7.45)	1084 (7.77)
10	1239 (7.13)	626 (6.36)	754 (6.68)	1201 (6.92)	954 (6.84)
11	823 (4.74)	484 (4.93)	571 (5.05)	817 (4.71)	673 (4.82)
12	628 (3.62)	436 (4.43)	458 (4.06)	600 (3.46)	530 (3.80)
13	555 (3.20)	397 (4.04)	391 (3.47)	481 (2.77)	456 (3.27)
14	500 (2.88)	353 (3.59)	342 (3.03)	408 (2.35)	400 (2.87)
15	513 (2.95)	346 (3.53)	346 (3.06)	419 (2.42)	406 (2.91)
16	543 (3.12)	372 (3.79)	409 (3.62)	469 (2.70)	448 (3.21)
17	622 (3.58)	412 (4.19)	445 (3.94)	642 (3.70)	530 (3.80)
18	784 (4.51)	434 (4.41)	493 (4.37)	932 (5.37)	661 (4.73)
19	1000 (5.75)	395 (4.02)	479 (4.24)	1175 (6.77)	762 (5.46)
20	993 (5.71)	373 (3.80)	513 (4.55)	1206 (6.95)	771 (5.53)
21	936 (5.38)	406 (4.14)	606 (5.36)	1075 (6.19)	756 (5.41)
22	898 (5.17)	459 (4.67)	656 (5.81)	958 (5.52)	742 (5.32)
23	839 (4.83)	469 (4.77)	631 (5.59)	904 (5.21)	711 (5.09)
24	750 (4.32)	443 (4.50)	562 (4.97)	802 (4.62)	639 (4.58)

Denver: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	617 (3.64)	368 (3.86)	445 (4.06)	650 (3.84)	520 (3.83)
2	554 (3.27)	322 (3.39)	373 (3.41)	554 (3.27)	451 (3.32)
3	462 (2.73)	285 (2.99)	294 (2.68)	431 (2.54)	368 (2.71)
4	425 (2.51)	241 (2.54)	254 (2.32)	382 (2.25)	325 (2.39)
5	353 (2.08)	206 (2.16)	211 (1.92)	323 (1.91)	273 (2.01)
6	330 (1.95)	206 (2.16)	204 (1.87)	293 (1.73)	258 (1.90)
7	467 (2.76)	317 (3.33)	290 (2.65)	396 (2.34)	367 (2.70)
8	1045 (6.17)	664 (6.98)	664 (6.07)	894 (5.28)	816 (6.01)
9	1411 (8.33)	759 (7.97)	848 (7.75)	1296 (7.66)	1078 (7.94)
10	1189 (7.02)	603 (6.34)	735 (6.72)	1176 (6.94)	925 (6.81)
11	786 (4.64)	456 (4.79)	543 (4.96)	788 (4.65)	643 (4.74)
12	585 (3.45)	400 (4.20)	432 (3.95)	556 (3.28)	493 (3.63)
13	518 (3.06)	380 (3.99)	379 (3.46)	451 (2.66)	431 (3.18)
14	482 (2.84)	351 (3.69)	336 (3.07)	401 (2.37)	392 (2.89)
15	492 (2.91)	339 (3.56)	332 (3.03)	415 (2.45)	394 (2.90)
16	532 (3.14)	353 (3.71)	369 (3.37)	460 (2.72)	428 (3.15)
17	599 (3.53)	396 (4.16)	422 (3.85)	620 (3.66)	509 (3.75)
18	822 (4.85)	425 (4.46)	473 (4.32)	974 (5.75)	673 (4.96)
19	972 (5.74)	391 (4.11)	477 (4.36)	1143 (6.75)	746 (5.49)
20	954 (5.63)	363 (3.81)	519 (4.74)	1121 (6.62)	739 (5.44)
21	921 (5.43)	393 (4.13)	589 (5.38)	1043 (6.16)	737 (5.42)
22	875 (5.16)	432 (4.54)	619 (5.65)	928 (5.48)	713 (5.25)
23	823 (4.86)	449 (4.72)	605 (5.53)	865 (5.11)	686 (5.05)
24	730 (4.31)	419 (4.40)	534 (4.88)	772 (4.56)	614 (4.52)

Denver: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	597 (3.59)	363 (3.88)	435 (4.08)	624 (3.75)	505 (3.79)
2	528 (3.18)	319 (3.40)	364 (3.42)	535 (3.22)	436 (3.28)
3	441 (2.65)	281 (3.00)	283 (2.65)	410 (2.46)	353 (2.65)
4	402 (2.42)	230 (2.45)	241 (2.26)	360 (2.16)	308 (2.31)
5	336 (2.02)	197 (2.11)	202 (1.90)	307 (1.84)	260 (1.95)
6	311 (1.87)	201 (2.15)	203 (1.91)	277 (1.66)	248 (1.86)
7	436 (2.62)	293 (3.13)	278 (2.60)	361 (2.17)	341 (2.57)
8	1048 (6.30)	642 (6.86)	622 (5.84)	886 (5.33)	799 (6.00)
9	1434 (8.63)	754 (8.05)	821 (7.70)	1326 (7.97)	1083 (8.13)
10	1140 (6.86)	575 (6.14)	693 (6.50)	1134 (6.82)	885 (6.65)
11	764 (4.60)	443 (4.73)	517 (4.85)	778 (4.68)	625 (4.70)
12	584 (3.51)	394 (4.21)	416 (3.91)	560 (3.37)	488 (3.67)
13	528 (3.17)	381 (4.07)	376 (3.52)	464 (2.79)	437 (3.28)
14	485 (2.92)	351 (3.75)	336 (3.15)	405 (2.44)	394 (2.96)
15	474 (2.85)	339 (3.62)	347 (3.25)	402 (2.42)	390 (2.93)
16	511 (3.07)	353 (3.77)	369 (3.46)	455 (2.74)	422 (3.17)
17	549 (3.30)	381 (4.07)	410 (3.85)	575 (3.46)	479 (3.60)
18	860 (5.17)	427 (4.56)	465 (4.36)	1003 (6.03)	688 (5.17)
19	1011 (6.08)	396 (4.23)	475 (4.46)	1165 (7.00)	761 (5.72)
20	966 (5.81)	376 (4.02)	524 (4.92)	1142 (6.87)	752 (5.65)
21	916 (5.51)	400 (4.28)	590 (5.54)	1030 (6.19)	734 (5.51)
22	829 (4.99)	424 (4.53)	609 (5.71)	877 (5.27)	685 (5.14)
23	767 (4.61)	426 (4.55)	565 (5.30)	809 (4.86)	642 (4.82)
24	709 (4.26)	415 (4.43)	517 (4.85)	746 (4.48)	597 (4.48)

Denver: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	562 (3.48)	362 (4.04)	422 (4.17)	571 (3.65)	479 (3.77)
2	500 (3.09)	321 (3.58)	353 (3.49)	510 (3.26)	421 (3.31)
3	416 (2.58)	281 (3.13)	262 (2.59)	380 (2.43)	335 (2.63)
4	387 (2.39)	224 (2.50)	230 (2.27)	342 (2.19)	295 (2.32)
5	327 (2.02)	193 (2.15)	194 (1.92)	295 (1.89)	252 (1.98)
6	301 (1.86)	193 (2.15)	191 (1.89)	265 (1.69)	237 (1.87)
7	390 (2.41)	277 (3.09)	259 (2.56)	330 (2.11)	314 (2.47)
8	1183 (7.32)	645 (7.19)	590 (5.83)	965 (6.17)	844 (6.64)
9	1365 (8.45)	721 (8.03)	779 (7.70)	1222 (7.81)	1021 (8.03)
10	1112 (6.88)	547 (6.09)	656 (6.48)	1049 (6.71)	840 (6.61)
11	731 (4.53)	405 (4.51)	476 (4.70)	697 (4.45)	577 (4.54)
12	533 (3.30)	353 (3.93)	388 (3.84)	489 (3.13)	441 (3.47)
13	513 (3.18)	364 (4.05)	368 (3.63)	424 (2.71)	417 (3.28)
14	471 (2.91)	324 (3.61)	309 (3.05)	369 (2.36)	368 (2.89)
15	447 (2.77)	318 (3.54)	303 (2.99)	386 (2.47)	363 (2.86)
16	506 (3.13)	321 (3.58)	338 (3.34)	420 (2.69)	396 (3.11)
17	587 (3.63)	346 (3.86)	370 (3.66)	564 (3.61)	467 (3.67)
18	880 (5.45)	420 (4.68)	458 (4.53)	992 (6.34)	687 (5.41)
19	929 (5.75)	361 (4.03)	446 (4.41)	1072 (6.86)	702 (5.52)
20	936 (5.80)	366 (4.08)	511 (5.05)	1107 (7.08)	730 (5.74)
21	901 (5.58)	379 (4.22)	547 (5.40)	962 (6.15)	697 (5.48)
22	796 (4.92)	424 (4.72)	602 (5.95)	813 (5.20)	658 (5.18)
23	732 (4.53)	428 (4.77)	565 (5.58)	746 (4.77)	617 (4.86)
24	653 (4.04)	403 (4.49)	502 (4.96)	667 (4.27)	556 (4.37)

Denver: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	602 (3.55)	360 (3.79)	441 (4.04)	633 (3.76)	509 (3.76)
2	541 (3.19)	315 (3.31)	370 (3.39)	541 (3.21)	441 (3.26)
3	458 (2.70)	282 (2.97)	292 (2.68)	425 (2.52)	364 (2.69)
4	421 (2.49)	239 (2.52)	253 (2.32)	378 (2.24)	323 (2.38)
5	351 (2.07)	204 (2.15)	210 (1.93)	322 (1.91)	271 (2.00)
6	325 (1.92)	205 (2.16)	204 (1.87)	289 (1.72)	256 (1.89)
7	447 (2.64)	302 (3.18)	274 (2.52)	376 (2.23)	349 (2.58)
8	1087 (6.41)	661 (6.96)	627 (5.74)	925 (5.49)	824 (6.08)
9	1463 (8.63)	766 (8.06)	822 (7.54)	1337 (7.93)	1096 (8.09)
10	1205 (7.11)	605 (6.37)	728 (6.67)	1183 (7.02)	930 (6.87)
11	800 (4.72)	460 (4.84)	544 (4.99)	796 (4.73)	650 (4.80)
12	602 (3.55)	408 (4.29)	433 (3.97)	567 (3.37)	502 (3.71)
13	524 (3.09)	383 (4.04)	379 (3.48)	454 (2.70)	435 (3.21)
14	476 (2.81)	347 (3.65)	334 (3.07)	392 (2.33)	387 (2.86)
15	502 (2.96)	349 (3.67)	347 (3.18)	421 (2.50)	404 (2.98)
16	570 (3.36)	376 (3.96)	388 (3.56)	496 (2.95)	457 (3.38)
17	607 (3.58)	402 (4.24)	437 (4.01)	627 (3.72)	518 (3.83)
18	820 (4.84)	421 (4.43)	475 (4.35)	956 (5.67)	668 (4.93)
19	1000 (5.90)	390 (4.11)	482 (4.42)	1163 (6.91)	759 (5.60)
20	949 (5.60)	373 (3.93)	550 (5.04)	1119 (6.64)	748 (5.52)
21	890 (5.25)	390 (4.11)	596 (5.46)	1009 (5.99)	721 (5.33)
22	823 (4.86)	417 (4.40)	607 (5.56)	873 (5.18)	680 (5.02)
23	783 (4.62)	431 (4.54)	586 (5.37)	823 (4.89)	656 (4.84)
24	704 (4.15)	410 (4.31)	530 (4.85)	742 (4.40)	596 (4.40)

Denver: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	718 (3.96)	428 (4.16)	501 (4.33)	739 (4.12)	596 (4.12)
2	621 (3.43)	363 (3.53)	396 (3.42)	609 (3.40)	497 (3.44)
3	502 (2.77)	305 (2.96)	309 (2.68)	471 (2.63)	397 (2.74)
4	443 (2.44)	254 (2.47)	261 (2.26)	404 (2.25)	340 (2.35)
5	353 (1.95)	207 (2.01)	212 (1.83)	324 (1.81)	274 (1.89)
6	322 (1.78)	205 (1.99)	203 (1.76)	284 (1.58)	253 (1.75)
7	505 (2.79)	332 (3.23)	289 (2.50)	407 (2.27)	383 (2.64)
8	924 (5.10)	651 (6.33)	680 (5.89)	753 (4.20)	752 (5.19)
9	1346 (7.43)	795 (7.73)	974 (8.42)	1182 (6.59)	1073 (7.42)
10	1256 (6.93)	674 (6.55)	832 (7.20)	1209 (6.74)	992 (6.86)
11	836 (4.61)	529 (5.15)	621 (5.37)	830 (4.63)	704 (4.87)
12	631 (3.48)	422 (4.11)	435 (3.77)	593 (3.30)	520 (3.59)
13	598 (3.30)	436 (4.24)	426 (3.69)	501 (2.79)	490 (3.39)
14	544 (3.00)	392 (3.81)	365 (3.16)	442 (2.46)	435 (3.01)
15	530 (2.93)	356 (3.46)	337 (2.92)	443 (2.47)	416 (2.88)
16	667 (3.68)	409 (3.98)	398 (3.44)	578 (3.22)	512 (3.54)
17	763 (4.21)	486 (4.73)	493 (4.26)	830 (4.62)	643 (4.44)
18	865 (4.77)	440 (4.28)	497 (4.30)	999 (5.57)	700 (4.84)
19	1062 (5.86)	387 (3.77)	454 (3.93)	1200 (6.69)	775 (5.36)
20	1055 (5.82)	365 (3.55)	463 (4.01)	1259 (7.02)	785 (5.43)
21	979 (5.40)	402 (3.91)	558 (4.82)	1087 (6.06)	756 (5.23)
22	918 (5.06)	514 (5.00)	724 (6.26)	991 (5.52)	787 (5.44)
23	871 (4.80)	480 (4.67)	601 (5.20)	940 (5.24)	723 (5.00)
24	815 (4.50)	453 (4.41)	532 (4.60)	866 (4.83)	666 (4.61)

Denver: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	623 (3.42)	381 (3.73)	457 (3.95)	647 (3.59)	527 (3.64)
2	556 (3.05)	333 (3.27)	381 (3.29)	549 (3.05)	455 (3.14)
3	460 (2.52)	284 (2.79)	291 (2.52)	424 (2.36)	365 (2.52)
4	423 (2.32)	240 (2.35)	252 (2.18)	379 (2.10)	323 (2.23)
5	353 (1.94)	204 (2.00)	209 (1.81)	322 (1.79)	272 (1.88)
6	330 (1.81)	211 (2.07)	212 (1.84)	292 (1.62)	261 (1.80)
7	534 (2.93)	361 (3.54)	333 (2.88)	446 (2.48)	418 (2.88)
8	1211 (6.64)	745 (7.31)	765 (6.62)	1027 (5.71)	936 (6.46)
9	1560 (8.56)	827 (8.12)	929 (8.04)	1420 (7.89)	1183 (8.17)
10	1280 (7.02)	643 (6.31)	767 (6.64)	1239 (6.88)	981 (6.77)
11	867 (4.75)	489 (4.80)	563 (4.87)	846 (4.70)	691 (4.77)
12	667 (3.66)	439 (4.31)	460 (3.98)	613 (3.40)	544 (3.76)
13	616 (3.38)	419 (4.11)	406 (3.52)	516 (2.86)	489 (3.37)
14	568 (3.11)	387 (3.80)	361 (3.12)	458 (2.54)	443 (3.06)
15	555 (3.04)	371 (3.64)	357 (3.09)	460 (2.55)	435 (3.00)
16	587 (3.22)	395 (3.87)	408 (3.53)	518 (2.88)	476 (3.29)
17	699 (3.83)	450 (4.42)	463 (4.01)	755 (4.19)	591 (4.08)
18	923 (5.06)	484 (4.75)	533 (4.61)	1113 (6.18)	763 (5.27)
19	1018 (5.58)	412 (4.04)	497 (4.30)	1194 (6.63)	780 (5.38)
20	974 (5.34)	368 (3.61)	519 (4.49)	1136 (6.31)	749 (5.17)
21	952 (5.22)	401 (3.93)	578 (5.00)	1063 (5.90)	748 (5.16)
22	910 (4.99)	458 (4.49)	649 (5.62)	952 (5.29)	742 (5.12)
23	827 (4.53)	453 (4.45)	608 (5.26)	861 (4.78)	687 (4.74)
24	747 (4.09)	438 (4.30)	557 (4.82)	775 (4.30)	629 (4.34)

Denver: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	614 (3.68)	376 (3.99)	455 (4.24)	644 (3.88)	523 (3.91)
2	549 (3.29)	325 (3.45)	375 (3.49)	542 (3.26)	447 (3.35)
3	460 (2.76)	281 (2.98)	292 (2.72)	426 (2.57)	364 (2.73)
4	423 (2.54)	240 (2.55)	253 (2.36)	381 (2.30)	324 (2.43)
5	352 (2.11)	203 (2.15)	209 (1.95)	322 (1.94)	271 (2.03)
6	326 (1.95)	202 (2.14)	200 (1.86)	287 (1.73)	253 (1.90)
7	429 (2.57)	283 (3.00)	258 (2.41)	355 (2.14)	331 (2.48)
8	880 (5.28)	580 (6.15)	558 (5.19)	742 (4.47)	689 (5.16)
9	1324 (7.94)	736 (7.81)	801 (7.46)	1218 (7.34)	1019 (7.63)
10	1188 (7.12)	617 (6.55)	735 (6.85)	1159 (6.99)	924 (6.92)
11	793 (4.75)	453 (4.80)	535 (4.98)	776 (4.68)	639 (4.78)
12	607 (3.64)	406 (4.30)	428 (3.98)	563 (3.39)	500 (3.75)
13	524 (3.14)	379 (4.02)	375 (3.49)	448 (2.70)	431 (3.23)
14	499 (2.99)	355 (3.76)	336 (3.13)	408 (2.46)	399 (2.99)
15	491 (2.95)	336 (3.56)	335 (3.12)	411 (2.48)	393 (2.94)
16	518 (3.10)	350 (3.71)	372 (3.46)	459 (2.76)	424 (3.18)
17	628 (3.77)	404 (4.28)	420 (3.91)	648 (3.90)	525 (3.93)
18	742 (4.45)	410 (4.35)	448 (4.17)	894 (5.39)	624 (4.67)
19	948 (5.68)	389 (4.13)	465 (4.33)	1112 (6.70)	728 (5.45)
20	968 (5.80)	361 (3.82)	498 (4.64)	1144 (6.89)	742 (5.56)
21	952 (5.71)	401 (4.25)	586 (5.46)	1069 (6.44)	752 (5.63)
22	896 (5.37)	457 (4.85)	653 (6.08)	951 (5.73)	739 (5.54)
23	833 (4.99)	459 (4.87)	611 (5.69)	869 (5.23)	693 (5.19)
24	735 (4.41)	427 (4.53)	539 (5.03)	768 (4.62)	617 (4.62)

Denver: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	619 (3.55)	378 (3.90)	452 (4.08)	649 (3.78)	524 (3.79)
2	549 (3.15)	330 (3.40)	376 (3.40)	545 (3.18)	450 (3.25)
3	456 (2.62)	285 (2.94)	294 (2.65)	423 (2.47)	364 (2.63)
4	417 (2.40)	238 (2.46)	250 (2.26)	374 (2.18)	320 (2.31)
5	348 (2.00)	203 (2.09)	207 (1.87)	318 (1.86)	269 (1.94)
6	327 (1.88)	204 (2.10)	202 (1.82)	288 (1.68)	255 (1.84)
7	460 (2.65)	308 (3.17)	288 (2.60)	379 (2.21)	358 (2.59)
8	1092 (6.28)	668 (6.88)	668 (6.03)	899 (5.24)	831 (6.01)
9	1476 (8.48)	783 (8.07)	856 (7.73)	1332 (7.77)	1111 (8.03)
10	1205 (6.92)	606 (6.25)	722 (6.52)	1166 (6.80)	924 (6.68)
11	797 (4.58)	455 (4.69)	534 (4.83)	781 (4.55)	641 (4.64)
12	608 (3.49)	403 (4.15)	433 (3.91)	567 (3.31)	502 (3.63)
13	558 (3.21)	390 (4.02)	390 (3.52)	471 (2.75)	452 (3.27)
14	524 (3.01)	365 (3.76)	339 (3.06)	425 (2.48)	413 (2.99)
15	519 (2.98)	343 (3.53)	326 (2.95)	421 (2.46)	402 (2.91)
16	540 (3.10)	354 (3.65)	374 (3.38)	456 (2.66)	430 (3.11)
17	640 (3.68)	405 (4.18)	426 (3.85)	651 (3.79)	530 (3.84)
18	898 (5.16)	457 (4.71)	512 (4.63)	1055 (6.15)	730 (5.28)
19	1012 (5.82)	408 (4.20)	498 (4.49)	1178 (6.87)	774 (5.60)
20	976 (5.61)	363 (3.74)	497 (4.49)	1144 (6.67)	745 (5.39)
21	956 (5.49)	409 (4.22)	601 (5.43)	1068 (6.23)	758 (5.49)
22	881 (5.06)	444 (4.58)	638 (5.77)	928 (5.41)	723 (5.23)
23	821 (4.72)	471 (4.85)	640 (5.78)	867 (5.06)	700 (5.06)
24	727 (4.18)	431 (4.45)	549 (4.96)	764 (4.46)	618 (4.47)

Denver: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	608 (3.66)	366 (3.88)	458 (4.15)	637 (3.88)	517 (3.87)
2	549 (3.30)	324 (3.43)	389 (3.52)	540 (3.29)	450 (3.37)
3	460 (2.77)	288 (3.05)	305 (2.77)	426 (2.60)	370 (2.77)
4	425 (2.56)	245 (2.60)	265 (2.40)	380 (2.32)	328 (2.46)
5	354 (2.13)	208 (2.20)	217 (1.97)	324 (1.97)	276 (2.06)
6	328 (1.98)	207 (2.19)	208 (1.88)	289 (1.76)	258 (1.93)
7	425 (2.56)	290 (3.07)	271 (2.45)	353 (2.15)	334 (2.50)
8	1006 (6.06)	636 (6.73)	593 (5.38)	915 (5.58)	787 (5.89)
9	1336 (8.04)	705 (7.46)	801 (7.25)	1170 (7.13)	1002 (7.49)
10	1208 (7.27)	595 (6.30)	691 (6.26)	1147 (6.99)	910 (6.80)
11	855 (5.14)	489 (5.18)	562 (5.09)	860 (5.24)	691 (5.17)
12	636 (3.83)	408 (4.32)	457 (4.14)	595 (3.62)	524 (3.92)
13	600 (3.61)	392 (4.15)	398 (3.61)	487 (2.97)	469 (3.51)
14	512 (3.08)	345 (3.65)	334 (3.02)	397 (2.42)	396 (2.97)
15	473 (2.85)	345 (3.66)	359 (3.25)	395 (2.40)	393 (2.94)
16	504 (3.04)	380 (4.02)	416 (3.76)	455 (2.77)	438 (3.28)
17	549 (3.30)	417 (4.42)	513 (4.65)	566 (3.45)	511 (3.82)
18	714 (4.30)	419 (4.43)	516 (4.68)	842 (5.13)	623 (4.66)
19	899 (5.41)	368 (3.90)	478 (4.33)	1038 (6.33)	696 (5.20)
20	884 (5.32)	317 (3.35)	446 (4.04)	1041 (6.34)	672 (5.03)
21	916 (5.52)	416 (4.40)	616 (5.58)	1037 (6.32)	746 (5.58)
22	855 (5.15)	431 (4.56)	607 (5.50)	921 (5.61)	704 (5.26)
23	802 (4.83)	441 (4.67)	596 (5.40)	849 (5.17)	672 (5.03)
24	713 (4.29)	414 (4.38)	542 (4.91)	746 (4.55)	604 (4.51)

Denver: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	603 (3.28)	358 (3.54)	438 (3.83)	630 (3.48)	507 (3.50)
2	537 (2.92)	317 (3.13)	369 (3.23)	538 (2.97)	440 (3.03)
3	453 (2.46)	284 (2.81)	289 (2.53)	420 (2.32)	362 (2.49)
4	417 (2.26)	238 (2.35)	250 (2.18)	373 (2.06)	319 (2.20)
5	348 (1.89)	202 (2.00)	207 (1.81)	319 (1.76)	269 (1.85)
6	327 (1.78)	207 (2.05)	207 (1.81)	292 (1.61)	258 (1.78)
7	592 (3.21)	370 (3.66)	334 (2.92)	481 (2.66)	444 (3.06)
8	1329 (7.22)	813 (8.03)	827 (7.23)	1130 (6.24)	1024 (7.06)
9	1601 (8.69)	865 (8.54)	951 (8.32)	1467 (8.11)	1220 (8.41)
10	1306 (7.09)	667 (6.59)	773 (6.76)	1269 (7.01)	1003 (6.91)
11	865 (4.70)	499 (4.93)	564 (4.93)	850 (4.70)	694 (4.78)
12	661 (3.59)	435 (4.29)	448 (3.92)	616 (3.40)	539 (3.72)
13	592 (3.21)	427 (4.22)	422 (3.69)	507 (2.80)	487 (3.35)
14	557 (3.03)	386 (3.82)	358 (3.13)	454 (2.51)	439 (3.02)
15	527 (2.86)	341 (3.37)	318 (2.78)	435 (2.40)	405 (2.79)
16	545 (2.96)	348 (3.43)	355 (3.10)	469 (2.59)	429 (2.95)
17	680 (3.70)	428 (4.23)	455 (3.98)	691 (3.82)	563 (3.88)
18	1051 (5.71)	494 (4.88)	541 (4.73)	1192 (6.59)	819 (5.65)
19	1047 (5.69)	398 (3.94)	471 (4.12)	1206 (6.67)	780 (5.38)
20	959 (5.21)	357 (3.52)	504 (4.41)	1122 (6.20)	735 (5.07)
21	963 (5.23)	413 (4.08)	625 (5.47)	1077 (5.95)	769 (5.30)
22	912 (4.95)	433 (4.27)	624 (5.46)	944 (5.22)	728 (5.02)
23	819 (4.45)	430 (4.25)	578 (5.06)	853 (4.72)	670 (4.62)
24	718 (3.90)	413 (4.07)	526 (4.60)	757 (4.18)	603 (4.16)

Denver: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	601 (3.69)	366 (4.05)	452 (4.36)	631 (3.97)	512 (3.98)
2	543 (3.33)	323 (3.57)	383 (3.70)	538 (3.38)	447 (3.47)
3	454 (2.79)	287 (3.18)	298 (2.88)	421 (2.65)	365 (2.83)
4	419 (2.57)	241 (2.67)	255 (2.46)	375 (2.36)	322 (2.50)
5	350 (2.15)	206 (2.29)	212 (2.04)	320 (2.02)	272 (2.11)
6	325 (1.99)	206 (2.28)	204 (1.97)	287 (1.80)	255 (1.98)
7	425 (2.61)	290 (3.21)	270 (2.61)	353 (2.22)	334 (2.59)
8	834 (5.12)	548 (6.07)	539 (5.20)	671 (4.22)	647 (5.02)
9	1310 (8.04)	703 (7.78)	772 (7.46)	1158 (7.28)	985 (7.64)
10	1159 (7.11)	570 (6.32)	677 (6.53)	1109 (6.97)	878 (6.81)
11	792 (4.86)	435 (4.82)	502 (4.85)	760 (4.78)	622 (4.83)
12	622 (3.82)	400 (4.43)	424 (4.09)	566 (3.56)	502 (3.90)
13	529 (3.25)	355 (3.93)	356 (3.44)	435 (2.74)	418 (3.25)
14	505 (3.10)	336 (3.73)	314 (3.04)	397 (2.50)	388 (3.01)
15	516 (3.17)	331 (3.66)	312 (3.02)	410 (2.58)	392 (3.04)
16	509 (3.12)	325 (3.60)	345 (3.33)	413 (2.60)	398 (3.09)
17	565 (3.47)	348 (3.85)	379 (3.66)	526 (3.31)	454 (3.52)
18	718 (4.41)	387 (4.28)	422 (4.07)	832 (5.23)	589 (4.57)
19	916 (5.62)	372 (4.12)	449 (4.33)	1063 (6.68)	700 (5.43)
20	962 (5.90)	357 (3.95)	493 (4.76)	1135 (7.14)	736 (5.71)
21	894 (5.49)	387 (4.28)	589 (5.69)	1018 (6.40)	722 (5.60)
22	842 (5.17)	412 (4.57)	600 (5.79)	892 (5.61)	686 (5.33)
23	792 (4.86)	428 (4.74)	576 (5.57)	835 (5.25)	658 (5.10)
24	712 (4.37)	418 (4.63)	534 (5.16)	755 (4.75)	605 (4.69)

Denver: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	611 (3.58)	372 (3.93)	444 (4.08)	641 (3.83)	517 (3.82)
2	548 (3.22)	326 (3.43)	371 (3.41)	549 (3.27)	448 (3.31)
3	459 (2.69)	290 (3.06)	290 (2.67)	428 (2.55)	367 (2.71)
4	416 (2.44)	238 (2.51)	249 (2.29)	371 (2.22)	318 (2.35)
5	345 (2.02)	202 (2.12)	205 (1.88)	315 (1.88)	266 (1.97)
6	334 (1.96)	205 (2.16)	199 (1.83)	294 (1.75)	258 (1.90)
7	517 (3.03)	335 (3.53)	308 (2.83)	427 (2.55)	396 (2.93)
8	1111 (6.51)	671 (7.07)	697 (6.41)	919 (5.49)	849 (6.27)
9	1407 (8.25)	757 (7.98)	869 (7.98)	1263 (7.54)	1073 (7.93)
10	1193 (6.99)	605 (6.38)	748 (6.87)	1149 (6.86)	923 (6.82)
11	811 (4.75)	453 (4.78)	543 (4.99)	785 (4.68)	647 (4.78)
12	595 (3.49)	391 (4.12)	427 (3.92)	556 (3.32)	492 (3.63)
13	565 (3.31)	391 (4.13)	391 (3.59)	472 (2.82)	455 (3.36)
14	534 (3.13)	371 (3.91)	351 (3.23)	425 (2.53)	420 (3.10)
15	515 (3.02)	335 (3.53)	313 (2.88)	413 (2.47)	394 (2.91)
16	520 (3.05)	342 (3.61)	369 (3.39)	440 (2.63)	417 (3.08)
17	600 (3.52)	374 (3.95)	415 (3.81)	573 (3.42)	490 (3.62)
18	767 (4.50)	395 (4.16)	427 (3.92)	919 (5.48)	627 (4.63)
19	934 (5.48)	380 (4.01)	455 (4.19)	1117 (6.67)	722 (5.33)
20	930 (5.45)	345 (3.64)	476 (4.37)	1099 (6.56)	712 (5.26)
21	922 (5.41)	391 (4.12)	565 (5.19)	1052 (6.28)	732 (5.41)
22	906 (5.31)	455 (4.79)	640 (5.88)	951 (5.68)	738 (5.45)
23	799 (4.68)	446 (4.70)	605 (5.56)	845 (5.04)	674 (4.98)
24	715 (4.19)	418 (4.41)	526 (4.84)	753 (4.49)	603 (4.45)

Denver: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	628 (3.58)	383 (3.74)	461 (3.97)	661 (3.82)	533 (3.76)
2	563 (3.21)	333 (3.25)	385 (3.32)	545 (3.15)	456 (3.22)
3	467 (2.66)	291 (2.85)	299 (2.58)	432 (2.50)	372 (2.63)
4	430 (2.45)	249 (2.43)	259 (2.23)	386 (2.23)	331 (2.34)
5	358 (2.04)	210 (2.05)	212 (1.82)	328 (1.90)	277 (1.95)
6	348 (1.98)	210 (2.06)	201 (1.73)	299 (1.73)	264 (1.87)
7	511 (2.91)	328 (3.21)	288 (2.48)	410 (2.37)	384 (2.71)
8	935 (5.33)	666 (6.52)	662 (5.71)	796 (4.60)	764 (5.40)
9	1547 (8.82)	836 (8.18)	899 (7.75)	1397 (8.07)	1169 (8.25)
10	1314 (7.49)	686 (6.71)	788 (6.79)	1262 (7.29)	1012 (7.14)
11	866 (4.94)	520 (5.08)	584 (5.03)	816 (4.72)	696 (4.92)
12	663 (3.78)	451 (4.41)	482 (4.15)	585 (3.38)	545 (3.85)
13	534 (3.04)	391 (3.82)	405 (3.49)	446 (2.58)	444 (3.13)
14	574 (3.27)	397 (3.88)	382 (3.29)	446 (2.58)	449 (3.17)
15	591 (3.37)	413 (4.04)	414 (3.57)	467 (2.70)	471 (3.33)
16	597 (3.40)	428 (4.18)	453 (3.90)	512 (2.96)	497 (3.51)
17	708 (4.03)	455 (4.45)	467 (4.03)	756 (4.37)	596 (4.21)
18	707 (4.03)	421 (4.11)	474 (4.08)	855 (4.95)	614 (4.34)
19	895 (5.10)	381 (3.73)	453 (3.90)	1083 (6.26)	703 (4.96)
20	997 (5.68)	401 (3.93)	558 (4.81)	1208 (6.99)	791 (5.59)
21	839 (4.78)	390 (3.82)	615 (5.30)	987 (5.70)	708 (5.00)
22	855 (4.87)	445 (4.35)	652 (5.62)	911 (5.27)	716 (5.05)
23	853 (4.86)	485 (4.75)	653 (5.62)	903 (5.22)	724 (5.11)
24	765 (4.36)	456 (4.46)	562 (4.84)	805 (4.66)	647 (4.57)

Denver: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	628 (3.72)	382 (3.98)	463 (4.23)	657 (3.99)	532 (3.95)
2	568 (3.36)	338 (3.52)	390 (3.57)	547 (3.33)	461 (3.42)
3	468 (2.77)	295 (3.07)	302 (2.76)	434 (2.64)	374 (2.78)
4	432 (2.56)	252 (2.62)	262 (2.40)	387 (2.35)	333 (2.47)
5	360 (2.13)	212 (2.21)	214 (1.96)	329 (2.00)	278 (2.07)
6	336 (1.99)	210 (2.19)	203 (1.86)	292 (1.78)	260 (1.93)
7	440 (2.61)	308 (3.20)	283 (2.59)	364 (2.21)	348 (2.59)
8	899 (5.32)	597 (6.22)	603 (5.52)	723 (4.39)	705 (5.24)
9	1387 (8.21)	733 (7.63)	792 (7.25)	1234 (7.50)	1035 (7.69)
10	1213 (7.18)	618 (6.43)	725 (6.64)	1163 (7.07)	929 (6.90)
11	838 (4.96)	486 (5.06)	549 (5.02)	819 (4.98)	672 (5.00)
12	631 (3.74)	415 (4.31)	426 (3.90)	575 (3.49)	511 (3.80)
13	619 (3.67)	437 (4.55)	407 (3.73)	530 (3.22)	498 (3.70)
14	561 (3.32)	392 (4.08)	356 (3.26)	450 (2.74)	439 (3.26)
15	516 (3.06)	348 (3.62)	337 (3.08)	412 (2.50)	403 (2.99)
16	532 (3.15)	354 (3.68)	378 (3.46)	431 (2.62)	424 (3.15)
17	515 (3.05)	351 (3.65)	397 (3.63)	480 (2.92)	436 (3.24)
18	647 (3.83)	411 (4.27)	487 (4.46)	763 (4.64)	577 (4.29)
19	970 (5.75)	399 (4.15)	482 (4.41)	1111 (6.75)	740 (5.50)
20	931 (5.51)	349 (3.63)	490 (4.48)	1118 (6.80)	722 (5.36)
21	924 (5.47)	382 (3.97)	567 (5.18)	1056 (6.42)	732 (5.44)
22	884 (5.24)	440 (4.58)	638 (5.83)	917 (5.57)	719 (5.34)
23	850 (5.03)	468 (4.87)	632 (5.78)	892 (5.42)	711 (5.28)
24	735 (4.35)	434 (4.52)	548 (5.02)	769 (4.67)	622 (4.62)

Denver: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	621 (2.93)	364 (3.09)	443 (3.27)	652 (3.13)	520 (3.09)
2	568 (2.68)	319 (2.71)	376 (2.77)	562 (2.70)	456 (2.71)
3	473 (2.23)	286 (2.43)	302 (2.23)	440 (2.11)	375 (2.23)
4	431 (2.03)	244 (2.07)	259 (1.91)	388 (1.86)	330 (1.96)
5	358 (1.69)	207 (1.76)	213 (1.57)	329 (1.58)	276 (1.64)
6	344 (1.62)	216 (1.83)	209 (1.54)	305 (1.47)	268 (1.59)
7	777 (3.67)	438 (3.72)	333 (2.46)	627 (3.01)	543 (3.23)
8	1569 (7.40)	989 (8.40)	1098 (8.11)	1437 (6.91)	1273 (7.57)
9	2110 (9.96)	1042 (8.85)	1230 (9.08)	1916 (9.21)	1573 (9.35)
10	1496 (7.06)	766 (6.51)	948 (7.00)	1416 (6.81)	1156 (6.87)
11	1046 (4.94)	615 (5.23)	716 (5.29)	972 (4.67)	837 (4.98)
12	794 (3.75)	538 (4.57)	612 (4.52)	681 (3.28)	656 (3.90)
13	756 (3.57)	500 (4.25)	487 (3.60)	601 (2.89)	586 (3.48)
14	717 (3.38)	454 (3.85)	425 (3.13)	557 (2.68)	537 (3.19)
15	676 (3.19)	448 (3.80)	453 (3.34)	546 (2.63)	530 (3.15)
16	713 (3.37)	508 (4.31)	552 (4.08)	637 (3.06)	603 (3.58)
17	909 (4.29)	579 (4.91)	591 (4.37)	1048 (5.04)	782 (4.65)
18	917 (4.33)	546 (4.64)	629 (4.64)	1206 (5.80)	825 (4.91)
19	1049 (4.95)	486 (4.13)	671 (4.95)	1296 (6.23)	876 (5.21)
20	1017 (4.80)	431 (3.66)	637 (4.70)	1205 (5.79)	823 (4.89)
21	1053 (4.97)	430 (3.65)	584 (4.31)	1153 (5.54)	805 (4.79)
22	1048 (4.95)	472 (4.01)	638 (4.71)	1061 (5.10)	805 (4.78)
23	939 (4.43)	476 (4.04)	618 (4.56)	948 (4.56)	745 (4.43)
24	803 (3.79)	422 (3.58)	523 (3.86)	814 (3.91)	640 (3.81)

Denver: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	601 (3.38)	359 (3.65)	438 (3.92)	630 (3.56)	507 (3.59)
2	540 (3.04)	313 (3.19)	367 (3.28)	539 (3.05)	440 (3.12)
3	458 (2.58)	279 (2.85)	290 (2.59)	423 (2.39)	362 (2.57)
4	420 (2.37)	237 (2.41)	251 (2.24)	376 (2.12)	321 (2.27)
5	348 (1.96)	202 (2.06)	209 (1.87)	318 (1.80)	269 (1.91)
6	321 (1.81)	202 (2.06)	203 (1.82)	286 (1.62)	253 (1.79)
7	457 (2.57)	302 (3.08)	276 (2.46)	380 (2.15)	353 (2.50)
8	1101 (6.20)	694 (7.07)	664 (5.94)	973 (5.50)	857 (6.08)
9	1592 (8.96)	803 (8.17)	848 (7.58)	1471 (8.31)	1177 (8.34)
10	1233 (6.94)	612 (6.23)	732 (6.54)	1217 (6.88)	948 (6.72)
11	817 (4.60)	467 (4.75)	548 (4.90)	814 (4.60)	661 (4.68)
12	625 (3.52)	418 (4.25)	437 (3.91)	586 (3.31)	516 (3.66)
13	535 (3.01)	402 (4.09)	396 (3.54)	468 (2.65)	450 (3.19)
14	518 (2.92)	366 (3.73)	349 (3.12)	427 (2.41)	415 (2.94)
15	560 (3.15)	379 (3.86)	376 (3.36)	468 (2.64)	445 (3.16)
16	678 (3.82)	428 (4.36)	425 (3.80)	597 (3.37)	532 (3.77)
17	733 (4.13)	447 (4.56)	470 (4.20)	786 (4.44)	609 (4.31)
18	949 (5.34)	448 (4.56)	497 (4.45)	1086 (6.13)	745 (5.28)
19	1092 (6.15)	400 (4.07)	488 (4.36)	1254 (7.09)	808 (5.73)
20	955 (5.38)	389 (3.96)	572 (5.11)	1138 (6.43)	763 (5.41)
21	893 (5.03)	391 (3.98)	602 (5.38)	998 (5.64)	721 (5.11)
22	843 (4.74)	436 (4.44)	634 (5.67)	895 (5.05)	702 (4.97)
23	789 (4.44)	438 (4.46)	591 (5.29)	830 (4.69)	662 (4.69)
24	703 (3.96)	407 (4.14)	523 (4.67)	740 (4.18)	593 (4.20)

Denver: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	605 (3.74)	364 (3.93)	440 (4.12)	632 (3.92)	510 (3.91)
2	545 (3.37)	322 (3.47)	372 (3.49)	537 (3.33)	444 (3.40)
3	456 (2.82)	284 (3.06)	291 (2.73)	422 (2.62)	363 (2.78)
4	421 (2.60)	241 (2.60)	253 (2.37)	377 (2.34)	323 (2.47)
5	350 (2.17)	204 (2.21)	209 (1.95)	321 (1.99)	271 (2.08)
6	334 (2.07)	207 (2.23)	201 (1.89)	293 (1.82)	259 (1.98)
7	436 (2.70)	294 (3.18)	270 (2.53)	364 (2.26)	341 (2.61)
8	959 (5.94)	635 (6.85)	628 (5.88)	836 (5.19)	764 (5.85)
9	1391 (8.61)	727 (7.85)	802 (7.51)	1237 (7.67)	1038 (7.96)
10	1166 (7.22)	590 (6.36)	711 (6.66)	1138 (7.06)	901 (6.90)
11	761 (4.71)	468 (5.05)	559 (5.24)	771 (4.78)	640 (4.90)
12	579 (3.58)	405 (4.37)	441 (4.13)	550 (3.41)	493 (3.78)
13	531 (3.29)	394 (4.25)	386 (3.62)	461 (2.86)	443 (3.39)
14	462 (2.86)	343 (3.70)	332 (3.11)	383 (2.37)	379 (2.91)
15	455 (2.82)	331 (3.57)	323 (3.03)	382 (2.37)	372 (2.85)
16	461 (2.85)	332 (3.58)	358 (3.36)	401 (2.49)	388 (2.97)
17	518 (3.21)	356 (3.84)	391 (3.66)	532 (3.30)	449 (3.44)
18	695 (4.30)	392 (4.23)	439 (4.12)	855 (5.30)	595 (4.56)
19	900 (5.57)	380 (4.10)	467 (4.38)	1071 (6.64)	704 (5.40)
20	930 (5.76)	355 (3.83)	496 (4.65)	1113 (6.90)	723 (5.54)
21	874 (5.41)	376 (4.05)	569 (5.33)	996 (6.18)	704 (5.39)
22	833 (5.15)	415 (4.48)	603 (5.65)	879 (5.45)	683 (5.23)
23	783 (4.84)	438 (4.72)	601 (5.63)	826 (5.13)	662 (5.07)
24	713 (4.41)	414 (4.47)	530 (4.97)	746 (4.63)	601 (4.60)

Denver: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	617 (3.56)	373 (3.85)	451 (4.08)	646 (3.76)	521 (3.78)
2	551 (3.18)	326 (3.37)	376 (3.41)	546 (3.19)	450 (3.26)
3	460 (2.65)	285 (2.95)	294 (2.66)	427 (2.49)	366 (2.65)
4	422 (2.43)	240 (2.48)	253 (2.29)	379 (2.21)	323 (2.34)
5	351 (2.03)	204 (2.11)	209 (1.89)	321 (1.87)	271 (1.97)
6	329 (1.90)	206 (2.13)	204 (1.85)	290 (1.69)	257 (1.86)
7	483 (2.79)	320 (3.30)	292 (2.64)	400 (2.33)	373 (2.71)
8	1083 (6.25)	665 (6.87)	651 (5.90)	910 (5.31)	827 (5.99)
9	1455 (8.39)	773 (7.98)	847 (7.68)	1324 (7.72)	1099 (7.96)
10	1218 (7.02)	615 (6.35)	737 (6.67)	1187 (6.92)	939 (6.80)
11	815 (4.70)	466 (4.82)	545 (4.94)	804 (4.69)	657 (4.76)
12	620 (3.58)	412 (4.26)	437 (3.96)	579 (3.37)	512 (3.71)
13	560 (3.23)	393 (4.06)	387 (3.50)	476 (2.78)	453 (3.29)
14	521 (3.01)	363 (3.75)	342 (3.09)	423 (2.47)	412 (2.99)
15	516 (2.97)	348 (3.60)	339 (3.07)	426 (2.48)	407 (2.95)
16	546 (3.15)	365 (3.77)	383 (3.47)	473 (2.76)	441 (3.20)
17	635 (3.66)	409 (4.22)	435 (3.94)	652 (3.80)	532 (3.86)
18	846 (4.88)	438 (4.52)	485 (4.39)	998 (5.82)	692 (5.01)
19	989 (5.71)	396 (4.09)	479 (4.34)	1158 (6.75)	755 (5.47)
20	962 (5.55)	366 (3.78)	518 (4.69)	1135 (6.61)	745 (5.40)
21	933 (5.38)	401 (4.14)	595 (5.39)	1051 (6.13)	745 (5.40)
22	880 (5.08)	441 (4.56)	632 (5.72)	927 (5.40)	720 (5.22)
23	817 (4.71)	451 (4.66)	607 (5.50)	858 (5.00)	683 (4.95)
24	729 (4.20)	426 (4.40)	541 (4.90)	765 (4.46)	615 (4.46)

Houston: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	453 (4.16)	286 (3.76)	471 (3.80)	672 (4.15)	471 (4.00)
2	402 (3.69)	255 (3.35)	447 (3.60)	664 (4.10)	443 (3.76)
3	372 (3.41)	229 (3.01)	415 (3.34)	613 (3.78)	408 (3.46)
4	350 (3.21)	210 (2.75)	403 (3.25)	594 (3.67)	390 (3.31)
5	318 (2.92)	200 (2.62)	388 (3.13)	567 (3.50)	369 (3.13)
6	306 (2.81)	201 (2.63)	382 (3.08)	543 (3.35)	359 (3.04)
7	379 (3.48)	260 (3.41)	459 (3.70)	630 (3.89)	433 (3.67)
8	675 (6.19)	471 (6.18)	778 (6.27)	989 (6.11)	729 (6.18)
9	791 (7.26)	537 (7.05)	922 (7.43)	1127 (6.96)	845 (7.17)
10	609 (5.59)	421 (5.53)	714 (5.76)	933 (5.76)	670 (5.68)
11	428 (3.93)	332 (4.36)	516 (4.16)	685 (4.23)	491 (4.17)
12	361 (3.32)	303 (3.98)	448 (3.61)	559 (3.45)	418 (3.55)
13	360 (3.31)	316 (4.14)	456 (3.68)	532 (3.28)	416 (3.53)
14	351 (3.22)	311 (4.08)	455 (3.67)	497 (3.07)	404 (3.43)
15	368 (3.38)	308 (4.04)	458 (3.69)	514 (3.18)	412 (3.50)
16	397 (3.65)	318 (4.17)	466 (3.76)	533 (3.30)	429 (3.64)
17	424 (3.90)	338 (4.43)	489 (3.95)	559 (3.46)	453 (3.84)
18	483 (4.43)	364 (4.77)	535 (4.31)	653 (4.04)	509 (4.32)
19	515 (4.73)	356 (4.67)	534 (4.30)	722 (4.46)	532 (4.51)
20	525 (4.82)	332 (4.35)	544 (4.39)	744 (4.59)	537 (4.55)
21	515 (4.73)	317 (4.16)	552 (4.45)	719 (4.44)	527 (4.47)
22	501 (4.60)	323 (4.23)	547 (4.41)	699 (4.32)	518 (4.39)
23	508 (4.66)	324 (4.24)	522 (4.21)	724 (4.47)	520 (4.41)
24	503 (4.61)	310 (4.07)	501 (4.04)	716 (4.42)	508 (4.31)

Houston: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	455 (4.17)	298 (3.82)	487 (3.95)	671 (4.14)	479 (4.04)
2	408 (3.74)	265 (3.40)	452 (3.66)	667 (4.11)	449 (3.79)
3	380 (3.49)	239 (3.07)	424 (3.43)	614 (3.78)	415 (3.51)
4	361 (3.31)	224 (2.87)	414 (3.35)	607 (3.74)	402 (3.40)
5	327 (3.00)	213 (2.74)	399 (3.23)	580 (3.57)	381 (3.22)
6	317 (2.90)	217 (2.78)	406 (3.29)	556 (3.43)	375 (3.17)
7	397 (3.64)	272 (3.49)	450 (3.65)	653 (4.02)	444 (3.75)
8	796 (7.30)	523 (6.70)	745 (6.04)	1134 (6.98)	800 (6.76)
9	836 (7.66)	570 (7.31)	925 (7.49)	1182 (7.28)	879 (7.43)
10	629 (5.76)	444 (5.70)	733 (5.94)	958 (5.90)	692 (5.85)
11	423 (3.88)	335 (4.30)	517 (4.19)	684 (4.21)	491 (4.14)
12	328 (3.01)	278 (3.57)	410 (3.32)	517 (3.19)	384 (3.24)
13	312 (2.86)	280 (3.59)	399 (3.23)	482 (2.97)	369 (3.12)
14	348 (3.19)	301 (3.86)	413 (3.35)	503 (3.10)	392 (3.31)
15	478 (4.38)	365 (4.68)	465 (3.76)	668 (4.12)	495 (4.18)
16	361 (3.31)	303 (3.88)	445 (3.60)	491 (3.03)	401 (3.38)
17	418 (3.83)	347 (4.44)	503 (4.08)	552 (3.40)	455 (3.85)
18	446 (4.08)	363 (4.66)	548 (4.44)	594 (3.66)	488 (4.13)
19	466 (4.27)	344 (4.42)	522 (4.23)	643 (3.96)	494 (4.18)
20	483 (4.43)	316 (4.06)	495 (4.01)	696 (4.29)	498 (4.21)
21	480 (4.40)	312 (4.01)	543 (4.40)	683 (4.21)	505 (4.27)
22	471 (4.31)	322 (4.14)	553 (4.48)	671 (4.13)	505 (4.27)
23	507 (4.65)	345 (4.42)	568 (4.60)	731 (4.50)	538 (4.55)
24	486 (4.45)	319 (4.10)	527 (4.27)	694 (4.27)	507 (4.28)

Houston: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	451 (4.24)	287 (3.86)	458 (3.91)	661 (4.30)	465 (4.11)
2	405 (3.80)	255 (3.43)	429 (3.66)	656 (4.27)	437 (3.87)
3	379 (3.56)	229 (3.08)	402 (3.43)	612 (3.98)	406 (3.59)
4	357 (3.35)	212 (2.85)	392 (3.35)	598 (3.89)	390 (3.46)
5	309 (2.91)	195 (2.63)	372 (3.18)	547 (3.56)	357 (3.16)
6	294 (2.77)	197 (2.66)	375 (3.20)	517 (3.37)	347 (3.07)
7	358 (3.36)	243 (3.27)	415 (3.54)	589 (3.84)	402 (3.56)
8	679 (6.38)	454 (6.11)	676 (5.77)	962 (6.27)	693 (6.14)
9	760 (7.14)	524 (7.05)	874 (7.46)	1064 (6.93)	806 (7.14)
10	600 (5.63)	420 (5.66)	696 (5.94)	901 (5.87)	655 (5.80)
11	417 (3.92)	324 (4.36)	493 (4.20)	646 (4.21)	471 (4.16)
12	333 (3.13)	274 (3.69)	395 (3.37)	496 (3.23)	375 (3.32)
13	328 (3.08)	281 (3.79)	387 (3.30)	465 (3.03)	366 (3.24)
14	352 (3.31)	298 (4.01)	402 (3.43)	474 (3.09)	382 (3.38)
15	456 (4.28)	345 (4.65)	448 (3.83)	604 (3.93)	464 (4.10)
16	368 (3.46)	298 (4.01)	435 (3.72)	472 (3.08)	394 (3.49)
17	429 (4.03)	339 (4.56)	483 (4.12)	536 (3.49)	447 (3.96)
18	450 (4.23)	351 (4.72)	524 (4.47)	572 (3.73)	474 (4.20)
19	459 (4.31)	329 (4.43)	500 (4.27)	610 (3.97)	475 (4.20)
20	477 (4.48)	303 (4.09)	482 (4.12)	651 (4.24)	479 (4.24)
21	479 (4.50)	301 (4.05)	523 (4.47)	650 (4.24)	489 (4.33)
22	495 (4.65)	320 (4.31)	527 (4.50)	671 (4.37)	504 (4.46)
23	516 (4.84)	335 (4.51)	531 (4.53)	713 (4.64)	524 (4.64)
24	493 (4.63)	312 (4.21)	497 (4.24)	686 (4.47)	498 (4.40)

Houston: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	448 (4.24)	292 (3.85)	464 (3.92)	650 (4.24)	464 (4.09)
2	398 (3.76)	262 (3.45)	441 (3.73)	641 (4.18)	436 (3.84)
3	372 (3.52)	237 (3.13)	418 (3.53)	593 (3.87)	406 (3.57)
4	354 (3.35)	220 (2.90)	404 (3.41)	587 (3.83)	392 (3.45)
5	320 (3.02)	209 (2.75)	387 (3.27)	561 (3.66)	370 (3.26)
6	310 (2.93)	208 (2.75)	376 (3.18)	539 (3.51)	359 (3.16)
7	391 (3.69)	271 (3.57)	445 (3.76)	633 (4.13)	436 (3.84)
8	594 (5.61)	426 (5.62)	660 (5.57)	847 (5.52)	632 (5.57)
9	738 (6.97)	519 (6.85)	858 (7.25)	1024 (6.67)	786 (6.92)
10	601 (5.68)	426 (5.63)	703 (5.94)	903 (5.89)	659 (5.81)
11	415 (3.92)	328 (4.33)	501 (4.24)	651 (4.24)	475 (4.18)
12	327 (3.09)	275 (3.63)	397 (3.35)	497 (3.24)	374 (3.30)
13	344 (3.25)	300 (3.96)	407 (3.44)	500 (3.26)	388 (3.42)
14	336 (3.17)	296 (3.91)	410 (3.46)	458 (2.99)	375 (3.31)
15	403 (3.81)	327 (4.32)	446 (3.77)	541 (3.53)	430 (3.79)
16	388 (3.67)	313 (4.13)	439 (3.71)	504 (3.29)	411 (3.63)
17	433 (4.09)	352 (4.64)	492 (4.15)	548 (3.57)	456 (4.02)
18	510 (4.82)	388 (5.12)	544 (4.60)	657 (4.29)	525 (4.63)
19	483 (4.56)	343 (4.53)	490 (4.14)	646 (4.21)	491 (4.33)
20	487 (4.60)	310 (4.10)	471 (3.98)	673 (4.39)	486 (4.28)
21	496 (4.69)	319 (4.21)	538 (4.55)	684 (4.46)	510 (4.49)
22	471 (4.45)	321 (4.24)	537 (4.54)	651 (4.24)	496 (4.37)
23	475 (4.49)	322 (4.24)	515 (4.35)	669 (4.36)	496 (4.37)
24	489 (4.62)	314 (4.15)	494 (4.17)	682 (4.44)	495 (4.36)

Houston: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	470 (4.33)	291 (3.86)	462 (3.82)	693 (4.31)	480 (4.12)
2	419 (3.86)	261 (3.47)	443 (3.67)	689 (4.28)	454 (3.89)
3	385 (3.55)	233 (3.10)	414 (3.42)	631 (3.93)	416 (3.57)
4	350 (3.22)	209 (2.77)	398 (3.29)	591 (3.68)	388 (3.33)
5	316 (2.91)	198 (2.64)	383 (3.17)	563 (3.50)	366 (3.14)
6	307 (2.83)	202 (2.69)	386 (3.19)	542 (3.37)	360 (3.09)
7	382 (3.52)	257 (3.42)	443 (3.67)	634 (3.94)	430 (3.69)
8	640 (5.90)	434 (5.77)	681 (5.64)	936 (5.82)	674 (5.78)
9	760 (7.00)	512 (6.80)	863 (7.14)	1077 (6.70)	804 (6.90)
10	597 (5.50)	414 (5.50)	705 (5.83)	912 (5.67)	658 (5.65)
11	432 (3.98)	338 (4.49)	528 (4.36)	687 (4.28)	497 (4.26)
12	386 (3.55)	317 (4.20)	454 (3.75)	593 (3.69)	438 (3.76)
13	363 (3.34)	310 (4.12)	437 (3.62)	535 (3.33)	412 (3.53)
14	331 (3.05)	292 (3.88)	428 (3.54)	467 (2.90)	380 (3.26)
15	357 (3.29)	301 (3.99)	452 (3.74)	501 (3.11)	403 (3.46)
16	385 (3.55)	316 (4.19)	476 (3.94)	517 (3.22)	424 (3.64)
17	428 (3.95)	339 (4.50)	490 (4.05)	562 (3.50)	455 (3.91)
18	452 (4.17)	355 (4.71)	539 (4.46)	605 (3.76)	488 (4.19)
19	488 (4.49)	342 (4.54)	515 (4.26)	678 (4.22)	506 (4.34)
20	532 (4.90)	325 (4.32)	510 (4.22)	747 (4.65)	529 (4.54)
21	517 (4.76)	314 (4.17)	536 (4.43)	719 (4.47)	522 (4.48)
22	514 (4.73)	329 (4.37)	546 (4.52)	718 (4.46)	527 (4.52)
23	527 (4.86)	328 (4.35)	511 (4.23)	748 (4.65)	529 (4.54)
24	517 (4.76)	313 (4.16)	490 (4.05)	733 (4.56)	514 (4.41)

Houston: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	455 (4.18)	285 (3.75)	470 (3.77)	679 (4.17)	473 (4.00)
2	405 (3.72)	255 (3.34)	446 (3.57)	670 (4.12)	445 (3.76)
3	376 (3.45)	230 (3.02)	416 (3.34)	621 (3.81)	411 (3.47)
4	357 (3.27)	212 (2.78)	407 (3.26)	606 (3.72)	396 (3.35)
5	322 (2.95)	201 (2.64)	392 (3.14)	575 (3.53)	373 (3.15)
6	310 (2.84)	201 (2.64)	383 (3.07)	550 (3.38)	362 (3.06)
7	385 (3.53)	263 (3.45)	465 (3.72)	640 (3.93)	439 (3.71)
8	678 (6.22)	476 (6.25)	797 (6.38)	995 (6.11)	738 (6.23)
9	782 (7.18)	534 (7.01)	929 (7.44)	1117 (6.86)	842 (7.11)
10	608 (5.58)	422 (5.54)	718 (5.75)	936 (5.75)	672 (5.68)
11	422 (3.88)	330 (4.34)	521 (4.17)	679 (4.17)	489 (4.13)
12	354 (3.25)	301 (3.95)	454 (3.63)	552 (3.39)	416 (3.51)
13	352 (3.23)	313 (4.10)	460 (3.68)	525 (3.23)	413 (3.49)
14	351 (3.22)	312 (4.09)	461 (3.69)	503 (3.09)	407 (3.44)
15	379 (3.47)	311 (4.08)	458 (3.67)	534 (3.28)	421 (3.55)
16	392 (3.59)	316 (4.14)	468 (3.75)	532 (3.27)	427 (3.61)
17	430 (3.94)	342 (4.48)	498 (3.99)	573 (3.52)	461 (3.90)
18	488 (4.48)	364 (4.78)	533 (4.27)	667 (4.09)	513 (4.34)
19	519 (4.76)	356 (4.67)	534 (4.27)	733 (4.50)	536 (4.53)
20	510 (4.68)	326 (4.28)	545 (4.37)	727 (4.47)	528 (4.46)
21	508 (4.66)	315 (4.13)	557 (4.46)	712 (4.37)	523 (4.42)
22	504 (4.63)	320 (4.21)	540 (4.32)	709 (4.35)	519 (4.38)
23	512 (4.69)	326 (4.28)	532 (4.26)	734 (4.51)	526 (4.45)
24	500 (4.59)	309 (4.05)	502 (4.02)	715 (4.39)	507 (4.28)

Houston: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	454 (4.12)	289 (3.74)	485 (3.84)	677 (4.11)	477 (3.98)
2	401 (3.64)	256 (3.32)	455 (3.60)	665 (4.03)	445 (3.71)
3	371 (3.36)	231 (2.99)	422 (3.34)	615 (3.73)	410 (3.42)
4	347 (3.15)	209 (2.71)	407 (3.22)	591 (3.59)	389 (3.25)
5	315 (2.86)	199 (2.58)	391 (3.09)	564 (3.42)	368 (3.07)
6	302 (2.74)	202 (2.62)	395 (3.13)	538 (3.26)	360 (3.00)
7	353 (3.20)	250 (3.25)	465 (3.68)	595 (3.61)	416 (3.48)
8	687 (6.23)	479 (6.21)	797 (6.31)	1014 (6.15)	745 (6.22)
9	826 (7.49)	553 (7.17)	945 (7.48)	1187 (7.19)	879 (7.33)
10	613 (5.56)	419 (5.43)	707 (5.59)	944 (5.72)	672 (5.61)
11	438 (3.97)	331 (4.29)	501 (3.97)	706 (4.28)	495 (4.13)
12	370 (3.36)	305 (3.96)	445 (3.52)	578 (3.50)	425 (3.55)
13	369 (3.34)	319 (4.14)	458 (3.62)	550 (3.33)	424 (3.54)
14	356 (3.23)	315 (4.09)	463 (3.66)	509 (3.09)	411 (3.43)
15	365 (3.31)	314 (4.06)	484 (3.83)	514 (3.12)	420 (3.50)
16	404 (3.67)	325 (4.21)	475 (3.76)	546 (3.31)	438 (3.65)
17	426 (3.87)	338 (4.39)	489 (3.87)	566 (3.43)	455 (3.80)
18	504 (4.57)	378 (4.90)	556 (4.40)	693 (4.20)	533 (4.45)
19	537 (4.87)	370 (4.79)	559 (4.43)	763 (4.63)	558 (4.65)
20	557 (5.05)	347 (4.50)	569 (4.51)	795 (4.82)	568 (4.74)
21	530 (4.80)	327 (4.24)	573 (4.54)	745 (4.52)	544 (4.54)
22	492 (4.46)	323 (4.19)	562 (4.45)	691 (4.19)	518 (4.32)
23	500 (4.53)	318 (4.12)	518 (4.10)	715 (4.34)	513 (4.28)
24	510 (4.63)	315 (4.09)	515 (4.07)	731 (4.43)	518 (4.33)

Houston: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	467 (4.18)	308 (3.87)	506 (3.99)	684 (4.16)	492 (4.07)
2	421 (3.77)	277 (3.48)	474 (3.75)	688 (4.18)	466 (3.86)
3	386 (3.45)	244 (3.07)	424 (3.35)	628 (3.81)	421 (3.49)
4	368 (3.30)	225 (2.82)	413 (3.26)	619 (3.76)	407 (3.37)
5	334 (2.99)	214 (2.69)	397 (3.14)	593 (3.60)	385 (3.19)
6	322 (2.88)	214 (2.69)	389 (3.07)	565 (3.43)	373 (3.09)
7	383 (3.43)	268 (3.37)	462 (3.64)	632 (3.84)	437 (3.62)
8	780 (6.98)	528 (6.64)	811 (6.40)	1128 (6.85)	813 (6.73)
9	867 (7.76)	587 (7.38)	968 (7.65)	1222 (7.42)	912 (7.55)
10	617 (5.53)	441 (5.54)	739 (5.83)	944 (5.73)	686 (5.68)
11	407 (3.64)	329 (4.13)	514 (4.06)	651 (3.96)	476 (3.94)
12	330 (2.95)	296 (3.72)	449 (3.55)	507 (3.08)	396 (3.28)
13	359 (3.22)	329 (4.13)	474 (3.74)	527 (3.20)	423 (3.50)
14	331 (2.97)	311 (3.90)	459 (3.62)	467 (2.84)	393 (3.25)
15	395 (3.53)	321 (4.03)	439 (3.47)	536 (3.26)	423 (3.50)
16	370 (3.31)	301 (3.79)	431 (3.40)	492 (2.99)	399 (3.30)
17	382 (3.42)	313 (3.93)	448 (3.53)	498 (3.03)	410 (3.40)
18	536 (4.80)	395 (4.96)	542 (4.28)	726 (4.41)	550 (4.55)
19	511 (4.57)	359 (4.51)	527 (4.16)	704 (4.27)	526 (4.35)
20	582 (5.21)	359 (4.51)	555 (4.38)	812 (4.93)	578 (4.78)
21	508 (4.55)	324 (4.07)	555 (4.38)	710 (4.31)	525 (4.34)
22	497 (4.45)	345 (4.33)	597 (4.71)	693 (4.20)	533 (4.42)
23	510 (4.57)	345 (4.33)	563 (4.45)	726 (4.41)	537 (4.44)
24	507 (4.54)	327 (4.11)	528 (4.17)	716 (4.35)	520 (4.31)

Houston: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	441 (4.10)	280 (3.70)	465 (3.75)	657 (4.08)	461 (3.94)
2	393 (3.65)	250 (3.31)	442 (3.56)	652 (4.05)	435 (3.71)
3	367 (3.41)	226 (2.99)	413 (3.33)	606 (3.77)	404 (3.45)
4	350 (3.25)	209 (2.77)	405 (3.26)	594 (3.69)	390 (3.33)
5	318 (2.95)	199 (2.64)	390 (3.14)	568 (3.53)	370 (3.15)
6	306 (2.84)	200 (2.65)	385 (3.10)	543 (3.38)	359 (3.07)
7	365 (3.39)	251 (3.32)	448 (3.61)	612 (3.80)	420 (3.58)
8	690 (6.40)	470 (6.22)	757 (6.10)	1012 (6.29)	733 (6.25)
9	796 (7.39)	532 (7.05)	903 (7.28)	1137 (7.07)	843 (7.19)
10	607 (5.64)	418 (5.53)	715 (5.77)	929 (5.78)	668 (5.70)
11	424 (3.94)	330 (4.37)	522 (4.21)	682 (4.24)	490 (4.18)
12	363 (3.37)	304 (4.02)	451 (3.64)	566 (3.52)	422 (3.60)
13	358 (3.32)	312 (4.13)	451 (3.64)	532 (3.31)	414 (3.53)
14	340 (3.16)	303 (4.01)	449 (3.62)	487 (3.03)	395 (3.37)
15	382 (3.55)	318 (4.21)	477 (3.85)	539 (3.35)	430 (3.67)
16	421 (3.91)	332 (4.40)	479 (3.86)	570 (3.55)	451 (3.85)
17	428 (3.98)	340 (4.50)	497 (4.01)	571 (3.55)	460 (3.92)
18	471 (4.37)	356 (4.72)	531 (4.29)	642 (3.99)	501 (4.27)
19	508 (4.72)	351 (4.65)	536 (4.32)	717 (4.46)	529 (4.51)
20	507 (4.70)	333 (4.40)	571 (4.61)	720 (4.48)	533 (4.55)
21	494 (4.58)	311 (4.12)	556 (4.49)	693 (4.31)	514 (4.39)
22	475 (4.41)	313 (4.14)	543 (4.38)	667 (4.15)	500 (4.27)
23	486 (4.51)	313 (4.15)	514 (4.15)	696 (4.33)	503 (4.29)
24	482 (4.47)	303 (4.01)	500 (4.03)	689 (4.28)	494 (4.22)

Houston: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	517 (4.48)	336 (4.02)	548 (4.11)	765 (4.54)	542 (4.32)
2	470 (4.07)	292 (3.49)	474 (3.56)	757 (4.49)	499 (3.98)
3	424 (3.67)	261 (3.12)	449 (3.36)	684 (4.06)	455 (3.63)
4	384 (3.33)	236 (2.83)	429 (3.22)	646 (3.83)	425 (3.39)
5	325 (2.82)	213 (2.55)	399 (2.99)	574 (3.41)	379 (3.02)
6	308 (2.67)	211 (2.53)	392 (2.94)	538 (3.19)	363 (2.89)
7	391 (3.39)	287 (3.44)	500 (3.75)	639 (3.79)	455 (3.63)
8	595 (5.16)	497 (5.95)	923 (6.92)	861 (5.11)	721 (5.75)
9	712 (6.17)	561 (6.72)	1059 (7.94)	991 (5.88)	832 (6.64)
10	626 (5.42)	475 (5.68)	823 (6.17)	953 (5.66)	720 (5.74)
11	481 (4.16)	391 (4.68)	596 (4.47)	751 (4.45)	555 (4.43)
12	395 (3.42)	317 (3.79)	424 (3.18)	597 (3.54)	434 (3.46)
13	394 (3.41)	367 (4.39)	539 (4.04)	571 (3.39)	468 (3.73)
14	377 (3.26)	353 (4.23)	533 (4.00)	523 (3.11)	447 (3.57)
15	389 (3.37)	330 (3.95)	479 (3.59)	529 (3.14)	432 (3.45)
16	462 (4.00)	361 (4.32)	491 (3.68)	605 (3.59)	480 (3.83)
17	527 (4.57)	418 (5.00)	587 (4.40)	677 (4.02)	553 (4.41)
18	470 (4.07)	373 (4.47)	558 (4.18)	615 (3.65)	505 (4.03)
19	484 (4.19)	342 (4.10)	504 (3.78)	660 (3.92)	498 (3.97)
20	563 (4.88)	328 (3.92)	454 (3.40)	782 (4.64)	532 (4.24)
21	525 (4.55)	320 (3.83)	519 (3.89)	728 (4.32)	524 (4.18)
22	554 (4.80)	395 (4.73)	682 (5.11)	765 (4.54)	600 (4.79)
23	583 (5.05)	354 (4.24)	510 (3.82)	817 (4.85)	566 (4.52)
24	584 (5.06)	337 (4.03)	470 (3.52)	822 (4.88)	553 (4.41)

Houston: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	460 (3.97)	294 (3.63)	483 (3.76)	683 (4.00)	480 (3.87)
2	407 (3.51)	262 (3.24)	460 (3.59)	670 (3.93)	450 (3.63)
3	373 (3.23)	232 (2.86)	416 (3.25)	613 (3.60)	409 (3.30)
4	353 (3.05)	213 (2.63)	405 (3.16)	598 (3.51)	393 (3.17)
5	322 (2.78)	203 (2.51)	389 (3.03)	573 (3.36)	372 (3.00)
6	315 (2.72)	210 (2.59)	398 (3.11)	556 (3.26)	370 (2.99)
7	436 (3.77)	296 (3.66)	499 (3.89)	708 (4.15)	485 (3.91)
8	760 (6.57)	536 (6.63)	893 (6.96)	1096 (6.43)	822 (6.63)
9	844 (7.29)	581 (7.18)	989 (7.71)	1202 (7.05)	905 (7.30)
10	643 (5.56)	445 (5.50)	725 (5.66)	983 (5.76)	700 (5.65)
11	460 (3.97)	350 (4.33)	515 (4.01)	725 (4.25)	513 (4.14)
12	394 (3.41)	327 (4.04)	459 (3.58)	601 (3.53)	446 (3.60)
13	390 (3.37)	336 (4.15)	462 (3.61)	568 (3.33)	440 (3.55)
14	384 (3.32)	333 (4.12)	468 (3.65)	537 (3.15)	431 (3.48)
15	412 (3.56)	331 (4.09)	457 (3.56)	566 (3.32)	442 (3.56)
16	446 (3.85)	348 (4.31)	480 (3.74)	587 (3.44)	466 (3.76)
17	504 (4.35)	383 (4.73)	518 (4.04)	653 (3.83)	515 (4.15)
18	563 (4.87)	412 (5.10)	577 (4.50)	755 (4.43)	577 (4.66)
19	536 (4.64)	371 (4.59)	548 (4.28)	747 (4.38)	551 (4.45)
20	510 (4.40)	325 (4.02)	532 (4.15)	722 (4.24)	523 (4.22)
21	525 (4.54)	317 (3.92)	532 (4.15)	734 (4.30)	527 (4.25)
22	520 (4.49)	336 (4.16)	564 (4.40)	728 (4.27)	538 (4.34)
23	507 (4.38)	326 (4.03)	527 (4.11)	722 (4.23)	521 (4.20)
24	508 (4.39)	321 (3.97)	526 (4.10)	724 (4.25)	521 (4.20)

Houston: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	449 (4.25)	290 (3.89)	478 (3.98)	661 (4.23)	470 (4.11)
2	396 (3.74)	255 (3.42)	443 (3.69)	648 (4.16)	436 (3.82)
3	367 (3.47)	228 (3.06)	409 (3.40)	597 (3.83)	401 (3.51)
4	350 (3.30)	211 (2.83)	400 (3.33)	588 (3.77)	388 (3.39)
5	317 (2.99)	201 (2.69)	385 (3.20)	562 (3.60)	367 (3.21)
6	305 (2.88)	201 (2.69)	376 (3.13)	537 (3.44)	355 (3.11)
7	343 (3.24)	239 (3.20)	427 (3.55)	574 (3.68)	396 (3.47)
8	595 (5.63)	423 (5.67)	687 (5.71)	868 (5.56)	644 (5.64)
9	758 (7.16)	519 (6.96)	877 (7.30)	1070 (6.86)	807 (7.06)
10	610 (5.76)	428 (5.74)	722 (6.01)	930 (5.96)	674 (5.89)
11	412 (3.89)	322 (4.31)	504 (4.19)	656 (4.21)	474 (4.15)
12	352 (3.33)	298 (3.99)	437 (3.63)	542 (3.47)	408 (3.57)
13	341 (3.23)	306 (4.10)	445 (3.70)	502 (3.22)	399 (3.49)
14	344 (3.26)	306 (4.10)	445 (3.70)	483 (3.10)	395 (3.46)
15	360 (3.40)	295 (3.96)	425 (3.53)	498 (3.19)	395 (3.45)
16	385 (3.64)	304 (4.08)	435 (3.62)	510 (3.27)	409 (3.58)
17	435 (4.11)	339 (4.55)	476 (3.96)	569 (3.64)	455 (3.98)
18	450 (4.26)	343 (4.59)	498 (4.14)	595 (3.82)	472 (4.13)
19	486 (4.59)	346 (4.64)	517 (4.30)	670 (4.29)	505 (4.42)
20	502 (4.75)	320 (4.29)	514 (4.28)	706 (4.53)	511 (4.47)
21	510 (4.82)	314 (4.21)	536 (4.46)	710 (4.55)	518 (4.53)
22	515 (4.87)	333 (4.46)	553 (4.60)	717 (4.59)	530 (4.64)
23	503 (4.76)	329 (4.41)	531 (4.42)	716 (4.59)	520 (4.55)
24	492 (4.65)	310 (4.16)	502 (4.17)	695 (4.46)	500 (4.38)

Houston: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	461 (4.23)	291 (3.77)	471 (3.77)	683 (4.22)	477 (4.03)
2	405 (3.71)	258 (3.35)	447 (3.58)	666 (4.12)	445 (3.76)
3	374 (3.42)	232 (3.01)	416 (3.33)	614 (3.79)	410 (3.46)
4	351 (3.21)	211 (2.74)	402 (3.21)	593 (3.67)	390 (3.29)
5	319 (2.92)	202 (2.61)	387 (3.10)	568 (3.51)	369 (3.12)
6	310 (2.84)	203 (2.64)	382 (3.06)	547 (3.38)	361 (3.05)
7	367 (3.36)	257 (3.34)	462 (3.70)	611 (3.78)	425 (3.59)
8	673 (6.17)	482 (6.26)	811 (6.49)	986 (6.10)	739 (6.24)
9	807 (7.39)	558 (7.24)	960 (7.69)	1145 (7.08)	869 (7.34)
10	609 (5.58)	424 (5.50)	708 (5.67)	929 (5.74)	669 (5.65)
11	417 (3.82)	330 (4.28)	515 (4.12)	664 (4.11)	482 (4.07)
12	346 (3.17)	300 (3.89)	451 (3.61)	533 (3.29)	408 (3.45)
13	348 (3.19)	314 (4.07)	459 (3.68)	513 (3.17)	409 (3.46)
14	358 (3.28)	318 (4.13)	458 (3.66)	502 (3.11)	410 (3.46)
15	362 (3.32)	309 (4.00)	455 (3.64)	505 (3.12)	408 (3.45)
16	377 (3.45)	308 (4.00)	454 (3.63)	504 (3.11)	411 (3.47)
17	431 (3.95)	343 (4.45)	489 (3.91)	564 (3.48)	457 (3.86)
18	505 (4.63)	383 (4.97)	561 (4.50)	679 (4.20)	533 (4.50)
19	514 (4.71)	365 (4.73)	551 (4.41)	718 (4.44)	538 (4.54)
20	516 (4.72)	324 (4.20)	518 (4.14)	733 (4.53)	523 (4.42)
21	524 (4.80)	322 (4.18)	552 (4.42)	734 (4.54)	534 (4.51)
22	509 (4.66)	323 (4.19)	535 (4.28)	713 (4.41)	521 (4.40)
23	525 (4.81)	340 (4.41)	554 (4.44)	748 (4.63)	542 (4.58)
24	510 (4.67)	313 (4.05)	495 (3.96)	725 (4.48)	511 (4.32)

Houston: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	445 (4.18)	286 (3.75)	461 (3.81)	650 (4.16)	461 (4.00)
2	397 (3.73)	258 (3.39)	442 (3.65)	647 (4.14)	437 (3.79)
3	373 (3.50)	234 (3.07)	415 (3.42)	601 (3.85)	406 (3.53)
4	355 (3.33)	217 (2.85)	405 (3.35)	593 (3.80)	393 (3.42)
5	321 (3.02)	207 (2.71)	391 (3.22)	567 (3.63)	372 (3.23)
6	310 (2.92)	206 (2.71)	381 (3.14)	543 (3.48)	361 (3.13)
7	349 (3.28)	246 (3.23)	432 (3.57)	580 (3.71)	402 (3.49)
8	709 (6.66)	472 (6.19)	706 (5.83)	1002 (6.42)	723 (6.28)
9	676 (6.35)	489 (6.42)	865 (7.14)	941 (6.03)	744 (6.46)
10	582 (5.47)	424 (5.56)	703 (5.80)	887 (5.68)	650 (5.65)
11	469 (4.41)	364 (4.78)	540 (4.46)	730 (4.68)	527 (4.58)
12	360 (3.38)	308 (4.05)	456 (3.77)	545 (3.49)	418 (3.63)
13	357 (3.35)	315 (4.14)	455 (3.75)	522 (3.34)	413 (3.58)
14	336 (3.16)	294 (3.86)	415 (3.43)	476 (3.05)	381 (3.31)
15	378 (3.55)	319 (4.18)	455 (3.76)	523 (3.35)	419 (3.64)
16	432 (4.06)	353 (4.63)	502 (4.14)	570 (3.65)	465 (4.04)
17	433 (4.07)	358 (4.69)	519 (4.29)	560 (3.58)	468 (4.06)
18	450 (4.22)	353 (4.64)	516 (4.26)	596 (3.82)	479 (4.16)
19	455 (4.27)	324 (4.25)	472 (3.89)	626 (4.01)	470 (4.08)
20	446 (4.19)	293 (3.84)	462 (3.82)	630 (4.03)	458 (3.98)
21	520 (4.88)	343 (4.50)	602 (4.97)	726 (4.65)	548 (4.76)
22	513 (4.82)	330 (4.33)	529 (4.37)	711 (4.55)	521 (4.53)
23	500 (4.70)	325 (4.26)	509 (4.20)	709 (4.54)	511 (4.44)
24	480 (4.51)	303 (3.98)	480 (3.96)	678 (4.34)	486 (4.22)

Houston: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	447 (3.80)	282 (3.44)	462 (3.57)	660 (3.81)	463 (3.68)
2	400 (3.40)	256 (3.12)	446 (3.44)	658 (3.79)	441 (3.50)
3	376 (3.20)	232 (2.83)	417 (3.22)	617 (3.56)	411 (3.27)
4	356 (3.03)	213 (2.60)	406 (3.13)	601 (3.47)	395 (3.14)
5	322 (2.74)	202 (2.47)	390 (3.01)	572 (3.30)	373 (2.96)
6	318 (2.71)	206 (2.52)	385 (2.97)	560 (3.23)	368 (2.93)
7	455 (3.87)	295 (3.60)	478 (3.69)	740 (4.27)	493 (3.92)
8	845 (7.19)	596 (7.27)	995 (7.68)	1215 (7.01)	914 (7.27)
9	906 (7.70)	631 (7.69)	1078 (8.32)	1279 (7.38)	975 (7.75)
10	689 (5.86)	479 (5.84)	769 (5.93)	1053 (6.07)	748 (5.95)
11	488 (4.15)	373 (4.54)	539 (4.16)	769 (4.43)	543 (4.32)
12	416 (3.53)	331 (4.04)	441 (3.41)	631 (3.64)	455 (3.62)
13	406 (3.45)	361 (4.41)	511 (3.95)	586 (3.38)	467 (3.71)
14	393 (3.34)	350 (4.27)	499 (3.85)	545 (3.14)	447 (3.56)
15	392 (3.33)	314 (3.83)	426 (3.29)	538 (3.10)	418 (3.32)
16	406 (3.45)	310 (3.78)	419 (3.23)	537 (3.10)	418 (3.32)
17	472 (4.01)	365 (4.45)	498 (3.85)	619 (3.57)	489 (3.89)
18	567 (4.82)	437 (5.33)	652 (5.03)	773 (4.46)	608 (4.83)
19	542 (4.61)	367 (4.47)	530 (4.09)	760 (4.39)	550 (4.37)
20	520 (4.42)	326 (3.97)	523 (4.03)	738 (4.26)	527 (4.19)
21	534 (4.54)	332 (4.05)	577 (4.45)	747 (4.31)	548 (4.36)
22	502 (4.27)	320 (3.90)	536 (4.14)	703 (4.05)	516 (4.10)
23	505 (4.29)	312 (3.80)	485 (3.74)	720 (4.15)	506 (4.02)
24	503 (4.28)	309 (3.77)	493 (3.81)	716 (4.13)	506 (4.02)

Houston: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	444 (4.36)	285 (3.93)	465 (3.95)	654 (4.32)	463 (4.17)
2	397 (3.90)	255 (3.52)	441 (3.75)	651 (4.31)	437 (3.94)
3	369 (3.63)	230 (3.17)	413 (3.50)	601 (3.97)	404 (3.64)
4	352 (3.46)	213 (2.94)	404 (3.43)	591 (3.91)	391 (3.52)
5	319 (3.13)	206 (2.84)	399 (3.39)	565 (3.74)	373 (3.36)
6	308 (3.02)	205 (2.83)	388 (3.30)	540 (3.58)	361 (3.25)
7	347 (3.41)	244 (3.37)	438 (3.72)	580 (3.84)	403 (3.63)
8	538 (5.29)	395 (5.45)	659 (5.59)	793 (5.25)	597 (5.38)
9	705 (6.92)	497 (6.85)	864 (7.34)	987 (6.53)	764 (6.89)
10	573 (5.63)	397 (5.48)	664 (5.64)	873 (5.77)	628 (5.66)
11	410 (4.03)	315 (4.34)	477 (4.05)	655 (4.33)	465 (4.19)
12	358 (3.51)	296 (4.09)	430 (3.65)	553 (3.66)	410 (3.69)
13	319 (3.13)	282 (3.89)	410 (3.48)	477 (3.15)	372 (3.36)
14	336 (3.30)	291 (4.02)	411 (3.49)	477 (3.15)	379 (3.42)
15	362 (3.55)	302 (4.17)	439 (3.73)	507 (3.35)	403 (3.63)
16	337 (3.31)	291 (4.01)	452 (3.84)	458 (3.03)	385 (3.47)
17	352 (3.46)	299 (4.13)	453 (3.85)	465 (3.07)	393 (3.54)
18	425 (4.17)	332 (4.58)	492 (4.18)	568 (3.76)	455 (4.10)
19	469 (4.60)	340 (4.69)	509 (4.32)	651 (4.31)	493 (4.44)
20	511 (5.01)	330 (4.55)	529 (4.49)	724 (4.79)	524 (4.72)
21	490 (4.81)	317 (4.37)	561 (4.77)	683 (4.52)	513 (4.63)
22	481 (4.72)	306 (4.22)	502 (4.27)	668 (4.42)	490 (4.41)
23	485 (4.76)	311 (4.29)	490 (4.16)	689 (4.56)	494 (4.46)
24	499 (4.90)	308 (4.26)	485 (4.12)	707 (4.68)	501 (4.51)

Houston: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	465 (4.25)	297 (3.89)	489 (3.99)	686 (4.23)	485 (4.12)
2	415 (3.79)	263 (3.44)	450 (3.68)	682 (4.21)	453 (3.85)
3	386 (3.53)	238 (3.11)	422 (3.45)	633 (3.91)	420 (3.57)
4	355 (3.24)	213 (2.79)	407 (3.33)	599 (3.70)	394 (3.35)
5	318 (2.91)	201 (2.63)	390 (3.19)	565 (3.49)	369 (3.14)
6	313 (2.86)	204 (2.67)	384 (3.13)	551 (3.40)	364 (3.09)
7	408 (3.73)	273 (3.57)	464 (3.79)	669 (4.13)	454 (3.86)
8	685 (6.27)	468 (6.12)	743 (6.07)	998 (6.16)	724 (6.15)
9	775 (7.09)	531 (6.94)	904 (7.39)	1092 (6.74)	827 (7.02)
10	604 (5.52)	422 (5.52)	715 (5.84)	918 (5.66)	666 (5.65)
11	422 (3.85)	328 (4.30)	508 (4.15)	673 (4.15)	483 (4.11)
12	351 (3.21)	291 (3.81)	422 (3.45)	540 (3.33)	401 (3.41)
13	364 (3.33)	318 (4.16)	448 (3.66)	539 (3.32)	418 (3.55)
14	365 (3.33)	328 (4.30)	476 (3.89)	514 (3.18)	422 (3.58)
15	371 (3.39)	307 (4.02)	435 (3.55)	520 (3.21)	409 (3.47)
16	375 (3.43)	305 (3.99)	449 (3.67)	502 (3.10)	408 (3.47)
17	388 (3.55)	319 (4.17)	467 (3.82)	509 (3.14)	421 (3.58)
18	466 (4.26)	341 (4.46)	474 (3.88)	625 (3.86)	477 (4.05)
19	515 (4.71)	357 (4.67)	519 (4.24)	718 (4.43)	528 (4.48)
20	511 (4.67)	322 (4.21)	505 (4.12)	728 (4.49)	517 (4.39)
21	538 (4.92)	325 (4.25)	547 (4.47)	753 (4.65)	542 (4.60)
22	530 (4.85)	349 (4.56)	592 (4.83)	742 (4.58)	554 (4.71)
23	513 (4.69)	329 (4.31)	527 (4.31)	731 (4.51)	526 (4.46)
24	504 (4.61)	314 (4.11)	505 (4.13)	715 (4.42)	510 (4.33)

Houston: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	457 (4.07)	297 (3.58)	464 (3.57)	659 (4.08)	470 (3.86)
2	395 (3.51)	262 (3.16)	438 (3.37)	634 (3.92)	433 (3.55)
3	370 (3.29)	236 (2.86)	409 (3.14)	589 (3.64)	401 (3.29)
4	353 (3.14)	219 (2.65)	400 (3.07)	583 (3.61)	389 (3.19)
5	318 (2.83)	209 (2.52)	384 (2.96)	558 (3.45)	368 (3.02)
6	309 (2.75)	209 (2.52)	375 (2.88)	536 (3.31)	358 (2.94)
7	376 (3.35)	270 (3.26)	461 (3.55)	611 (3.78)	430 (3.53)
8	665 (5.92)	493 (5.96)	796 (6.12)	942 (5.83)	725 (5.95)
9	857 (7.63)	590 (7.13)	949 (7.30)	1195 (7.40)	899 (7.38)
10	671 (5.98)	493 (5.95)	791 (6.08)	1020 (6.31)	745 (6.11)
11	458 (4.07)	388 (4.69)	593 (4.56)	707 (4.38)	537 (4.41)
12	381 (3.40)	347 (4.19)	510 (3.92)	566 (3.50)	452 (3.71)
13	347 (3.08)	324 (3.92)	471 (3.62)	492 (3.04)	409 (3.36)
14	375 (3.34)	354 (4.28)	523 (4.02)	510 (3.16)	441 (3.62)
15	418 (3.72)	386 (4.66)	597 (4.59)	558 (3.45)	490 (4.02)
16	450 (4.01)	397 (4.80)	594 (4.57)	577 (3.57)	505 (4.15)
17	500 (4.45)	401 (4.85)	554 (4.26)	628 (3.89)	521 (4.28)
18	456 (4.06)	365 (4.41)	528 (4.06)	581 (3.60)	483 (3.96)
19	490 (4.36)	349 (4.22)	486 (3.74)	650 (4.03)	494 (4.06)
20	570 (5.08)	364 (4.40)	560 (4.30)	784 (4.85)	570 (4.68)
21	467 (4.16)	317 (3.83)	561 (4.31)	629 (3.89)	494 (4.06)
22	484 (4.30)	327 (3.95)	537 (4.13)	656 (4.06)	501 (4.11)
23	534 (4.75)	346 (4.18)	522 (4.02)	745 (4.61)	537 (4.41)
24	535 (4.77)	335 (4.04)	502 (3.86)	748 (4.63)	530 (4.35)

Houston: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	446 (4.26)	291 (3.77)	458 (3.75)	641 (4.25)	460 (4.04)
2	395 (3.78)	262 (3.39)	439 (3.59)	635 (4.21)	433 (3.81)
3	370 (3.54)	237 (3.07)	409 (3.35)	589 (3.90)	402 (3.53)
4	353 (3.38)	220 (2.85)	400 (3.28)	583 (3.86)	390 (3.42)
5	319 (3.05)	209 (2.71)	385 (3.15)	558 (3.70)	369 (3.24)
6	309 (2.95)	209 (2.71)	376 (3.08)	534 (3.54)	358 (3.14)
7	353 (3.38)	257 (3.33)	448 (3.67)	577 (3.82)	410 (3.60)
8	559 (5.34)	432 (5.60)	730 (5.98)	799 (5.29)	631 (5.54)
9	730 (6.98)	516 (6.68)	862 (7.06)	1001 (6.63)	778 (6.83)
10	605 (5.78)	433 (5.61)	710 (5.82)	908 (6.01)	665 (5.84)
11	465 (4.44)	361 (4.68)	524 (4.29)	719 (4.76)	518 (4.55)
12	380 (3.64)	316 (4.09)	428 (3.51)	565 (3.74)	423 (3.71)
13	439 (4.20)	369 (4.78)	470 (3.85)	625 (4.14)	476 (4.18)
14	405 (3.87)	346 (4.48)	448 (3.67)	548 (3.63)	437 (3.84)
15	370 (3.54)	318 (4.12)	453 (3.71)	496 (3.29)	410 (3.60)
16	364 (3.48)	317 (4.11)	476 (3.90)	471 (3.12)	408 (3.58)
17	346 (3.30)	309 (4.01)	469 (3.84)	434 (2.87)	390 (3.42)
18	383 (3.67)	359 (4.65)	590 (4.83)	485 (3.21)	455 (4.00)
19	461 (4.41)	367 (4.76)	573 (4.69)	618 (4.10)	506 (4.44)
20	471 (4.50)	321 (4.16)	512 (4.19)	648 (4.29)	488 (4.29)
21	487 (4.65)	308 (3.99)	514 (4.21)	661 (4.38)	493 (4.33)
22	469 (4.49)	321 (4.16)	537 (4.40)	639 (4.23)	492 (4.32)
23	495 (4.73)	331 (4.29)	520 (4.26)	690 (4.57)	509 (4.47)
24	484 (4.63)	309 (4.00)	478 (3.91)	671 (4.45)	486 (4.27)

Houston: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	441 (3.46)	278 (3.02)	453 (3.03)	655 (3.51)	457 (3.29)
2	393 (3.08)	248 (2.69)	435 (2.91)	646 (3.46)	431 (3.10)
3	372 (2.91)	228 (2.47)	412 (2.76)	611 (3.28)	407 (2.92)
4	348 (2.73)	208 (2.26)	400 (2.68)	588 (3.15)	387 (2.78)
5	315 (2.47)	198 (2.15)	385 (2.58)	561 (3.01)	365 (2.63)
6	319 (2.50)	206 (2.24)	384 (2.57)	564 (3.03)	369 (2.65)
7	539 (4.23)	335 (3.63)	504 (3.37)	859 (4.61)	560 (4.03)
8	1010 (7.92)	690 (7.49)	1136 (7.61)	1406 (7.54)	1062 (7.63)
9	977 (7.66)	692 (7.51)	1203 (8.06)	1433 (7.68)	1078 (7.75)
10	690 (5.40)	518 (5.62)	857 (5.74)	1070 (5.74)	785 (5.64)
11	510 (3.99)	428 (4.65)	660 (4.42)	793 (4.25)	599 (4.31)
12	424 (3.32)	386 (4.19)	587 (3.93)	636 (3.41)	509 (3.66)
13	450 (3.52)	408 (4.43)	591 (3.96)	638 (3.42)	523 (3.76)
14	446 (3.49)	394 (4.28)	577 (3.87)	622 (3.33)	510 (3.67)
15	481 (3.77)	403 (4.38)	595 (3.98)	652 (3.50)	533 (3.84)
16	528 (4.14)	459 (4.98)	695 (4.65)	682 (3.66)	592 (4.25)
17	639 (5.01)	492 (5.34)	692 (4.63)	825 (4.42)	662 (4.76)
18	659 (5.17)	485 (5.26)	681 (4.56)	876 (4.69)	676 (4.86)
19	630 (4.94)	435 (4.72)	673 (4.51)	874 (4.69)	654 (4.70)
20	530 (4.16)	395 (4.28)	755 (5.05)	744 (3.99)	607 (4.36)
21	548 (4.29)	348 (3.78)	610 (4.08)	767 (4.11)	569 (4.09)
22	516 (4.05)	346 (3.75)	603 (4.04)	725 (3.89)	548 (3.94)
23	508 (3.98)	338 (3.67)	570 (3.82)	726 (3.89)	536 (3.86)
24	487 (3.82)	298 (3.23)	473 (3.17)	698 (3.74)	489 (3.52)

Houston: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	440 (3.90)	282 (3.59)	478 (3.73)	655 (3.90)	464 (3.80)
2	390 (3.46)	250 (3.18)	446 (3.48)	647 (3.85)	434 (3.56)
3	364 (3.23)	224 (2.85)	412 (3.22)	602 (3.58)	401 (3.29)
4	347 (3.08)	208 (2.64)	405 (3.16)	589 (3.51)	388 (3.18)
5	315 (2.79)	198 (2.52)	390 (3.04)	563 (3.35)	367 (3.01)
6	303 (2.68)	198 (2.52)	382 (2.98)	538 (3.20)	356 (2.92)
7	363 (3.22)	250 (3.18)	452 (3.52)	609 (3.62)	419 (3.43)
8	747 (6.63)	503 (6.41)	803 (6.27)	1087 (6.47)	786 (6.44)
9	858 (7.61)	559 (7.12)	925 (7.21)	1231 (7.32)	894 (7.33)
10	624 (5.54)	426 (5.43)	724 (5.65)	955 (5.68)	683 (5.60)
11	437 (3.87)	336 (4.27)	524 (4.09)	705 (4.19)	501 (4.11)
12	377 (3.34)	311 (3.96)	455 (3.55)	590 (3.51)	434 (3.55)
13	379 (3.36)	333 (4.24)	483 (3.77)	563 (3.35)	440 (3.61)
14	365 (3.24)	322 (4.10)	480 (3.75)	523 (3.11)	423 (3.47)
15	422 (3.75)	346 (4.40)	517 (4.03)	594 (3.54)	470 (3.85)
16	498 (4.41)	376 (4.79)	516 (4.03)	672 (4.00)	516 (4.23)
17	490 (4.35)	372 (4.74)	526 (4.11)	654 (3.89)	511 (4.19)
18	522 (4.63)	382 (4.86)	554 (4.32)	719 (4.28)	545 (4.46)
19	543 (4.81)	359 (4.58)	538 (4.19)	771 (4.59)	553 (4.53)
20	538 (4.77)	349 (4.44)	601 (4.69)	762 (4.54)	563 (4.61)
21	482 (4.28)	313 (3.98)	577 (4.50)	679 (4.04)	513 (4.21)
22	495 (4.39)	331 (4.21)	581 (4.53)	698 (4.15)	527 (4.32)
23	498 (4.41)	324 (4.12)	537 (4.19)	714 (4.25)	519 (4.25)
24	479 (4.25)	305 (3.88)	511 (3.99)	685 (4.07)	495 (4.06)

Houston: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	440 (4.22)	281 (3.79)	455 (3.80)	647 (4.20)	456 (4.03)
2	393 (3.76)	253 (3.42)	438 (3.66)	643 (4.18)	433 (3.82)
3	367 (3.52)	230 (3.09)	410 (3.43)	598 (3.89)	402 (3.55)
4	350 (3.35)	212 (2.86)	401 (3.35)	588 (3.82)	389 (3.43)
5	317 (3.04)	202 (2.73)	387 (3.23)	563 (3.66)	368 (3.25)
6	312 (2.99)	205 (2.76)	380 (3.17)	548 (3.56)	362 (3.20)
7	353 (3.38)	248 (3.35)	444 (3.71)	587 (3.82)	409 (3.61)
8	665 (6.37)	464 (6.25)	741 (6.19)	958 (6.23)	708 (6.25)
9	737 (7.06)	504 (6.79)	852 (7.12)	1034 (6.72)	783 (6.92)
10	591 (5.66)	408 (5.50)	688 (5.75)	897 (5.83)	647 (5.72)
11	432 (4.14)	350 (4.72)	557 (4.65)	684 (4.45)	507 (4.48)
12	351 (3.36)	306 (4.12)	461 (3.85)	538 (3.50)	415 (3.66)
13	374 (3.58)	324 (4.36)	448 (3.75)	550 (3.58)	425 (3.75)
14	329 (3.15)	302 (4.07)	444 (3.71)	459 (2.98)	384 (3.39)
15	362 (3.46)	307 (4.13)	447 (3.73)	501 (3.26)	405 (3.57)
16	363 (3.48)	298 (4.01)	437 (3.65)	483 (3.14)	396 (3.50)
17	388 (3.71)	308 (4.15)	435 (3.63)	501 (3.26)	408 (3.61)
18	429 (4.11)	332 (4.48)	490 (4.10)	563 (3.66)	454 (4.01)
19	486 (4.65)	340 (4.58)	494 (4.12)	670 (4.36)	498 (4.40)
20	501 (4.80)	323 (4.36)	525 (4.38)	703 (4.57)	514 (4.54)
21	475 (4.55)	302 (4.07)	532 (4.45)	659 (4.28)	493 (4.35)
22	470 (4.50)	306 (4.12)	513 (4.28)	652 (4.24)	485 (4.29)
23	479 (4.58)	315 (4.25)	513 (4.28)	678 (4.41)	497 (4.39)
24	478 (4.58)	299 (4.03)	478 (3.99)	675 (4.39)	483 (4.27)

Houston: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	453 (4.14)	289 (3.75)	473 (3.81)	670 (4.13)	472 (3.98)
2	402 (3.67)	257 (3.34)	447 (3.60)	661 (4.07)	443 (3.74)
3	373 (3.41)	231 (3.00)	415 (3.34)	611 (3.76)	408 (3.45)
4	353 (3.22)	213 (2.76)	404 (3.25)	595 (3.67)	392 (3.31)
5	319 (2.91)	202 (2.62)	389 (3.13)	568 (3.50)	370 (3.13)
6	310 (2.83)	204 (2.65)	384 (3.09)	547 (3.37)	362 (3.06)
7	385 (3.51)	264 (3.43)	459 (3.70)	636 (3.92)	437 (3.69)
8	684 (6.25)	477 (6.19)	774 (6.23)	996 (6.14)	734 (6.20)
9	795 (7.26)	542 (7.04)	921 (7.42)	1130 (6.96)	848 (7.16)
10	615 (5.61)	427 (5.55)	718 (5.78)	941 (5.80)	676 (5.71)
11	432 (3.94)	336 (4.36)	518 (4.17)	689 (4.25)	495 (4.18)
12	366 (3.34)	307 (3.98)	448 (3.61)	565 (3.48)	422 (3.56)
13	363 (3.31)	318 (4.12)	455 (3.66)	536 (3.30)	418 (3.53)
14	359 (3.27)	316 (4.10)	456 (3.67)	508 (3.13)	410 (3.46)
15	378 (3.45)	314 (4.08)	459 (3.70)	528 (3.25)	421 (3.55)
16	402 (3.66)	322 (4.19)	467 (3.76)	538 (3.32)	433 (3.66)
17	438 (4.00)	347 (4.50)	495 (3.99)	576 (3.55)	465 (3.92)
18	492 (4.49)	371 (4.81)	539 (4.34)	660 (4.07)	516 (4.36)
19	510 (4.65)	357 (4.63)	532 (4.29)	710 (4.37)	528 (4.46)
20	510 (4.65)	328 (4.26)	538 (4.33)	722 (4.44)	525 (4.43)
21	513 (4.68)	319 (4.14)	553 (4.45)	716 (4.41)	526 (4.44)
22	501 (4.57)	325 (4.22)	548 (4.41)	700 (4.31)	519 (4.38)
23	505 (4.61)	326 (4.23)	524 (4.22)	720 (4.44)	520 (4.39)
24	500 (4.56)	312 (4.05)	502 (4.05)	711 (4.38)	507 (4.28)

Los Angeles: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1325 (4.77)	552 (3.87)	539 (3.76)	1498 (5.14)	978 (4.58)
2	1259 (4.53)	539 (3.78)	532 (3.71)	1411 (4.84)	934 (4.37)
3	1141 (4.10)	502 (3.52)	510 (3.56)	1230 (4.22)	845 (3.96)
4	1022 (3.68)	486 (3.41)	477 (3.33)	1089 (3.74)	768 (3.59)
5	924 (3.32)	447 (3.14)	457 (3.19)	967 (3.32)	698 (3.27)
6	978 (3.52)	445 (3.12)	456 (3.18)	997 (3.42)	718 (3.36)
7	1115 (4.01)	615 (4.31)	628 (4.38)	1136 (3.90)	873 (4.09)
8	1818 (6.54)	940 (6.59)	968 (6.76)	1803 (6.19)	1381 (6.47)
9	2094 (7.54)	946 (6.63)	1009 (7.04)	2145 (7.36)	1547 (7.24)
10	1755 (6.32)	825 (5.79)	863 (6.02)	1790 (6.14)	1307 (6.12)
11	1284 (4.62)	741 (5.19)	761 (5.31)	1254 (4.31)	1009 (4.72)
12	1010 (3.63)	685 (4.81)	704 (4.91)	922 (3.17)	830 (3.88)
13	882 (3.17)	659 (4.62)	677 (4.72)	768 (2.64)	746 (3.49)
14	767 (2.76)	590 (4.13)	614 (4.28)	655 (2.25)	656 (3.07)
15	719 (2.59)	555 (3.89)	554 (3.86)	624 (2.14)	613 (2.87)
16	723 (2.60)	533 (3.74)	509 (3.55)	644 (2.21)	602 (2.82)
17	750 (2.70)	523 (3.67)	483 (3.37)	721 (2.48)	619 (2.90)
18	884 (3.18)	532 (3.73)	489 (3.41)	945 (3.25)	712 (3.33)
19	1023 (3.68)	514 (3.60)	483 (3.37)	1140 (3.92)	789 (3.69)
20	1128 (4.06)	504 (3.53)	505 (3.53)	1286 (4.42)	855 (4.00)
21	1180 (4.25)	507 (3.56)	514 (3.59)	1382 (4.74)	895 (4.19)
22	1267 (4.56)	528 (3.71)	515 (3.59)	1514 (5.20)	956 (4.47)
23	1350 (4.86)	542 (3.80)	533 (3.72)	1603 (5.50)	1006 (4.71)
24	1394 (5.01)	553 (3.88)	551 (3.85)	1599 (5.49)	1023 (4.79)

Los Angeles: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1452 (4.84)	465 (3.40)	399 (3.15)	1748 (5.26)	1015 (4.54)
2	1391 (4.64)	457 (3.34)	390 (3.07)	1655 (4.98)	972 (4.34)
3	1287 (4.29)	440 (3.22)	389 (3.07)	1429 (4.30)	886 (3.96)
4	1178 (3.93)	455 (3.32)	385 (3.03)	1295 (3.89)	827 (3.69)
5	1089 (3.63)	426 (3.11)	379 (2.98)	1166 (3.51)	764 (3.41)
6	1177 (3.93)	431 (3.15)	397 (3.13)	1245 (3.74)	812 (3.63)
7	1376 (4.59)	630 (4.60)	616 (4.85)	1473 (4.43)	1023 (4.57)
8	2525 (8.42)	1145 (8.37)	1121 (8.84)	2624 (7.89)	1852 (8.27)
9	2588 (8.63)	1062 (7.76)	1092 (8.61)	2721 (8.18)	1864 (8.33)
10	2022 (6.74)	840 (6.14)	820 (6.47)	2100 (6.31)	1444 (6.45)
11	1386 (4.62)	709 (5.18)	691 (5.45)	1403 (4.22)	1046 (4.67)
12	1001 (3.34)	596 (4.36)	601 (4.74)	980 (2.95)	794 (3.55)
13	829 (2.77)	567 (4.14)	574 (4.52)	783 (2.35)	688 (3.07)
14	780 (2.60)	536 (3.92)	516 (4.07)	726 (2.18)	639 (2.85)
15	878 (2.93)	606 (4.43)	513 (4.04)	861 (2.59)	714 (3.19)
16	623 (2.08)	479 (3.50)	438 (3.46)	619 (1.86)	540 (2.41)
17	704 (2.35)	508 (3.71)	416 (3.28)	752 (2.26)	595 (2.66)
18	757 (2.53)	518 (3.79)	445 (3.51)	892 (2.68)	653 (2.92)
19	850 (2.83)	458 (3.34)	392 (3.09)	1037 (3.12)	684 (3.05)
20	990 (3.30)	449 (3.28)	401 (3.16)	1230 (3.70)	767 (3.43)
21	1050 (3.50)	450 (3.29)	407 (3.21)	1353 (4.07)	815 (3.64)
22	1180 (3.94)	483 (3.53)	430 (3.39)	1574 (4.73)	917 (4.09)
23	1424 (4.75)	511 (3.74)	456 (3.60)	1832 (5.51)	1055 (4.72)
24	1441 (4.81)	463 (3.39)	414 (3.27)	1763 (5.30)	1020 (4.56)

Los Angeles: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1462 (5.01)	569 (3.83)	529 (3.58)	1700 (5.33)	1064 (4.69)
2	1381 (4.73)	548 (3.69)	506 (3.42)	1596 (5.00)	1007 (4.44)
3	1252 (4.28)	515 (3.47)	494 (3.34)	1386 (4.35)	911 (4.02)
4	1118 (3.83)	502 (3.38)	475 (3.22)	1236 (3.87)	832 (3.67)
5	988 (3.38)	457 (3.08)	455 (3.08)	1066 (3.34)	741 (3.27)
6	1048 (3.59)	451 (3.04)	455 (3.08)	1094 (3.43)	761 (3.36)
7	1174 (4.02)	612 (4.13)	634 (4.29)	1234 (3.87)	913 (4.03)
8	2041 (6.99)	1028 (6.93)	1067 (7.22)	2083 (6.53)	1554 (6.85)
9	2219 (7.60)	995 (6.70)	1071 (7.25)	2325 (7.29)	1651 (7.28)
10	1823 (6.24)	845 (5.69)	865 (5.85)	1911 (5.99)	1360 (6.00)
11	1281 (4.39)	742 (5.00)	761 (5.15)	1297 (4.07)	1020 (4.50)
12	957 (3.28)	655 (4.42)	699 (4.73)	911 (2.86)	805 (3.55)
13	827 (2.83)	632 (4.26)	683 (4.63)	762 (2.39)	726 (3.20)
14	787 (2.69)	596 (4.02)	622 (4.21)	712 (2.23)	679 (3.00)
15	889 (3.04)	668 (4.50)	635 (4.30)	839 (2.63)	758 (3.34)
16	684 (2.34)	549 (3.70)	555 (3.76)	657 (2.06)	611 (2.70)
17	785 (2.69)	572 (3.85)	520 (3.52)	822 (2.58)	674 (2.97)
18	851 (2.91)	575 (3.88)	543 (3.67)	984 (3.09)	738 (3.26)
19	948 (3.25)	520 (3.50)	493 (3.34)	1137 (3.57)	774 (3.42)
20	1092 (3.74)	513 (3.45)	499 (3.38)	1316 (4.13)	855 (3.77)
21	1184 (4.05)	525 (3.54)	512 (3.47)	1459 (4.57)	920 (4.06)
22	1378 (4.72)	584 (3.93)	554 (3.75)	1723 (5.40)	1060 (4.67)
23	1535 (5.25)	615 (4.15)	591 (4.00)	1872 (5.87)	1153 (5.08)
24	1511 (5.17)	574 (3.87)	551 (3.73)	1782 (5.59)	1104 (4.87)

Los Angeles: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1398 (5.00)	546 (3.89)	514 (3.78)	1629 (5.37)	1021 (4.76)
2	1316 (4.70)	530 (3.78)	492 (3.62)	1530 (5.04)	966 (4.50)
3	1203 (4.30)	502 (3.58)	485 (3.57)	1324 (4.36)	878 (4.09)
4	1079 (3.86)	492 (3.51)	459 (3.38)	1186 (3.91)	803 (3.74)
5	991 (3.54)	458 (3.27)	447 (3.29)	1060 (3.49)	739 (3.44)
6	1064 (3.80)	453 (3.23)	445 (3.27)	1105 (3.64)	766 (3.57)
7	1220 (4.36)	632 (4.51)	636 (4.68)	1283 (4.23)	942 (4.39)
8	1715 (6.13)	873 (6.22)	865 (6.36)	1733 (5.71)	1295 (6.03)
9	2062 (7.37)	900 (6.42)	947 (6.97)	2153 (7.10)	1514 (7.05)
10	1772 (6.33)	824 (5.88)	846 (6.22)	1842 (6.07)	1320 (6.15)
11	1253 (4.48)	709 (5.06)	714 (5.25)	1258 (4.15)	983 (4.58)
12	937 (3.35)	620 (4.42)	650 (4.78)	885 (2.92)	773 (3.60)
13	860 (3.07)	635 (4.52)	658 (4.84)	779 (2.57)	732 (3.41)
14	741 (2.65)	559 (3.99)	580 (4.26)	653 (2.15)	633 (2.95)
15	768 (2.75)	585 (4.17)	559 (4.11)	703 (2.32)	653 (3.04)
16	691 (2.47)	528 (3.77)	501 (3.69)	646 (2.13)	591 (2.75)
17	755 (2.70)	551 (3.93)	492 (3.62)	760 (2.51)	639 (2.98)
18	908 (3.24)	561 (4.00)	474 (3.49)	1031 (3.40)	743 (3.46)
19	936 (3.35)	504 (3.59)	454 (3.34)	1107 (3.65)	750 (3.49)
20	1066 (3.81)	478 (3.41)	440 (3.24)	1275 (4.20)	814 (3.79)
21	1186 (4.24)	496 (3.54)	455 (3.35)	1453 (4.79)	897 (4.18)
22	1258 (4.50)	517 (3.69)	468 (3.44)	1573 (5.18)	953 (4.44)
23	1359 (4.86)	535 (3.81)	501 (3.69)	1665 (5.49)	1014 (4.72)
24	1443 (5.16)	537 (3.83)	512 (3.76)	1708 (5.63)	1049 (4.89)

Los Angeles: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1464 (5.01)	567 (3.81)	524 (3.56)	1697 (5.39)	1062 (4.71)
2	1387 (4.75)	558 (3.75)	520 (3.53)	1600 (5.08)	1015 (4.50)
3	1249 (4.27)	518 (3.48)	497 (3.38)	1371 (4.35)	908 (4.02)
4	1074 (3.68)	492 (3.31)	468 (3.18)	1174 (3.73)	801 (3.55)
5	980 (3.35)	457 (3.07)	452 (3.07)	1046 (3.32)	733 (3.25)
6	1054 (3.61)	458 (3.08)	458 (3.11)	1093 (3.47)	765 (3.39)
7	1203 (4.12)	644 (4.33)	669 (4.54)	1254 (3.98)	942 (4.17)
8	1856 (6.35)	973 (6.54)	1029 (6.99)	1871 (5.94)	1431 (6.34)
9	2130 (7.29)	970 (6.52)	1053 (7.15)	2214 (7.03)	1591 (7.05)
10	1794 (6.14)	842 (5.66)	878 (5.96)	1857 (5.90)	1341 (5.95)
11	1339 (4.58)	774 (5.21)	787 (5.34)	1330 (4.22)	1057 (4.68)
12	1118 (3.83)	744 (5.01)	750 (5.09)	1046 (3.32)	914 (4.05)
13	928 (3.18)	688 (4.62)	713 (4.84)	832 (2.64)	790 (3.50)
14	757 (2.59)	594 (4.00)	640 (4.34)	662 (2.10)	663 (2.94)
15	716 (2.45)	569 (3.83)	573 (3.89)	647 (2.05)	626 (2.77)
16	718 (2.46)	565 (3.80)	554 (3.76)	668 (2.12)	626 (2.77)
17	781 (2.67)	563 (3.78)	506 (3.43)	783 (2.49)	658 (2.92)
18	846 (2.89)	553 (3.72)	502 (3.41)	945 (3.00)	711 (3.15)
19	990 (3.39)	528 (3.55)	488 (3.32)	1154 (3.66)	790 (3.50)
20	1189 (4.07)	542 (3.64)	519 (3.52)	1406 (4.46)	913 (4.05)
21	1238 (4.24)	544 (3.66)	530 (3.60)	1504 (4.78)	954 (4.23)
22	1375 (4.71)	569 (3.82)	525 (3.56)	1708 (5.43)	1044 (4.63)
23	1502 (5.14)	587 (3.95)	549 (3.73)	1829 (5.81)	1116 (4.95)
24	1528 (5.23)	574 (3.86)	545 (3.70)	1799 (5.71)	1111 (4.92)

Los Angeles: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1369 (4.79)	545 (3.76)	517 (3.60)	1568 (5.15)	999 (4.55)
2	1295 (4.53)	528 (3.64)	506 (3.52)	1469 (4.82)	949 (4.32)
3	1179 (4.13)	495 (3.42)	488 (3.40)	1283 (4.21)	860 (3.92)
4	1064 (3.72)	484 (3.34)	462 (3.22)	1147 (3.76)	789 (3.59)
5	962 (3.37)	447 (3.09)	444 (3.09)	1018 (3.34)	717 (3.27)
6	1025 (3.59)	447 (3.09)	448 (3.12)	1057 (3.47)	743 (3.39)
7	1179 (4.13)	620 (4.28)	621 (4.32)	1218 (4.00)	909 (4.14)
8	1905 (6.66)	966 (6.67)	992 (6.91)	1909 (6.27)	1442 (6.57)
9	2143 (7.50)	957 (6.61)	1022 (7.11)	2212 (7.26)	1582 (7.21)
10	1802 (6.30)	840 (5.80)	867 (6.04)	1850 (6.07)	1339 (6.10)
11	1293 (4.52)	745 (5.14)	765 (5.33)	1275 (4.19)	1019 (4.64)
12	1010 (3.53)	689 (4.76)	713 (4.96)	937 (3.08)	837 (3.81)
13	885 (3.10)	662 (4.57)	685 (4.77)	787 (2.58)	754 (3.44)
14	784 (2.74)	604 (4.17)	626 (4.36)	687 (2.25)	675 (3.07)
15	753 (2.63)	579 (4.00)	568 (3.95)	675 (2.22)	643 (2.93)
16	730 (2.55)	542 (3.74)	512 (3.56)	671 (2.20)	613 (2.79)
17	783 (2.74)	549 (3.79)	493 (3.44)	783 (2.57)	652 (2.97)
18	922 (3.23)	566 (3.91)	513 (3.57)	1020 (3.35)	755 (3.44)
19	1058 (3.70)	544 (3.76)	507 (3.53)	1216 (3.99)	831 (3.78)
20	1119 (3.92)	516 (3.56)	514 (3.58)	1307 (4.29)	864 (3.93)
21	1183 (4.14)	517 (3.57)	515 (3.58)	1419 (4.66)	908 (4.14)
22	1308 (4.58)	543 (3.75)	518 (3.61)	1601 (5.26)	992 (4.52)
23	1402 (4.91)	553 (3.82)	532 (3.70)	1693 (5.56)	1044 (4.76)
24	1426 (4.99)	549 (3.79)	535 (3.72)	1659 (5.44)	1041 (4.74)

Los Angeles: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1324 (4.70)	541 (3.80)	527 (3.71)	1499 (5.05)	972 (4.51)
2	1252 (4.44)	526 (3.69)	522 (3.68)	1404 (4.73)	925 (4.29)
3	1139 (4.04)	493 (3.46)	503 (3.55)	1227 (4.14)	840 (3.90)
4	1018 (3.61)	473 (3.32)	464 (3.27)	1080 (3.64)	758 (3.52)
5	917 (3.25)	436 (3.06)	444 (3.13)	959 (3.24)	689 (3.20)
6	972 (3.45)	437 (3.06)	450 (3.17)	993 (3.35)	712 (3.30)
7	1060 (3.76)	584 (4.10)	608 (4.28)	1084 (3.66)	834 (3.87)
8	1879 (6.67)	942 (6.61)	949 (6.69)	1871 (6.31)	1409 (6.54)
9	2221 (7.88)	970 (6.81)	1009 (7.11)	2278 (7.68)	1618 (7.51)
10	1784 (6.33)	816 (5.72)	843 (5.94)	1824 (6.15)	1315 (6.10)
11	1325 (4.70)	751 (5.27)	768 (5.41)	1295 (4.37)	1034 (4.80)
12	1038 (3.68)	692 (4.85)	701 (4.94)	955 (3.22)	846 (3.92)
13	908 (3.22)	672 (4.72)	680 (4.79)	798 (2.69)	764 (3.55)
14	782 (2.77)	602 (4.22)	620 (4.37)	675 (2.28)	669 (3.10)
15	713 (2.53)	571 (4.01)	583 (4.10)	627 (2.11)	623 (2.89)
16	736 (2.61)	540 (3.79)	507 (3.57)	664 (2.24)	611 (2.84)
17	757 (2.68)	528 (3.70)	483 (3.40)	735 (2.48)	625 (2.90)
18	932 (3.31)	540 (3.79)	478 (3.37)	1008 (3.40)	739 (3.43)
19	1070 (3.80)	524 (3.67)	480 (3.38)	1204 (4.06)	819 (3.80)
20	1194 (4.24)	520 (3.65)	506 (3.56)	1376 (4.64)	898 (4.17)
21	1205 (4.28)	514 (3.61)	516 (3.64)	1426 (4.81)	915 (4.24)
22	1230 (4.36)	514 (3.61)	505 (3.56)	1480 (4.99)	932 (4.32)
23	1315 (4.67)	520 (3.65)	511 (3.60)	1571 (5.30)	979 (4.54)
24	1410 (5.00)	546 (3.83)	537 (3.79)	1622 (5.47)	1028 (4.77)

Los Angeles: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1314 (4.83)	544 (3.99)	531 (3.89)	1483 (5.22)	967 (4.67)
2	1279 (4.70)	541 (3.97)	526 (3.85)	1431 (5.04)	944 (4.56)
3	1154 (4.24)	505 (3.71)	507 (3.71)	1237 (4.36)	850 (4.11)
4	1049 (3.86)	496 (3.64)	478 (3.49)	1104 (3.89)	781 (3.77)
5	944 (3.47)	454 (3.34)	458 (3.35)	975 (3.44)	707 (3.42)
6	991 (3.64)	447 (3.28)	451 (3.30)	1006 (3.54)	723 (3.49)
7	1089 (4.00)	599 (4.40)	602 (4.41)	1106 (3.90)	849 (4.10)
8	1996 (7.33)	976 (7.17)	963 (7.05)	1980 (6.98)	1477 (7.14)
9	2205 (8.10)	980 (7.19)	1038 (7.60)	2259 (7.96)	1619 (7.82)
10	1713 (6.30)	790 (5.80)	830 (6.07)	1743 (6.14)	1268 (6.12)
11	1173 (4.31)	668 (4.90)	696 (5.10)	1136 (4.00)	918 (4.43)
12	883 (3.24)	596 (4.38)	626 (4.58)	801 (2.82)	726 (3.51)
13	828 (3.04)	621 (4.56)	650 (4.75)	713 (2.51)	703 (3.39)
14	683 (2.51)	519 (3.81)	542 (3.96)	579 (2.04)	580 (2.80)
15	716 (2.63)	519 (3.81)	493 (3.60)	615 (2.17)	585 (2.83)
16	628 (2.31)	462 (3.39)	453 (3.32)	549 (1.93)	523 (2.52)
17	622 (2.28)	438 (3.21)	421 (3.08)	579 (2.04)	515 (2.49)
18	917 (3.37)	509 (3.74)	461 (3.37)	979 (3.45)	716 (3.46)
19	931 (3.42)	456 (3.35)	435 (3.18)	1021 (3.60)	710 (3.43)
20	1176 (4.32)	497 (3.65)	491 (3.59)	1330 (4.69)	873 (4.22)
21	1097 (4.03)	462 (3.39)	474 (3.47)	1270 (4.48)	825 (3.99)
22	1193 (4.38)	496 (3.64)	492 (3.60)	1416 (4.99)	899 (4.34)
23	1288 (4.73)	510 (3.75)	507 (3.71)	1528 (5.38)	958 (4.63)
24	1345 (4.94)	535 (3.93)	543 (3.97)	1539 (5.42)	990 (4.78)

Los Angeles: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1357 (4.70)	536 (3.65)	506 (3.50)	1571 (5.05)	992 (4.45)
2	1283 (4.44)	517 (3.53)	490 (3.39)	1476 (4.74)	941 (4.22)
3	1175 (4.07)	487 (3.32)	477 (3.30)	1289 (4.14)	856 (3.85)
4	1061 (3.67)	480 (3.27)	456 (3.15)	1155 (3.71)	787 (3.54)
5	971 (3.36)	447 (3.05)	442 (3.05)	1035 (3.33)	723 (3.25)
6	1041 (3.60)	446 (3.04)	443 (3.07)	1081 (3.47)	752 (3.38)
7	1160 (4.02)	602 (4.11)	606 (4.19)	1211 (3.89)	894 (4.02)
8	2009 (6.96)	979 (6.68)	969 (6.70)	2028 (6.51)	1495 (6.71)
9	2252 (7.80)	971 (6.62)	1007 (6.96)	2337 (7.51)	1640 (7.37)
10	1828 (6.33)	827 (5.64)	848 (5.87)	1895 (6.09)	1348 (6.06)
11	1316 (4.56)	754 (5.14)	773 (5.35)	1313 (4.22)	1038 (4.66)
12	1050 (3.63)	712 (4.86)	735 (5.08)	987 (3.17)	870 (3.91)
13	910 (3.15)	683 (4.66)	711 (4.92)	822 (2.64)	781 (3.51)
14	776 (2.69)	607 (4.14)	637 (4.41)	690 (2.22)	677 (3.04)
15	768 (2.66)	598 (4.08)	584 (4.04)	702 (2.26)	663 (2.98)
16	794 (2.75)	592 (4.04)	548 (3.79)	748 (2.40)	670 (3.01)
17	797 (2.76)	582 (3.97)	531 (3.67)	813 (2.61)	681 (3.06)
18	908 (3.14)	580 (3.95)	529 (3.66)	1024 (3.29)	760 (3.41)
19	1062 (3.68)	560 (3.82)	526 (3.64)	1242 (3.99)	847 (3.81)
20	1141 (3.95)	548 (3.74)	552 (3.82)	1355 (4.35)	898 (4.03)
21	1181 (4.09)	535 (3.65)	536 (3.71)	1444 (4.64)	924 (4.15)
22	1261 (4.37)	534 (3.64)	506 (3.50)	1572 (5.05)	968 (4.35)
23	1370 (4.74)	545 (3.72)	523 (3.62)	1677 (5.39)	1028 (4.62)
24	1407 (4.87)	540 (3.68)	525 (3.63)	1658 (5.33)	1032 (4.63)

Los Angeles: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1586 (5.29)	620 (4.14)	574 (3.97)	1821 (5.66)	1150 (5.02)
2	1514 (5.04)	602 (4.02)	551 (3.81)	1716 (5.33)	1095 (4.78)
3	1327 (4.42)	553 (3.69)	519 (3.59)	1447 (4.50)	961 (4.20)
4	1154 (3.84)	519 (3.46)	477 (3.30)	1251 (3.89)	850 (3.71)
5	991 (3.30)	460 (3.07)	451 (3.12)	1053 (3.27)	738 (3.22)
6	1030 (3.43)	446 (2.98)	444 (3.07)	1063 (3.30)	745 (3.25)
7	1191 (3.97)	614 (4.09)	605 (4.18)	1237 (3.84)	911 (3.98)
8	1675 (5.58)	885 (5.90)	911 (6.30)	1677 (5.21)	1286 (5.62)
9	1929 (6.43)	953 (6.36)	1107 (7.66)	2001 (6.22)	1497 (6.54)
10	1824 (6.08)	886 (5.91)	925 (6.40)	1877 (5.83)	1377 (6.01)
11	1424 (4.74)	842 (5.62)	848 (5.87)	1398 (4.34)	1127 (4.92)
12	1088 (3.62)	720 (4.80)	719 (4.97)	1011 (3.14)	884 (3.86)
13	954 (3.18)	693 (4.62)	705 (4.87)	849 (2.64)	800 (3.49)
14	810 (2.70)	597 (3.98)	590 (4.08)	711 (2.21)	676 (2.95)
15	741 (2.47)	544 (3.63)	506 (3.50)	667 (2.07)	614 (2.68)
16	819 (2.73)	567 (3.78)	492 (3.40)	762 (2.37)	659 (2.88)
17	913 (3.04)	602 (4.02)	499 (3.45)	941 (2.92)	738 (3.22)
18	834 (2.78)	533 (3.56)	484 (3.34)	924 (2.87)	693 (3.03)
19	938 (3.13)	484 (3.23)	437 (3.02)	1083 (3.36)	735 (3.21)
20	1224 (4.08)	534 (3.56)	495 (3.42)	1439 (4.47)	922 (4.03)
21	1239 (4.13)	518 (3.45)	489 (3.38)	1494 (4.64)	934 (4.08)
22	1466 (4.88)	585 (3.90)	520 (3.60)	1802 (5.60)	1093 (4.77)
23	1638 (5.46)	609 (4.06)	545 (3.77)	1971 (6.13)	1190 (5.20)
24	1704 (5.68)	623 (4.16)	571 (3.95)	1983 (6.16)	1219 (5.33)

Los Angeles: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1377 (4.65)	559 (3.69)	543 (3.59)	1576 (5.03)	1013 (4.44)
2	1300 (4.39)	544 (3.59)	534 (3.53)	1475 (4.70)	962 (4.22)
3	1172 (3.95)	500 (3.30)	500 (3.30)	1273 (4.06)	860 (3.77)
4	1054 (3.56)	489 (3.23)	474 (3.13)	1134 (3.62)	787 (3.45)
5	962 (3.24)	454 (2.99)	456 (3.02)	1015 (3.24)	721 (3.16)
6	1034 (3.49)	463 (3.06)	472 (3.12)	1062 (3.39)	757 (3.32)
7	1302 (4.39)	702 (4.63)	717 (4.74)	1332 (4.25)	1013 (4.44)
8	2076 (7.01)	1061 (7.00)	1126 (7.44)	2083 (6.65)	1585 (6.95)
9	2280 (7.69)	1034 (6.82)	1114 (7.36)	2345 (7.48)	1692 (7.42)
10	1862 (6.28)	889 (5.87)	930 (6.14)	1897 (6.05)	1393 (6.11)
11	1366 (4.61)	788 (5.20)	806 (5.32)	1334 (4.25)	1073 (4.70)
12	1088 (3.67)	734 (4.84)	750 (4.95)	1000 (3.19)	892 (3.91)
13	947 (3.20)	697 (4.60)	715 (4.73)	831 (2.65)	797 (3.50)
14	823 (2.78)	628 (4.15)	648 (4.28)	712 (2.27)	703 (3.08)
15	787 (2.65)	603 (3.98)	593 (3.92)	698 (2.23)	669 (2.94)
16	795 (2.68)	582 (3.84)	543 (3.59)	724 (2.31)	660 (2.90)
17	875 (2.95)	589 (3.89)	515 (3.40)	871 (2.78)	712 (3.12)
18	1025 (3.46)	609 (4.02)	544 (3.59)	1127 (3.59)	825 (3.62)
19	1057 (3.57)	536 (3.53)	493 (3.26)	1203 (3.84)	822 (3.60)
20	1095 (3.69)	503 (3.32)	506 (3.34)	1269 (4.05)	843 (3.70)
21	1214 (4.10)	519 (3.43)	515 (3.40)	1448 (4.62)	924 (4.05)
22	1335 (4.50)	555 (3.67)	536 (3.54)	1623 (5.18)	1012 (4.44)
23	1371 (4.63)	550 (3.63)	541 (3.57)	1648 (5.26)	1027 (4.50)
24	1441 (4.86)	564 (3.73)	563 (3.72)	1671 (5.33)	1059 (4.65)

Los Angeles: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1373 (4.92)	548 (3.89)	522 (3.78)	1581 (5.28)	1005 (4.69)
2	1288 (4.62)	529 (3.76)	506 (3.66)	1474 (4.93)	949 (4.43)
3	1169 (4.19)	493 (3.50)	485 (3.51)	1276 (4.26)	855 (3.99)
4	1053 (3.78)	484 (3.44)	460 (3.33)	1143 (3.82)	784 (3.66)
5	961 (3.45)	449 (3.19)	445 (3.22)	1020 (3.41)	718 (3.35)
6	1026 (3.68)	444 (3.15)	441 (3.19)	1059 (3.54)	742 (3.46)
7	1069 (3.83)	568 (4.03)	581 (4.20)	1114 (3.72)	832 (3.89)
8	1697 (6.08)	868 (6.16)	868 (6.28)	1701 (5.69)	1282 (5.99)
9	2097 (7.52)	923 (6.55)	967 (7.00)	2177 (7.28)	1540 (7.19)
10	1805 (6.47)	825 (5.86)	830 (6.01)	1862 (6.22)	1329 (6.21)
11	1257 (4.51)	717 (5.09)	738 (5.34)	1251 (4.18)	990 (4.62)
12	1004 (3.60)	669 (4.75)	682 (4.93)	935 (3.13)	822 (3.84)
13	855 (3.07)	631 (4.48)	647 (4.68)	764 (2.55)	724 (3.38)
14	763 (2.74)	582 (4.13)	604 (4.37)	668 (2.23)	654 (3.05)
15	706 (2.53)	568 (4.03)	582 (4.21)	634 (2.12)	622 (2.91)
16	703 (2.52)	534 (3.79)	513 (3.71)	650 (2.17)	600 (2.80)
17	779 (2.79)	537 (3.82)	465 (3.37)	782 (2.61)	640 (2.99)
18	823 (2.95)	516 (3.67)	452 (3.27)	910 (3.04)	675 (3.15)
19	966 (3.46)	507 (3.60)	460 (3.33)	1120 (3.74)	763 (3.56)
20	1105 (3.96)	505 (3.59)	490 (3.55)	1299 (4.34)	849 (3.97)
21	1206 (4.32)	521 (3.70)	505 (3.65)	1456 (4.87)	922 (4.30)
22	1359 (4.87)	568 (4.03)	534 (3.87)	1673 (5.59)	1033 (4.82)
23	1408 (5.05)	552 (3.92)	519 (3.76)	1707 (5.71)	1046 (4.88)
24	1423 (5.10)	542 (3.85)	523 (3.78)	1664 (5.56)	1037 (4.84)

Los Angeles: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1366 (4.89)	551 (3.92)	532 (3.81)	1559 (5.27)	1001 (4.69)
2	1284 (4.59)	533 (3.79)	516 (3.70)	1453 (4.91)	946 (4.43)
3	1164 (4.17)	501 (3.56)	503 (3.60)	1260 (4.26)	856 (4.01)
4	1040 (3.72)	481 (3.42)	463 (3.32)	1114 (3.77)	774 (3.62)
5	943 (3.37)	445 (3.16)	445 (3.19)	991 (3.35)	705 (3.30)
6	1009 (3.61)	444 (3.16)	446 (3.19)	1034 (3.50)	732 (3.43)
7	1101 (3.94)	601 (4.27)	622 (4.46)	1133 (3.83)	864 (4.04)
8	1844 (6.60)	951 (6.76)	991 (7.10)	1839 (6.22)	1405 (6.58)
9	2157 (7.72)	949 (6.75)	991 (7.10)	2220 (7.51)	1578 (7.38)
10	1754 (6.28)	803 (5.71)	822 (5.89)	1793 (6.07)	1292 (6.05)
11	1249 (4.47)	702 (4.99)	711 (5.09)	1226 (4.15)	971 (4.55)
12	976 (3.49)	640 (4.55)	651 (4.67)	902 (3.05)	792 (3.71)
13	856 (3.06)	631 (4.48)	649 (4.65)	752 (2.54)	721 (3.38)
14	774 (2.77)	573 (4.07)	577 (4.13)	667 (2.26)	647 (3.03)
15	699 (2.50)	528 (3.76)	513 (3.68)	615 (2.08)	588 (2.75)
16	672 (2.41)	501 (3.56)	478 (3.42)	605 (2.05)	564 (2.64)
17	744 (2.66)	513 (3.64)	458 (3.28)	720 (2.44)	608 (2.85)
18	903 (3.23)	553 (3.93)	507 (3.63)	978 (3.31)	735 (3.44)
19	995 (3.56)	511 (3.63)	474 (3.40)	1124 (3.80)	776 (3.63)
20	1094 (3.91)	486 (3.45)	473 (3.39)	1262 (4.27)	828 (3.88)
21	1194 (4.27)	512 (3.64)	509 (3.65)	1418 (4.79)	908 (4.25)
22	1287 (4.61)	540 (3.84)	524 (3.76)	1562 (5.28)	978 (4.58)
23	1407 (5.04)	560 (3.98)	546 (3.91)	1688 (5.71)	1050 (4.91)
24	1428 (5.11)	559 (3.97)	557 (3.99)	1654 (5.59)	1049 (4.91)

Los Angeles: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1327 (4.87)	540 (3.77)	531 (3.61)	1524 (5.25)	980 (4.60)
2	1266 (4.64)	536 (3.75)	534 (3.63)	1446 (4.97)	945 (4.43)
3	1161 (4.26)	507 (3.54)	521 (3.55)	1265 (4.35)	863 (4.05)
4	1049 (3.84)	500 (3.50)	499 (3.39)	1132 (3.90)	794 (3.73)
5	955 (3.50)	464 (3.24)	482 (3.28)	1010 (3.48)	727 (3.41)
6	1015 (3.72)	458 (3.21)	478 (3.25)	1047 (3.60)	749 (3.51)
7	1058 (3.88)	586 (4.09)	623 (4.24)	1103 (3.79)	842 (3.95)
8	1939 (7.11)	946 (6.61)	938 (6.38)	1947 (6.70)	1441 (6.76)
9	1807 (6.62)	842 (5.89)	953 (6.49)	1865 (6.42)	1366 (6.41)
10	1684 (6.17)	746 (5.22)	730 (4.97)	1731 (5.96)	1222 (5.73)
11	1373 (5.03)	788 (5.51)	789 (5.37)	1333 (4.59)	1070 (5.02)
12	975 (3.57)	719 (5.03)	831 (5.65)	892 (3.07)	854 (4.00)
13	851 (3.12)	676 (4.73)	776 (5.28)	748 (2.57)	763 (3.58)
14	731 (2.68)	589 (4.12)	643 (4.38)	639 (2.20)	650 (3.05)
15	725 (2.66)	592 (4.14)	616 (4.19)	651 (2.24)	645 (3.03)
16	767 (2.81)	582 (4.07)	560 (3.81)	707 (2.43)	653 (3.07)
17	748 (2.74)	609 (4.26)	628 (4.27)	728 (2.51)	678 (3.18)
18	794 (2.91)	571 (3.99)	588 (4.00)	879 (3.02)	708 (3.32)
19	867 (3.18)	514 (3.59)	532 (3.62)	1000 (3.44)	728 (3.41)
20	943 (3.46)	445 (3.11)	450 (3.06)	1098 (3.78)	734 (3.44)
21	1211 (4.44)	501 (3.50)	468 (3.18)	1465 (5.04)	911 (4.27)
22	1311 (4.81)	527 (3.69)	481 (3.27)	1613 (5.55)	983 (4.61)
23	1364 (5.00)	534 (3.73)	514 (3.49)	1650 (5.68)	1015 (4.76)
24	1359 (4.98)	530 (3.70)	534 (3.63)	1586 (5.46)	1002 (4.70)

Los Angeles: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1311 (4.40)	535 (3.55)	527 (3.52)	1490 (4.75)	965 (4.24)
2	1256 (4.21)	526 (3.49)	519 (3.47)	1419 (4.52)	930 (4.08)
3	1161 (3.89)	498 (3.30)	502 (3.35)	1257 (4.01)	854 (3.75)
4	1045 (3.51)	486 (3.23)	472 (3.15)	1117 (3.56)	779 (3.42)
5	942 (3.16)	448 (2.97)	453 (3.03)	989 (3.15)	708 (3.10)
6	1023 (3.43)	465 (3.08)	479 (3.20)	1049 (3.34)	753 (3.31)
7	1336 (4.48)	729 (4.84)	756 (5.05)	1362 (4.34)	1045 (4.59)
8	2275 (7.63)	1129 (7.49)	1172 (7.83)	2286 (7.29)	1714 (7.52)
9	2409 (8.08)	1049 (6.96)	1080 (7.21)	2478 (7.90)	1752 (7.69)
10	1982 (6.65)	910 (6.04)	913 (6.09)	2024 (6.45)	1456 (6.39)
11	1439 (4.83)	809 (5.37)	803 (5.36)	1403 (4.47)	1112 (4.88)
12	1137 (3.81)	748 (4.96)	747 (4.99)	1044 (3.33)	918 (4.03)
13	972 (3.26)	709 (4.70)	715 (4.77)	850 (2.71)	811 (3.56)
14	835 (2.80)	615 (4.08)	614 (4.10)	719 (2.29)	695 (3.05)
15	745 (2.50)	559 (3.71)	543 (3.62)	656 (2.09)	625 (2.74)
16	718 (2.41)	528 (3.50)	501 (3.35)	648 (2.07)	599 (2.63)
17	814 (2.73)	570 (3.78)	528 (3.53)	802 (2.56)	678 (2.98)
18	1027 (3.45)	588 (3.90)	519 (3.47)	1123 (3.58)	814 (3.57)
19	1058 (3.55)	525 (3.48)	484 (3.23)	1198 (3.82)	816 (3.58)
20	1103 (3.70)	497 (3.30)	499 (3.33)	1272 (4.06)	842 (3.70)
21	1216 (4.08)	533 (3.54)	544 (3.64)	1444 (4.60)	934 (4.10)
22	1261 (4.23)	533 (3.54)	530 (3.54)	1522 (4.85)	961 (4.22)
23	1342 (4.50)	536 (3.56)	533 (3.56)	1605 (5.12)	1004 (4.40)
24	1401 (4.70)	543 (3.61)	539 (3.60)	1616 (5.15)	1024 (4.50)

Los Angeles: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1327 (5.03)	536 (3.99)	517 (3.84)	1520 (5.40)	974 (4.79)
2	1265 (4.79)	532 (3.96)	521 (3.87)	1441 (5.12)	939 (4.62)
3	1152 (4.36)	498 (3.71)	502 (3.73)	1253 (4.46)	851 (4.18)
4	1041 (3.94)	485 (3.61)	469 (3.48)	1120 (3.98)	778 (3.82)
5	946 (3.59)	449 (3.34)	452 (3.36)	998 (3.55)	711 (3.49)
6	1005 (3.81)	446 (3.32)	453 (3.37)	1035 (3.68)	734 (3.61)
7	1056 (4.00)	575 (4.28)	596 (4.43)	1097 (3.90)	831 (4.08)
8	1507 (5.71)	818 (6.09)	856 (6.36)	1496 (5.32)	1168 (5.74)
9	1890 (7.16)	847 (6.30)	914 (6.79)	1953 (6.95)	1400 (6.88)
10	1665 (6.31)	767 (5.70)	804 (5.97)	1715 (6.10)	1237 (6.08)
11	1229 (4.65)	695 (5.17)	706 (5.24)	1212 (4.31)	960 (4.72)
12	1004 (3.80)	669 (4.97)	690 (5.12)	930 (3.31)	822 (4.04)
13	793 (3.00)	596 (4.43)	628 (4.66)	704 (2.50)	680 (3.34)
14	734 (2.78)	558 (4.15)	579 (4.30)	639 (2.27)	627 (3.08)
15	699 (2.65)	529 (3.94)	516 (3.84)	625 (2.22)	592 (2.91)
16	611 (2.32)	469 (3.49)	464 (3.45)	556 (1.98)	525 (2.58)
17	618 (2.34)	454 (3.38)	430 (3.19)	587 (2.09)	522 (2.57)
18	760 (2.88)	472 (3.51)	420 (3.12)	832 (2.96)	621 (3.05)
19	910 (3.45)	481 (3.58)	449 (3.34)	1047 (3.72)	722 (3.55)
20	1097 (4.16)	492 (3.66)	477 (3.54)	1280 (4.55)	836 (4.11)
21	1122 (4.25)	499 (3.71)	507 (3.77)	1340 (4.76)	866 (4.26)
22	1230 (4.66)	519 (3.86)	500 (3.72)	1503 (5.34)	938 (4.61)
23	1317 (4.99)	514 (3.82)	488 (3.63)	1591 (5.66)	977 (4.80)
24	1418 (5.37)	541 (4.02)	522 (3.88)	1649 (5.87)	1032 (5.07)

Los Angeles: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1355 (4.89)	531 (3.78)	499 (3.52)	1543 (5.29)	981 (4.61)
2	1298 (4.69)	527 (3.75)	503 (3.55)	1466 (5.02)	948 (4.46)
3	1187 (4.29)	498 (3.54)	491 (3.46)	1285 (4.40)	864 (4.07)
4	1037 (3.74)	478 (3.40)	460 (3.25)	1105 (3.78)	769 (3.62)
5	926 (3.34)	437 (3.11)	440 (3.10)	969 (3.32)	692 (3.26)
6	999 (3.61)	440 (3.13)	441 (3.11)	1022 (3.50)	725 (3.41)
7	1198 (4.33)	655 (4.66)	676 (4.77)	1222 (4.19)	937 (4.41)
8	1849 (6.68)	1001 (7.13)	1103 (7.78)	1841 (6.31)	1448 (6.81)
9	2043 (7.38)	966 (6.87)	1084 (7.65)	2098 (7.19)	1547 (7.27)
10	1722 (6.22)	822 (5.85)	889 (6.27)	1761 (6.03)	1298 (6.10)
11	1251 (4.52)	719 (5.11)	748 (5.27)	1227 (4.20)	985 (4.63)
12	982 (3.55)	652 (4.64)	677 (4.78)	908 (3.11)	804 (3.78)
13	888 (3.21)	663 (4.72)	684 (4.83)	780 (2.67)	753 (3.54)
14	788 (2.85)	599 (4.26)	623 (4.39)	679 (2.33)	672 (3.16)
15	714 (2.58)	542 (3.86)	531 (3.74)	627 (2.15)	603 (2.84)
16	666 (2.40)	512 (3.64)	514 (3.63)	596 (2.04)	572 (2.69)
17	663 (2.40)	494 (3.51)	478 (3.37)	623 (2.13)	564 (2.65)
18	822 (2.97)	491 (3.50)	440 (3.10)	881 (3.02)	658 (3.09)
19	988 (3.57)	492 (3.50)	451 (3.18)	1110 (3.80)	760 (3.57)
20	1064 (3.84)	473 (3.36)	463 (3.27)	1220 (4.18)	804 (3.78)
21	1199 (4.33)	490 (3.49)	473 (3.34)	1418 (4.86)	894 (4.21)
22	1318 (4.76)	521 (3.70)	481 (3.40)	1594 (5.46)	978 (4.60)
23	1347 (4.86)	530 (3.77)	517 (3.65)	1616 (5.53)	1002 (4.71)
24	1386 (5.01)	522 (3.72)	508 (3.59)	1603 (5.49)	1004 (4.72)

Los Angeles: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1349 (4.80)	538 (3.75)	504 (3.58)	1535 (5.18)	981 (4.56)
2	1253 (4.45)	526 (3.67)	506 (3.60)	1417 (4.78)	925 (4.30)
3	1147 (4.08)	498 (3.47)	493 (3.51)	1240 (4.19)	844 (3.92)
4	1037 (3.68)	489 (3.41)	469 (3.34)	1109 (3.74)	775 (3.60)
5	941 (3.34)	452 (3.15)	451 (3.21)	985 (3.33)	707 (3.28)
6	993 (3.53)	444 (3.09)	445 (3.16)	1015 (3.43)	724 (3.36)
7	1099 (3.91)	589 (4.11)	585 (4.16)	1127 (3.81)	850 (3.95)
8	1763 (6.27)	908 (6.33)	906 (6.44)	1766 (5.96)	1335 (6.20)
9	2251 (8.00)	1003 (6.99)	1049 (7.46)	2325 (7.85)	1655 (7.69)
10	1912 (6.79)	895 (6.24)	870 (6.19)	1940 (6.55)	1403 (6.52)
11	1317 (4.68)	769 (5.36)	762 (5.42)	1269 (4.29)	1028 (4.78)
12	1011 (3.59)	713 (4.97)	746 (5.31)	914 (3.09)	846 (3.93)
13	822 (2.92)	632 (4.41)	676 (4.81)	713 (2.41)	710 (3.30)
14	777 (2.76)	607 (4.24)	648 (4.61)	663 (2.24)	674 (3.13)
15	771 (2.74)	595 (4.15)	592 (4.21)	675 (2.28)	658 (3.06)
16	776 (2.76)	555 (3.87)	508 (3.61)	701 (2.37)	634 (2.95)
17	830 (2.95)	545 (3.80)	466 (3.31)	821 (2.77)	665 (3.09)
18	771 (2.74)	485 (3.38)	434 (3.09)	827 (2.79)	629 (2.92)
19	904 (3.21)	471 (3.28)	429 (3.05)	1019 (3.44)	705 (3.28)
20	1212 (4.31)	523 (3.65)	496 (3.53)	1409 (4.76)	910 (4.23)
21	1049 (3.73)	462 (3.22)	462 (3.29)	1227 (4.14)	800 (3.72)
22	1217 (4.33)	511 (3.56)	491 (3.49)	1463 (4.94)	920 (4.27)
23	1434 (5.10)	571 (3.98)	554 (3.94)	1712 (5.78)	1067 (4.96)
24	1504 (5.34)	559 (3.90)	518 (3.68)	1741 (5.88)	1079 (5.02)

Los Angeles: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1309 (4.98)	526 (3.92)	497 (3.79)	1487 (5.41)	954 (4.75)
2	1252 (4.76)	526 (3.92)	505 (3.85)	1414 (5.14)	923 (4.60)
3	1146 (4.36)	498 (3.72)	493 (3.75)	1237 (4.50)	843 (4.20)
4	1036 (3.94)	489 (3.65)	468 (3.57)	1105 (4.02)	774 (3.86)
5	939 (3.57)	452 (3.37)	451 (3.43)	982 (3.57)	705 (3.51)
6	990 (3.76)	443 (3.31)	444 (3.38)	1011 (3.68)	721 (3.59)
7	1036 (3.94)	569 (4.25)	579 (4.42)	1067 (3.88)	812 (4.05)
8	1479 (5.62)	808 (6.03)	843 (6.42)	1460 (5.31)	1147 (5.71)
9	1878 (7.14)	844 (6.30)	902 (6.87)	1928 (7.01)	1387 (6.91)
10	1700 (6.46)	791 (5.90)	806 (6.14)	1734 (6.31)	1257 (6.26)
11	1347 (5.12)	748 (5.58)	725 (5.53)	1313 (4.77)	1032 (5.14)
12	1023 (3.89)	662 (4.94)	644 (4.90)	930 (3.38)	814 (4.06)
13	1051 (4.00)	717 (5.35)	663 (5.05)	914 (3.32)	835 (4.16)
14	867 (3.29)	631 (4.71)	626 (4.77)	738 (2.68)	715 (3.56)
15	692 (2.63)	531 (3.96)	524 (3.99)	602 (2.19)	587 (2.92)
16	633 (2.41)	473 (3.53)	452 (3.44)	562 (2.04)	529 (2.64)
17	577 (2.19)	425 (3.17)	398 (3.03)	527 (1.92)	481 (2.40)
18	633 (2.41)	429 (3.20)	398 (3.04)	662 (2.41)	530 (2.64)
19	844 (3.21)	438 (3.27)	393 (3.00)	948 (3.45)	655 (3.27)
20	964 (3.66)	439 (3.27)	431 (3.28)	1099 (3.99)	733 (3.65)
21	1081 (4.11)	456 (3.41)	448 (3.42)	1263 (4.59)	812 (4.04)
22	1171 (4.45)	481 (3.59)	451 (3.44)	1408 (5.12)	877 (4.37)
23	1313 (4.99)	515 (3.84)	492 (3.75)	1566 (5.69)	971 (4.84)
24	1341 (5.10)	510 (3.81)	491 (3.74)	1547 (5.62)	972 (4.84)

Los Angeles: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1336 (4.11)	527 (3.10)	496 (2.87)	1534 (4.45)	973 (3.84)
2	1262 (3.88)	513 (3.01)	493 (2.85)	1435 (4.16)	925 (3.65)
3	1173 (3.61)	490 (2.88)	484 (2.80)	1281 (3.72)	857 (3.38)
4	1042 (3.20)	476 (2.80)	457 (2.65)	1128 (3.27)	775 (3.06)
5	946 (2.91)	441 (2.59)	440 (2.54)	1005 (2.92)	707 (2.80)
6	1062 (3.26)	458 (2.69)	448 (2.59)	1098 (3.19)	766 (3.03)
7	1616 (4.97)	766 (4.50)	680 (3.93)	1645 (4.77)	1175 (4.64)
8	2715 (8.35)	1360 (7.98)	1532 (8.87)	2760 (8.01)	2090 (8.26)
9	2721 (8.37)	1296 (7.61)	1456 (8.42)	2791 (8.10)	2065 (8.16)
10	2028 (6.23)	1131 (6.64)	1265 (7.32)	2042 (5.93)	1616 (6.38)
11	1488 (4.57)	988 (5.80)	1091 (6.31)	1419 (4.12)	1246 (4.92)
12	1116 (3.43)	926 (5.44)	1092 (6.32)	1006 (2.92)	1035 (4.09)
13	1050 (3.23)	808 (4.75)	881 (5.10)	916 (2.66)	913 (3.61)
14	921 (2.83)	732 (4.30)	772 (4.46)	805 (2.34)	807 (3.19)
15	903 (2.77)	702 (4.12)	706 (4.08)	813 (2.36)	780 (3.08)
16	930 (2.86)	693 (4.07)	655 (3.79)	862 (2.50)	785 (3.10)
17	1113 (3.42)	722 (4.24)	612 (3.54)	1168 (3.39)	903 (3.57)
18	1219 (3.75)	708 (4.16)	621 (3.59)	1372 (3.98)	979 (3.87)
19	1284 (3.95)	696 (4.09)	695 (4.02)	1488 (4.32)	1040 (4.11)
20	1166 (3.59)	516 (3.03)	492 (2.84)	1367 (3.97)	884 (3.50)
21	1302 (4.00)	503 (2.95)	445 (2.57)	1578 (4.58)	956 (3.78)
22	1342 (4.12)	523 (3.07)	478 (2.77)	1636 (4.75)	994 (3.93)
23	1399 (4.30)	531 (3.12)	490 (2.84)	1679 (4.87)	1024 (4.05)
24	1396 (4.29)	524 (3.08)	501 (2.90)	1624 (4.71)	1011 (3.99)

Los Angeles: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1350 (4.50)	532 (3.51)	502 (3.38)	1561 (4.82)	986 (4.27)
2	1270 (4.23)	515 (3.39)	491 (3.31)	1459 (4.51)	933 (4.04)
3	1162 (3.87)	485 (3.19)	478 (3.22)	1273 (3.94)	849 (3.68)
4	1048 (3.49)	478 (3.15)	457 (3.08)	1140 (3.53)	780 (3.38)
5	958 (3.19)	444 (2.93)	443 (2.98)	1020 (3.15)	716 (3.10)
6	1027 (3.42)	444 (2.92)	446 (3.00)	1066 (3.29)	745 (3.23)
7	1150 (3.83)	600 (3.95)	607 (4.09)	1199 (3.71)	888 (3.85)
8	2165 (7.21)	1030 (6.78)	1006 (6.77)	2193 (6.78)	1597 (6.92)
9	2436 (8.11)	1031 (6.79)	1045 (7.03)	2523 (7.80)	1757 (7.61)
10	1876 (6.25)	842 (5.55)	856 (5.76)	1943 (6.01)	1378 (5.97)
11	1356 (4.52)	775 (5.10)	795 (5.35)	1356 (4.19)	1070 (4.63)
12	1090 (3.63)	737 (4.85)	758 (5.10)	1025 (3.17)	902 (3.91)
13	959 (3.19)	719 (4.74)	746 (5.02)	867 (2.68)	822 (3.56)
14	827 (2.75)	639 (4.21)	662 (4.45)	735 (2.27)	715 (3.10)
15	841 (2.80)	644 (4.24)	619 (4.17)	772 (2.39)	719 (3.11)
16	937 (3.12)	673 (4.43)	595 (4.01)	886 (2.74)	772 (3.34)
17	913 (3.04)	646 (4.26)	577 (3.88)	947 (2.93)	770 (3.34)
18	1021 (3.40)	624 (4.11)	562 (3.78)	1162 (3.59)	842 (3.65)
19	1150 (3.83)	585 (3.85)	547 (3.68)	1346 (4.16)	906 (3.93)
20	1222 (4.07)	571 (3.76)	567 (3.81)	1459 (4.51)	954 (4.13)
21	1154 (3.84)	527 (3.47)	533 (3.59)	1409 (4.35)	905 (3.92)
22	1321 (4.40)	555 (3.66)	526 (3.54)	1646 (5.09)	1011 (4.38)
23	1406 (4.68)	554 (3.65)	526 (3.54)	1719 (5.32)	1051 (4.55)
24	1396 (4.65)	533 (3.51)	517 (3.48)	1643 (5.08)	1021 (4.42)

Los Angeles: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1316 (4.87)	525 (3.81)	500 (3.64)	1505 (5.25)	961 (4.62)
2	1256 (4.65)	518 (3.76)	497 (3.62)	1428 (4.98)	924 (4.44)
3	1151 (4.26)	489 (3.55)	485 (3.53)	1250 (4.36)	843 (4.05)
4	1040 (3.85)	482 (3.50)	462 (3.36)	1119 (3.90)	775 (3.73)
5	946 (3.50)	446 (3.24)	445 (3.24)	997 (3.48)	708 (3.41)
6	1022 (3.78)	448 (3.25)	444 (3.23)	1051 (3.67)	740 (3.56)
7	1072 (3.97)	574 (4.16)	582 (4.24)	1108 (3.87)	834 (4.01)
8	1834 (6.78)	938 (6.81)	962 (7.00)	1835 (6.40)	1391 (6.69)
9	1973 (7.30)	906 (6.58)	1001 (7.28)	2034 (7.10)	1478 (7.11)
10	1715 (6.35)	796 (5.77)	840 (6.11)	1764 (6.15)	1278 (6.14)
11	1301 (4.81)	739 (5.36)	752 (5.47)	1285 (4.48)	1019 (4.90)
12	991 (3.67)	666 (4.83)	686 (4.99)	918 (3.20)	815 (3.92)
13	925 (3.42)	671 (4.87)	671 (4.88)	821 (2.86)	771 (3.71)
14	729 (2.70)	561 (4.07)	587 (4.27)	629 (2.19)	626 (3.01)
15	703 (2.60)	539 (3.91)	527 (3.84)	626 (2.18)	598 (2.88)
16	657 (2.43)	497 (3.61)	477 (3.47)	599 (2.09)	557 (2.68)
17	678 (2.51)	490 (3.56)	454 (3.30)	654 (2.28)	569 (2.74)
18	762 (2.82)	485 (3.52)	438 (3.19)	823 (2.87)	627 (3.01)
19	946 (3.50)	507 (3.68)	481 (3.50)	1083 (3.78)	754 (3.62)
20	1077 (3.99)	484 (3.51)	473 (3.44)	1251 (4.36)	821 (3.95)
21	1085 (4.01)	477 (3.46)	478 (3.48)	1290 (4.50)	832 (4.00)
22	1200 (4.44)	504 (3.65)	481 (3.50)	1463 (5.10)	911 (4.38)
23	1298 (4.80)	519 (3.77)	503 (3.66)	1565 (5.46)	971 (4.67)
24	1351 (5.00)	524 (3.80)	517 (3.76)	1569 (5.47)	989 (4.76)

Los Angeles: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1366 (4.78)	546 (3.77)	522 (3.64)	1567 (5.15)	1000 (4.56)
2	1292 (4.52)	532 (3.67)	512 (3.57)	1472 (4.84)	951 (4.33)
3	1175 (4.12)	498 (3.44)	493 (3.44)	1280 (4.21)	861 (3.92)
4	1054 (3.69)	485 (3.35)	465 (3.24)	1137 (3.74)	785 (3.58)
5	957 (3.35)	449 (3.10)	448 (3.12)	1012 (3.33)	716 (3.26)
6	1026 (3.59)	450 (3.11)	452 (3.15)	1057 (3.47)	746 (3.40)
7	1173 (4.11)	626 (4.32)	638 (4.45)	1212 (3.98)	912 (4.16)
8	1915 (6.71)	969 (6.69)	993 (6.92)	1921 (6.31)	1448 (6.60)
9	2178 (7.63)	967 (6.68)	1024 (7.14)	2251 (7.40)	1604 (7.31)
10	1809 (6.33)	838 (5.79)	863 (6.02)	1859 (6.11)	1341 (6.11)
11	1309 (4.58)	749 (5.17)	764 (5.32)	1291 (4.24)	1027 (4.68)
12	1035 (3.62)	694 (4.80)	713 (4.97)	960 (3.16)	850 (3.87)
13	901 (3.15)	666 (4.60)	687 (4.79)	799 (2.63)	763 (3.48)
14	791 (2.77)	601 (4.15)	620 (4.32)	690 (2.27)	675 (3.08)
15	739 (2.59)	570 (3.93)	560 (3.90)	661 (2.17)	632 (2.88)
16	732 (2.56)	546 (3.77)	516 (3.59)	672 (2.21)	616 (2.81)
17	779 (2.73)	548 (3.78)	494 (3.44)	773 (2.54)	648 (2.95)
18	902 (3.16)	556 (3.84)	500 (3.49)	995 (3.27)	738 (3.36)
19	1014 (3.55)	524 (3.62)	484 (3.37)	1164 (3.83)	796 (3.63)
20	1108 (3.88)	509 (3.51)	503 (3.51)	1294 (4.25)	853 (3.89)
21	1193 (4.18)	519 (3.59)	515 (3.59)	1432 (4.71)	914 (4.17)
22	1296 (4.54)	541 (3.73)	515 (3.59)	1588 (5.22)	984 (4.49)
23	1387 (4.86)	549 (3.79)	528 (3.68)	1675 (5.51)	1034 (4.71)
24	1428 (5.00)	549 (3.79)	536 (3.74)	1664 (5.47)	1044 (4.76)

Minneapolis/St. Paul: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	741 (3.55)	729 (4.37)	758 (4.25)	659 (3.35)	721 (3.85)
2	711 (3.40)	647 (3.88)	690 (3.87)	628 (3.19)	669 (3.57)
3	564 (2.70)	619 (3.71)	642 (3.60)	505 (2.57)	582 (3.10)
4	373 (1.78)	487 (2.92)	503 (2.82)	357 (1.81)	430 (2.29)
5	327 (1.57)	340 (2.04)	367 (2.06)	297 (1.51)	333 (1.77)
6	305 (1.46)	295 (1.77)	325 (1.83)	265 (1.35)	298 (1.59)
7	384 (1.84)	306 (1.83)	293 (1.65)	320 (1.62)	325 (1.73)
8	790 (3.78)	420 (2.52)	396 (2.23)	598 (3.04)	550 (2.93)
9	1062 (5.08)	615 (3.68)	584 (3.28)	862 (4.38)	780 (4.16)
10	981 (4.69)	768 (4.61)	770 (4.32)	923 (4.69)	860 (4.58)
11	868 (4.15)	741 (4.44)	796 (4.47)	877 (4.45)	820 (4.37)
12	877 (4.20)	697 (4.18)	791 (4.44)	882 (4.48)	812 (4.33)
13	975 (4.66)	741 (4.44)	827 (4.64)	978 (4.97)	880 (4.69)
14	1027 (4.91)	802 (4.81)	897 (5.03)	1044 (5.31)	942 (5.02)
15	1032 (4.94)	891 (5.34)	965 (5.42)	1028 (5.22)	979 (5.22)
16	1178 (5.64)	856 (5.13)	935 (5.25)	1093 (5.55)	1015 (5.41)
17	1235 (5.91)	882 (5.29)	948 (5.32)	1175 (5.97)	1059 (5.65)
18	1436 (6.87)	987 (5.92)	1015 (5.70)	1392 (7.07)	1207 (6.43)
19	1350 (6.46)	988 (5.93)	1034 (5.80)	1329 (6.75)	1175 (6.26)
20	1076 (5.15)	891 (5.34)	985 (5.53)	1092 (5.55)	1011 (5.39)
21	971 (4.65)	738 (4.42)	854 (4.79)	948 (4.82)	878 (4.68)
22	898 (4.30)	701 (4.21)	802 (4.50)	859 (4.37)	815 (4.35)
23	924 (4.42)	740 (4.44)	807 (4.53)	821 (4.17)	823 (4.38)
24	807 (3.86)	799 (4.79)	832 (4.67)	751 (3.82)	797 (4.25)

Minneapolis/St. Paul: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	813 (3.89)	758 (4.60)	768 (4.39)	684 (3.56)	756 (4.08)
2	770 (3.68)	665 (4.04)	687 (3.93)	639 (3.33)	690 (3.73)
3	631 (3.02)	644 (3.91)	646 (3.70)	523 (2.73)	611 (3.30)
4	415 (1.98)	517 (3.14)	521 (2.98)	368 (1.92)	455 (2.46)
5	366 (1.75)	354 (2.15)	376 (2.15)	305 (1.59)	350 (1.89)
6	336 (1.61)	307 (1.86)	333 (1.91)	268 (1.40)	311 (1.68)
7	434 (2.07)	312 (1.89)	288 (1.65)	331 (1.72)	341 (1.84)
8	729 (3.48)	447 (2.72)	419 (2.40)	565 (2.95)	540 (2.92)
9	1053 (5.03)	635 (3.86)	610 (3.49)	849 (4.42)	786 (4.24)
10	998 (4.77)	751 (4.56)	748 (4.28)	922 (4.81)	854 (4.62)
11	854 (4.08)	701 (4.25)	746 (4.27)	841 (4.38)	785 (4.24)
12	860 (4.11)	623 (3.78)	708 (4.05)	831 (4.33)	755 (4.08)
13	847 (4.05)	642 (3.90)	731 (4.18)	837 (4.36)	764 (4.13)
14	957 (4.57)	744 (4.51)	812 (4.64)	982 (5.12)	873 (4.72)
15	1018 (4.87)	986 (5.99)	1027 (5.87)	1074 (5.60)	1026 (5.55)
16	1031 (4.93)	803 (4.87)	922 (5.28)	955 (4.98)	928 (5.01)
17	1171 (5.60)	845 (5.13)	921 (5.27)	1112 (5.80)	1012 (5.47)
18	1256 (6.00)	930 (5.65)	1012 (5.79)	1225 (6.38)	1105 (5.97)
19	1315 (6.28)	913 (5.54)	959 (5.49)	1263 (6.58)	1112 (6.01)
20	1108 (5.30)	855 (5.19)	914 (5.23)	1092 (5.69)	992 (5.36)
21	1040 (4.97)	719 (4.36)	810 (4.64)	975 (5.08)	886 (4.78)
22	1020 (4.88)	713 (4.33)	808 (4.62)	911 (4.75)	863 (4.66)
23	1011 (4.83)	793 (4.81)	876 (5.01)	854 (4.45)	883 (4.77)
24	891 (4.26)	817 (4.96)	837 (4.79)	780 (4.07)	831 (4.49)

Minneapolis/St. Paul: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	712 (3.78)	683 (4.39)	714 (4.22)	661 (3.61)	692 (3.98)
2	676 (3.58)	616 (3.96)	651 (3.85)	629 (3.44)	643 (3.70)
3	533 (2.83)	602 (3.87)	621 (3.67)	508 (2.78)	566 (3.25)
4	364 (1.93)	467 (3.00)	486 (2.88)	368 (2.01)	421 (2.42)
5	322 (1.71)	334 (2.15)	362 (2.14)	305 (1.67)	331 (1.90)
6	302 (1.60)	292 (1.88)	322 (1.91)	275 (1.50)	298 (1.71)
7	386 (2.05)	299 (1.92)	288 (1.70)	335 (1.83)	327 (1.88)
8	644 (3.41)	414 (2.66)	409 (2.42)	534 (2.92)	500 (2.87)
9	947 (5.02)	609 (3.92)	604 (3.57)	796 (4.35)	738 (4.24)
10	913 (4.84)	748 (4.81)	755 (4.47)	882 (4.82)	824 (4.74)
11	785 (4.16)	697 (4.48)	758 (4.48)	812 (4.44)	763 (4.38)
12	799 (4.24)	612 (3.94)	706 (4.18)	805 (4.40)	730 (4.20)
13	799 (4.23)	629 (4.04)	719 (4.26)	809 (4.42)	739 (4.25)
14	878 (4.65)	706 (4.54)	782 (4.63)	922 (5.04)	822 (4.72)
15	914 (4.85)	902 (5.80)	968 (5.73)	982 (5.37)	942 (5.41)
16	932 (4.94)	755 (4.85)	887 (5.24)	898 (4.91)	868 (4.99)
17	1086 (5.76)	810 (5.21)	898 (5.31)	1059 (5.79)	963 (5.54)
18	1194 (6.33)	896 (5.76)	998 (5.90)	1172 (6.41)	1065 (6.12)
19	1205 (6.39)	875 (5.63)	959 (5.67)	1174 (6.42)	1053 (6.05)
20	1021 (5.41)	804 (5.17)	891 (5.27)	1025 (5.60)	935 (5.38)
21	924 (4.90)	665 (4.28)	769 (4.55)	908 (4.96)	816 (4.69)
22	878 (4.65)	669 (4.30)	765 (4.52)	866 (4.73)	794 (4.56)
23	876 (4.64)	727 (4.67)	814 (4.82)	818 (4.47)	809 (4.65)
24	774 (4.10)	740 (4.76)	780 (4.61)	750 (4.10)	761 (4.37)

Minneapolis/St. Paul: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	693 (3.68)	690 (4.58)	719 (4.51)	627 (3.49)	682 (4.03)
2	672 (3.57)	615 (4.08)	650 (4.08)	602 (3.35)	635 (3.74)
3	542 (2.88)	606 (4.02)	623 (3.90)	490 (2.73)	565 (3.34)
4	366 (1.94)	477 (3.17)	488 (3.06)	350 (1.95)	421 (2.48)
5	324 (1.72)	338 (2.24)	361 (2.26)	293 (1.63)	329 (1.94)
6	302 (1.60)	295 (1.96)	317 (1.99)	263 (1.46)	294 (1.74)
7	360 (1.91)	304 (2.01)	287 (1.80)	309 (1.72)	315 (1.86)
8	583 (3.10)	336 (2.23)	314 (1.97)	458 (2.55)	422 (2.49)
9	958 (5.09)	523 (3.47)	474 (2.97)	772 (4.30)	681 (4.02)
10	871 (4.62)	711 (4.71)	718 (4.50)	831 (4.63)	782 (4.62)
11	803 (4.27)	668 (4.43)	704 (4.42)	813 (4.53)	747 (4.41)
12	810 (4.30)	588 (3.90)	661 (4.14)	803 (4.47)	715 (4.22)
13	801 (4.26)	634 (4.21)	708 (4.44)	824 (4.59)	742 (4.38)
14	874 (4.64)	678 (4.49)	757 (4.75)	908 (5.06)	804 (4.74)
15	906 (4.81)	840 (5.57)	902 (5.65)	946 (5.27)	898 (5.30)
16	1053 (5.59)	766 (5.08)	837 (5.25)	988 (5.50)	911 (5.37)
17	1093 (5.81)	808 (5.36)	878 (5.50)	1056 (5.88)	959 (5.66)
18	1315 (6.98)	900 (5.97)	905 (5.67)	1294 (7.20)	1103 (6.51)
19	1182 (6.28)	857 (5.68)	902 (5.65)	1160 (6.46)	1025 (6.05)
20	973 (5.17)	776 (5.15)	829 (5.20)	990 (5.51)	892 (5.26)
21	883 (4.69)	651 (4.32)	731 (4.58)	872 (4.86)	784 (4.63)
22	845 (4.49)	622 (4.12)	698 (4.38)	815 (4.54)	745 (4.39)
23	876 (4.65)	665 (4.41)	728 (4.56)	784 (4.37)	763 (4.50)
24	745 (3.96)	730 (4.84)	760 (4.76)	706 (3.93)	735 (4.34)

Minneapolis/St. Paul: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	727 (3.54)	733 (4.43)	752 (4.24)	656 (3.38)	717 (3.86)
2	701 (3.41)	656 (3.97)	694 (3.91)	628 (3.23)	669 (3.61)
3	562 (2.74)	626 (3.79)	643 (3.62)	507 (2.61)	584 (3.15)
4	370 (1.80)	484 (2.93)	500 (2.82)	355 (1.83)	427 (2.30)
5	329 (1.60)	340 (2.05)	366 (2.06)	297 (1.53)	333 (1.79)
6	304 (1.48)	296 (1.79)	325 (1.83)	264 (1.36)	297 (1.60)
7	401 (1.95)	310 (1.88)	296 (1.67)	330 (1.70)	334 (1.80)
8	721 (3.51)	405 (2.45)	395 (2.22)	549 (2.83)	517 (2.79)
9	1016 (4.95)	597 (3.61)	587 (3.31)	816 (4.20)	753 (4.06)
10	986 (4.80)	760 (4.60)	770 (4.34)	921 (4.75)	859 (4.63)
11	863 (4.21)	742 (4.49)	806 (4.54)	877 (4.52)	822 (4.43)
12	869 (4.23)	711 (4.30)	801 (4.51)	889 (4.58)	817 (4.41)
13	978 (4.76)	733 (4.43)	814 (4.59)	981 (5.05)	876 (4.72)
14	1037 (5.05)	770 (4.65)	876 (4.94)	1039 (5.35)	930 (5.01)
15	1033 (5.03)	879 (5.31)	962 (5.42)	1023 (5.27)	974 (5.25)
16	1158 (5.64)	858 (5.19)	975 (5.49)	1071 (5.52)	1015 (5.47)
17	1268 (6.18)	880 (5.32)	945 (5.32)	1201 (6.19)	1073 (5.78)
18	1336 (6.51)	939 (5.68)	992 (5.59)	1296 (6.68)	1140 (6.15)
19	1331 (6.48)	954 (5.77)	1002 (5.65)	1302 (6.71)	1147 (6.18)
20	1068 (5.20)	886 (5.36)	967 (5.45)	1090 (5.61)	1003 (5.40)
21	920 (4.48)	728 (4.40)	845 (4.76)	912 (4.70)	851 (4.59)
22	859 (4.18)	700 (4.23)	796 (4.49)	840 (4.33)	799 (4.30)
23	910 (4.43)	752 (4.55)	816 (4.60)	821 (4.23)	825 (4.44)
24	789 (3.84)	799 (4.83)	826 (4.66)	745 (3.84)	790 (4.26)

Minneapolis/St. Paul: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	747 (3.57)	728 (4.35)	751 (4.21)	663 (3.36)	722 (3.84)
2	720 (3.44)	647 (3.87)	683 (3.83)	633 (3.21)	671 (3.57)
3	568 (2.71)	620 (3.71)	639 (3.58)	507 (2.57)	583 (3.10)
4	378 (1.81)	490 (2.93)	504 (2.82)	361 (1.83)	433 (2.31)
5	330 (1.58)	342 (2.04)	368 (2.06)	299 (1.52)	335 (1.78)
6	309 (1.48)	297 (1.77)	326 (1.83)	268 (1.36)	300 (1.59)
7	385 (1.84)	305 (1.83)	290 (1.63)	321 (1.63)	325 (1.73)
8	781 (3.74)	423 (2.53)	404 (2.26)	593 (3.01)	549 (2.92)
9	1053 (5.03)	615 (3.68)	588 (3.30)	856 (4.34)	777 (4.13)
10	989 (4.73)	777 (4.65)	777 (4.35)	933 (4.74)	869 (4.62)
11	872 (4.17)	741 (4.43)	801 (4.49)	877 (4.45)	823 (4.38)
12	869 (4.16)	694 (4.15)	794 (4.45)	872 (4.43)	807 (4.30)
13	947 (4.53)	733 (4.38)	825 (4.62)	954 (4.84)	865 (4.60)
14	1010 (4.83)	808 (4.83)	907 (5.08)	1032 (5.24)	939 (5.00)
15	1026 (4.91)	901 (5.39)	972 (5.44)	1032 (5.24)	983 (5.23)
16	1183 (5.65)	849 (5.08)	925 (5.18)	1093 (5.55)	1012 (5.38)
17	1245 (5.95)	888 (5.31)	947 (5.30)	1188 (6.03)	1066 (5.67)
18	1442 (6.90)	1000 (5.98)	1029 (5.77)	1402 (7.12)	1218 (6.48)
19	1340 (6.41)	1001 (5.98)	1056 (5.92)	1323 (6.71)	1180 (6.28)
20	1070 (5.12)	882 (5.27)	980 (5.49)	1081 (5.49)	1003 (5.34)
21	982 (4.69)	734 (4.39)	848 (4.75)	954 (4.84)	879 (4.68)
22	914 (4.37)	705 (4.22)	800 (4.48)	871 (4.42)	822 (4.38)
23	939 (4.49)	748 (4.47)	813 (4.55)	831 (4.22)	832 (4.43)
24	818 (3.91)	797 (4.77)	826 (4.63)	758 (3.85)	800 (4.25)

Minneapolis/St. Paul: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	758 (3.58)	738 (4.35)	769 (4.25)	669 (3.35)	733 (3.85)
2	718 (3.39)	654 (3.86)	702 (3.88)	631 (3.16)	676 (3.55)
3	570 (2.69)	623 (3.67)	649 (3.59)	508 (2.54)	587 (3.09)
4	374 (1.77)	486 (2.87)	504 (2.78)	357 (1.79)	430 (2.26)
5	327 (1.55)	339 (2.00)	367 (2.03)	296 (1.49)	332 (1.75)
6	305 (1.44)	294 (1.73)	327 (1.81)	264 (1.33)	298 (1.56)
7	386 (1.82)	297 (1.75)	288 (1.59)	314 (1.57)	321 (1.69)
8	812 (3.83)	421 (2.48)	390 (2.15)	611 (3.06)	557 (2.93)
9	1125 (5.31)	643 (3.79)	595 (3.29)	920 (4.61)	820 (4.30)
10	969 (4.58)	762 (4.49)	758 (4.19)	912 (4.57)	850 (4.47)
11	866 (4.09)	754 (4.45)	810 (4.47)	880 (4.41)	828 (4.35)
12	893 (4.22)	713 (4.20)	803 (4.44)	900 (4.51)	827 (4.34)
13	1012 (4.78)	766 (4.52)	851 (4.70)	1015 (5.08)	911 (4.78)
14	1055 (4.98)	826 (4.87)	926 (5.12)	1071 (5.37)	970 (5.09)
15	1030 (4.87)	923 (5.44)	1035 (5.72)	1024 (5.13)	1003 (5.27)
16	1149 (5.43)	869 (5.12)	951 (5.26)	1079 (5.41)	1012 (5.31)
17	1171 (5.53)	887 (5.23)	959 (5.30)	1131 (5.67)	1037 (5.45)
18	1497 (7.08)	1014 (5.98)	1019 (5.63)	1456 (7.30)	1246 (6.54)
19	1398 (6.61)	1021 (6.02)	1054 (5.82)	1379 (6.91)	1213 (6.37)
20	1093 (5.16)	922 (5.44)	1012 (5.59)	1120 (5.61)	1037 (5.44)
21	999 (4.72)	760 (4.48)	877 (4.85)	974 (4.88)	902 (4.74)
22	914 (4.32)	706 (4.16)	814 (4.50)	865 (4.34)	824 (4.33)
23	919 (4.34)	732 (4.31)	798 (4.41)	813 (4.07)	815 (4.28)
24	824 (3.89)	813 (4.79)	842 (4.65)	764 (3.83)	811 (4.26)

Minneapolis/St. Paul: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	739 (3.44)	753 (4.46)	792 (4.39)	653 (3.29)	734 (3.85)
2	709 (3.30)	665 (3.94)	713 (3.95)	626 (3.15)	678 (3.56)
3	570 (2.65)	629 (3.72)	656 (3.63)	509 (2.56)	591 (3.10)
4	375 (1.75)	499 (2.96)	516 (2.85)	362 (1.82)	438 (2.30)
5	328 (1.53)	344 (2.04)	371 (2.05)	301 (1.51)	336 (1.76)
6	304 (1.42)	294 (1.74)	329 (1.82)	266 (1.34)	298 (1.56)
7	356 (1.66)	297 (1.76)	287 (1.59)	300 (1.51)	310 (1.62)
8	1022 (4.76)	457 (2.71)	396 (2.19)	745 (3.74)	653 (3.43)
9	1141 (5.31)	650 (3.85)	622 (3.44)	913 (4.59)	830 (4.35)
10	1007 (4.69)	763 (4.52)	770 (4.26)	921 (4.63)	865 (4.53)
11	899 (4.19)	715 (4.24)	770 (4.26)	874 (4.40)	814 (4.27)
12	877 (4.08)	661 (3.92)	766 (4.24)	850 (4.27)	788 (4.13)
13	981 (4.57)	762 (4.51)	867 (4.80)	972 (4.89)	895 (4.70)
14	1043 (4.86)	778 (4.61)	868 (4.81)	1028 (5.17)	929 (4.87)
15	946 (4.40)	886 (5.25)	944 (5.23)	970 (4.88)	937 (4.91)
16	1151 (5.36)	827 (4.90)	914 (5.06)	1040 (5.23)	982 (5.15)
17	1318 (6.13)	846 (5.01)	912 (5.05)	1192 (6.00)	1066 (5.59)
18	1482 (6.90)	1045 (6.19)	1053 (5.83)	1447 (7.28)	1256 (6.59)
19	1418 (6.60)	990 (5.87)	1034 (5.73)	1375 (6.92)	1204 (6.31)
20	1132 (5.27)	948 (5.62)	1042 (5.77)	1151 (5.79)	1068 (5.60)
21	1048 (4.88)	755 (4.47)	865 (4.79)	992 (4.99)	915 (4.80)
22	920 (4.28)	728 (4.31)	851 (4.71)	860 (4.32)	840 (4.40)
23	912 (4.25)	758 (4.49)	844 (4.67)	800 (4.02)	828 (4.34)
24	798 (3.71)	827 (4.90)	882 (4.88)	737 (3.71)	811 (4.25)

Minneapolis/St. Paul: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	711 (3.48)	701 (4.28)	730 (4.15)	637 (3.30)	695 (3.77)
2	684 (3.35)	625 (3.81)	664 (3.78)	610 (3.15)	646 (3.50)
3	551 (2.70)	608 (3.71)	627 (3.57)	496 (2.57)	571 (3.10)
4	368 (1.80)	482 (2.94)	496 (2.82)	354 (1.83)	425 (2.31)
5	325 (1.59)	339 (2.07)	365 (2.08)	296 (1.53)	331 (1.80)
6	302 (1.48)	295 (1.80)	322 (1.83)	264 (1.37)	296 (1.61)
7	367 (1.80)	297 (1.81)	282 (1.60)	310 (1.60)	314 (1.70)
8	796 (3.90)	418 (2.55)	380 (2.16)	611 (3.16)	550 (2.99)
9	1074 (5.26)	604 (3.69)	554 (3.15)	875 (4.53)	776 (4.21)
10	964 (4.72)	749 (4.57)	748 (4.26)	906 (4.69)	841 (4.57)
11	850 (4.17)	732 (4.47)	795 (4.52)	863 (4.47)	810 (4.40)
12	863 (4.23)	693 (4.23)	788 (4.48)	875 (4.53)	805 (4.37)
13	938 (4.60)	730 (4.45)	822 (4.68)	952 (4.93)	861 (4.67)
14	977 (4.79)	778 (4.75)	887 (5.05)	1001 (5.18)	911 (4.94)
15	1023 (5.01)	896 (5.47)	969 (5.51)	1030 (5.33)	980 (5.32)
16	1234 (6.05)	881 (5.37)	948 (5.39)	1150 (5.95)	1053 (5.71)
17	1232 (6.04)	889 (5.43)	963 (5.48)	1178 (6.09)	1065 (5.78)
18	1392 (6.82)	971 (5.92)	1017 (5.78)	1350 (6.99)	1182 (6.42)
19	1341 (6.57)	988 (6.03)	1052 (5.99)	1317 (6.81)	1174 (6.38)
20	1047 (5.13)	878 (5.36)	998 (5.68)	1059 (5.48)	996 (5.40)
21	915 (4.48)	713 (4.35)	840 (4.78)	899 (4.65)	841 (4.57)
22	827 (4.05)	659 (4.02)	761 (4.33)	802 (4.15)	762 (4.14)
23	867 (4.25)	702 (4.28)	774 (4.40)	778 (4.02)	780 (4.23)
24	760 (3.72)	759 (4.63)	798 (4.54)	716 (3.70)	758 (4.12)

Minneapolis/St. Paul: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	883 (4.06)	809 (4.78)	822 (4.65)	777 (3.79)	822 (4.28)
2	789 (3.63)	719 (4.25)	726 (4.10)	701 (3.42)	733 (3.82)
3	590 (2.72)	654 (3.86)	658 (3.72)	533 (2.60)	609 (3.17)
4	391 (1.80)	497 (2.94)	504 (2.85)	372 (1.82)	441 (2.30)
5	328 (1.51)	342 (2.02)	365 (2.06)	296 (1.45)	333 (1.73)
6	303 (1.40)	294 (1.74)	319 (1.81)	262 (1.28)	295 (1.53)
7	404 (1.86)	305 (1.80)	283 (1.60)	331 (1.62)	331 (1.72)
8	677 (3.12)	376 (2.22)	375 (2.12)	509 (2.48)	483 (2.52)
9	981 (4.51)	613 (3.62)	691 (3.91)	773 (3.77)	764 (3.98)
10	1035 (4.76)	815 (4.82)	852 (4.82)	977 (4.77)	919 (4.79)
11	863 (3.97)	789 (4.66)	876 (4.96)	902 (4.41)	858 (4.47)
12	877 (4.03)	687 (4.06)	750 (4.24)	897 (4.38)	803 (4.18)
13	1008 (4.64)	757 (4.48)	842 (4.77)	1023 (5.00)	908 (4.73)
14	1056 (4.86)	804 (4.75)	875 (4.95)	1073 (5.24)	952 (4.96)
15	1039 (4.78)	842 (4.98)	871 (4.93)	1032 (5.04)	946 (4.93)
16	1370 (6.31)	876 (5.18)	882 (4.99)	1259 (6.15)	1096 (5.71)
17	1430 (6.58)	958 (5.66)	959 (5.43)	1377 (6.72)	1180 (6.15)
18	1431 (6.59)	930 (5.50)	966 (5.46)	1362 (6.65)	1172 (6.10)
19	1405 (6.47)	903 (5.33)	907 (5.13)	1343 (6.56)	1139 (5.93)
20	1119 (5.15)	877 (5.18)	911 (5.15)	1136 (5.55)	1010 (5.26)
21	962 (4.43)	706 (4.17)	781 (4.42)	940 (4.59)	847 (4.41)
22	918 (4.23)	735 (4.34)	832 (4.71)	889 (4.34)	843 (4.39)
23	957 (4.41)	780 (4.61)	799 (4.52)	872 (4.26)	852 (4.44)
24	909 (4.18)	855 (5.05)	830 (4.70)	844 (4.12)	859 (4.48)

Minneapolis/St. Paul: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	749 (3.37)	743 (4.23)	778 (4.19)	665 (3.18)	734 (3.71)
2	718 (3.24)	659 (3.76)	709 (3.81)	634 (3.03)	680 (3.43)
3	565 (2.55)	618 (3.53)	642 (3.45)	506 (2.42)	583 (2.94)
4	377 (1.70)	489 (2.79)	505 (2.71)	361 (1.73)	433 (2.19)
5	332 (1.50)	342 (1.95)	368 (1.98)	301 (1.44)	336 (1.70)
6	310 (1.40)	300 (1.71)	331 (1.78)	270 (1.29)	303 (1.53)
7	432 (1.95)	331 (1.88)	317 (1.70)	356 (1.70)	358 (1.81)
8	911 (4.10)	487 (2.78)	469 (2.53)	689 (3.30)	638 (3.22)
9	1177 (5.30)	702 (4.00)	674 (3.62)	968 (4.63)	879 (4.44)
10	1096 (4.94)	829 (4.72)	818 (4.40)	1029 (4.93)	943 (4.76)
11	972 (4.38)	781 (4.46)	826 (4.44)	969 (4.64)	887 (4.48)
12	966 (4.35)	740 (4.22)	826 (4.44)	963 (4.61)	874 (4.41)
13	1103 (4.97)	785 (4.48)	855 (4.60)	1092 (5.23)	959 (4.84)
14	1144 (5.15)	869 (4.95)	946 (5.09)	1149 (5.50)	1027 (5.19)
15	1085 (4.89)	945 (5.39)	1016 (5.46)	1082 (5.18)	1032 (5.21)
16	1199 (5.40)	911 (5.19)	989 (5.32)	1132 (5.42)	1057 (5.34)
17	1392 (6.27)	975 (5.56)	1002 (5.39)	1340 (6.41)	1177 (5.94)
18	1502 (6.77)	1090 (6.21)	1113 (5.99)	1487 (7.12)	1297 (6.55)
19	1358 (6.12)	1008 (5.75)	1054 (5.67)	1344 (6.43)	1191 (6.01)
20	1078 (4.86)	882 (5.03)	978 (5.26)	1086 (5.20)	1006 (5.08)
21	986 (4.44)	743 (4.23)	847 (4.55)	961 (4.60)	884 (4.46)
22	951 (4.28)	733 (4.18)	836 (4.50)	898 (4.30)	854 (4.31)
23	953 (4.29)	754 (4.30)	826 (4.44)	840 (4.02)	843 (4.26)
24	839 (3.78)	824 (4.70)	867 (4.66)	772 (3.69)	825 (4.17)

Minneapolis/St. Paul: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	735 (3.63)	723 (4.51)	755 (4.43)	653 (3.42)	716 (3.96)
2	703 (3.47)	637 (3.97)	680 (3.99)	620 (3.25)	660 (3.65)
3	563 (2.78)	611 (3.81)	632 (3.71)	503 (2.64)	577 (3.19)
4	377 (1.86)	484 (3.02)	498 (2.92)	359 (1.88)	430 (2.37)
5	330 (1.63)	338 (2.11)	363 (2.13)	298 (1.56)	332 (1.84)
6	308 (1.52)	292 (1.82)	320 (1.88)	266 (1.40)	297 (1.64)
7	363 (1.79)	287 (1.79)	274 (1.61)	301 (1.58)	306 (1.69)
8	650 (3.21)	352 (2.19)	331 (1.94)	494 (2.59)	456 (2.52)
9	953 (4.70)	562 (3.50)	525 (3.08)	779 (4.08)	704 (3.89)
10	962 (4.75)	749 (4.67)	736 (4.32)	911 (4.78)	839 (4.64)
11	872 (4.30)	708 (4.41)	756 (4.44)	866 (4.54)	800 (4.42)
12	876 (4.32)	665 (4.15)	744 (4.36)	870 (4.56)	789 (4.36)
13	928 (4.58)	688 (4.29)	762 (4.47)	926 (4.86)	826 (4.56)
14	1014 (5.00)	767 (4.78)	846 (4.96)	1025 (5.37)	913 (5.04)
15	1001 (4.94)	877 (5.47)	969 (5.69)	995 (5.22)	960 (5.31)
16	1117 (5.51)	818 (5.10)	903 (5.30)	1039 (5.45)	969 (5.35)
17	1248 (6.16)	852 (5.31)	888 (5.21)	1186 (6.21)	1043 (5.76)
18	1290 (6.37)	883 (5.51)	900 (5.28)	1258 (6.60)	1082 (5.98)
19	1279 (6.31)	926 (5.77)	966 (5.67)	1256 (6.58)	1106 (6.11)
20	1060 (5.23)	862 (5.38)	946 (5.55)	1069 (5.60)	984 (5.44)
21	972 (4.80)	723 (4.51)	827 (4.85)	947 (4.96)	867 (4.79)
22	911 (4.49)	717 (4.47)	818 (4.80)	874 (4.58)	830 (4.58)
23	936 (4.62)	733 (4.57)	794 (4.66)	827 (4.34)	822 (4.54)
24	817 (4.03)	782 (4.88)	809 (4.75)	754 (3.95)	790 (4.37)

Minneapolis/St. Paul: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	753 (3.52)	742 (4.45)	772 (4.35)	667 (3.34)	734 (3.87)
2	713 (3.33)	650 (3.90)	694 (3.91)	629 (3.14)	671 (3.54)
3	566 (2.65)	620 (3.72)	647 (3.65)	505 (2.53)	585 (3.09)
4	373 (1.74)	485 (2.91)	501 (2.82)	357 (1.79)	429 (2.27)
5	328 (1.53)	338 (2.03)	364 (2.05)	298 (1.49)	332 (1.75)
6	309 (1.44)	293 (1.76)	323 (1.82)	268 (1.34)	298 (1.57)
7	389 (1.82)	300 (1.80)	289 (1.63)	318 (1.59)	324 (1.71)
8	826 (3.86)	426 (2.55)	406 (2.29)	614 (3.07)	567 (2.99)
9	1107 (5.17)	625 (3.75)	582 (3.28)	899 (4.50)	802 (4.23)
10	997 (4.66)	749 (4.49)	735 (4.14)	929 (4.65)	852 (4.50)
11	873 (4.08)	709 (4.25)	752 (4.24)	868 (4.34)	800 (4.22)
12	889 (4.15)	661 (3.97)	747 (4.21)	874 (4.38)	793 (4.19)
13	1009 (4.71)	720 (4.32)	801 (4.51)	989 (4.95)	879 (4.64)
14	1065 (4.97)	789 (4.73)	856 (4.82)	1073 (5.37)	945 (4.99)
15	1053 (4.92)	869 (5.21)	925 (5.22)	1032 (5.17)	970 (5.12)
16	1146 (5.35)	820 (4.92)	902 (5.09)	1049 (5.25)	979 (5.17)
17	1330 (6.21)	882 (5.29)	926 (5.22)	1242 (6.22)	1094 (5.78)
18	1554 (7.26)	1040 (6.24)	1073 (6.05)	1492 (7.46)	1289 (6.80)
19	1398 (6.53)	1001 (6.01)	1051 (5.93)	1365 (6.83)	1203 (6.35)
20	1083 (5.06)	886 (5.32)	967 (5.45)	1095 (5.48)	1008 (5.32)
21	995 (4.65)	754 (4.52)	869 (4.90)	968 (4.84)	896 (4.73)
22	909 (4.25)	721 (4.32)	831 (4.69)	869 (4.35)	832 (4.39)
23	935 (4.37)	776 (4.65)	861 (4.86)	832 (4.16)	851 (4.49)
24	807 (3.77)	820 (4.92)	864 (4.87)	752 (3.76)	811 (4.28)

Minneapolis/St. Paul: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	716 (3.61)	718 (4.36)	758 (4.16)	635 (3.38)	706 (3.86)
2	694 (3.50)	647 (3.93)	704 (3.86)	609 (3.25)	663 (3.62)
3	561 (2.83)	634 (3.85)	668 (3.67)	497 (2.65)	590 (3.22)
4	375 (1.89)	504 (3.06)	532 (2.92)	354 (1.89)	442 (2.41)
5	332 (1.67)	353 (2.14)	390 (2.14)	295 (1.58)	343 (1.87)
6	308 (1.55)	307 (1.86)	344 (1.89)	263 (1.40)	305 (1.67)
7	351 (1.77)	300 (1.82)	295 (1.62)	292 (1.56)	309 (1.69)
8	765 (3.85)	401 (2.43)	359 (1.97)	593 (3.16)	529 (2.89)
9	992 (5.00)	533 (3.23)	539 (2.96)	774 (4.13)	708 (3.87)
10	985 (4.96)	710 (4.31)	689 (3.78)	915 (4.88)	824 (4.50)
11	981 (4.94)	783 (4.75)	839 (4.60)	991 (5.28)	898 (4.90)
12	983 (4.95)	742 (4.50)	889 (4.88)	965 (5.14)	895 (4.88)
13	1140 (5.75)	788 (4.78)	917 (5.03)	1105 (5.89)	987 (5.39)
14	1010 (5.09)	805 (4.88)	945 (5.18)	1015 (5.41)	944 (5.15)
15	900 (4.54)	896 (5.44)	1024 (5.62)	929 (4.95)	938 (5.12)
16	1000 (5.04)	873 (5.30)	999 (5.48)	983 (5.24)	964 (5.26)
17	1112 (5.61)	955 (5.80)	1152 (6.32)	1079 (5.76)	1075 (5.87)
18	1171 (5.90)	983 (5.97)	1138 (6.24)	1158 (6.18)	1113 (6.07)
19	1197 (6.03)	936 (5.68)	1066 (5.85)	1170 (6.24)	1092 (5.96)
20	953 (4.80)	783 (4.75)	862 (4.73)	963 (5.13)	890 (4.86)
21	861 (4.34)	694 (4.21)	798 (4.38)	863 (4.60)	804 (4.39)
22	813 (4.10)	665 (4.04)	743 (4.08)	806 (4.30)	757 (4.13)
23	878 (4.42)	707 (4.29)	768 (4.21)	785 (4.18)	784 (4.28)
24	766 (3.86)	763 (4.63)	808 (4.43)	713 (3.80)	763 (4.16)

Minneapolis/St. Paul: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	755 (3.37)	725 (4.14)	755 (4.10)	663 (3.15)	724 (3.65)
2	708 (3.16)	644 (3.68)	689 (3.74)	622 (2.95)	666 (3.35)
3	568 (2.53)	624 (3.57)	646 (3.51)	506 (2.40)	586 (2.95)
4	378 (1.68)	493 (2.82)	509 (2.76)	360 (1.71)	435 (2.19)
5	333 (1.48)	343 (1.96)	370 (2.01)	300 (1.42)	336 (1.70)
6	312 (1.39)	305 (1.74)	336 (1.83)	270 (1.28)	306 (1.54)
7	479 (2.13)	346 (1.98)	329 (1.78)	384 (1.82)	384 (1.93)
8	973 (4.34)	531 (3.04)	509 (2.76)	742 (3.52)	688 (3.46)
9	1186 (5.29)	709 (4.06)	672 (3.65)	984 (4.67)	887 (4.47)
10	1064 (4.74)	844 (4.82)	823 (4.47)	1017 (4.83)	937 (4.72)
11	936 (4.17)	796 (4.55)	832 (4.52)	956 (4.54)	880 (4.43)
12	948 (4.23)	746 (4.26)	817 (4.44)	962 (4.57)	868 (4.38)
13	1083 (4.83)	800 (4.57)	881 (4.78)	1093 (5.19)	964 (4.86)
14	1147 (5.11)	849 (4.85)	904 (4.91)	1161 (5.51)	1015 (5.11)
15	1071 (4.77)	893 (5.10)	936 (5.08)	1064 (5.05)	991 (4.99)
16	1147 (5.11)	837 (4.78)	900 (4.89)	1070 (5.08)	988 (4.98)
17	1340 (5.97)	956 (5.47)	1019 (5.53)	1276 (6.06)	1147 (5.78)
18	1738 (7.75)	1124 (6.42)	1122 (6.09)	1661 (7.89)	1410 (7.11)
19	1420 (6.33)	1014 (5.79)	1040 (5.64)	1391 (6.60)	1216 (6.12)
20	1063 (4.74)	880 (5.03)	971 (5.27)	1078 (5.12)	998 (5.03)
21	1015 (4.53)	773 (4.42)	905 (4.91)	987 (4.68)	920 (4.63)
22	982 (4.38)	723 (4.13)	825 (4.48)	918 (4.35)	862 (4.34)
23	962 (4.29)	742 (4.24)	804 (4.36)	844 (4.01)	838 (4.22)
24	824 (3.67)	799 (4.57)	829 (4.50)	760 (3.61)	803 (4.05)

Minneapolis/St. Paul: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	722 (3.59)	717 (4.58)	751 (4.48)	639 (3.42)	707 (3.97)
2	697 (3.47)	644 (4.11)	696 (4.15)	613 (3.28)	662 (3.72)
3	563 (2.80)	624 (3.98)	653 (3.90)	499 (2.67)	585 (3.29)
4	374 (1.86)	491 (3.13)	509 (3.04)	355 (1.90)	433 (2.43)
5	330 (1.64)	343 (2.19)	373 (2.22)	296 (1.58)	336 (1.89)
6	307 (1.53)	298 (1.90)	331 (1.97)	264 (1.41)	300 (1.68)
7	355 (1.77)	293 (1.87)	284 (1.70)	295 (1.58)	307 (1.72)
8	619 (3.08)	331 (2.12)	325 (1.94)	457 (2.44)	432 (2.43)
9	959 (4.77)	518 (3.30)	500 (2.98)	754 (4.04)	682 (3.83)
10	953 (4.74)	716 (4.57)	714 (4.26)	883 (4.72)	816 (4.59)
11	872 (4.34)	699 (4.46)	734 (4.38)	864 (4.62)	792 (4.45)
12	928 (4.62)	682 (4.36)	766 (4.58)	911 (4.87)	822 (4.62)
13	994 (4.95)	672 (4.29)	750 (4.48)	958 (5.13)	843 (4.74)
14	1039 (5.17)	759 (4.84)	830 (4.95)	1038 (5.55)	916 (5.15)
15	1052 (5.24)	851 (5.43)	899 (5.37)	1025 (5.48)	957 (5.38)
16	1105 (5.50)	766 (4.89)	851 (5.08)	995 (5.32)	929 (5.22)
17	1235 (6.15)	773 (4.93)	840 (5.02)	1115 (5.97)	990 (5.57)
18	1253 (6.24)	844 (5.39)	862 (5.15)	1212 (6.48)	1042 (5.86)
19	1258 (6.26)	909 (5.81)	960 (5.73)	1229 (6.58)	1089 (6.12)
20	1027 (5.11)	872 (5.57)	953 (5.69)	1050 (5.62)	975 (5.48)
21	915 (4.55)	720 (4.60)	851 (5.08)	896 (4.79)	845 (4.75)
22	855 (4.26)	672 (4.29)	769 (4.59)	821 (4.39)	779 (4.38)
23	900 (4.48)	692 (4.42)	746 (4.45)	794 (4.25)	783 (4.40)
24	778 (3.87)	778 (4.97)	807 (4.82)	728 (3.89)	773 (4.34)

Minneapolis/St. Paul: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	738 (3.51)	725 (4.38)	742 (4.20)	656 (3.34)	715 (3.82)
2	708 (3.37)	646 (3.90)	679 (3.84)	626 (3.19)	665 (3.55)
3	570 (2.71)	627 (3.78)	641 (3.63)	510 (2.59)	587 (3.13)
4	375 (1.78)	488 (2.95)	502 (2.84)	357 (1.82)	431 (2.30)
5	330 (1.57)	338 (2.04)	364 (2.06)	296 (1.51)	332 (1.77)
6	320 (1.52)	296 (1.79)	323 (1.83)	274 (1.39)	303 (1.62)
7	433 (2.06)	321 (1.94)	307 (1.74)	349 (1.78)	352 (1.88)
8	841 (4.00)	455 (2.75)	453 (2.57)	625 (3.18)	593 (3.17)
9	1046 (4.97)	629 (3.80)	634 (3.59)	839 (4.27)	786 (4.20)
10	985 (4.68)	765 (4.62)	780 (4.42)	915 (4.66)	861 (4.60)
11	901 (4.28)	730 (4.41)	780 (4.41)	889 (4.53)	825 (4.41)
12	873 (4.15)	665 (4.02)	761 (4.31)	864 (4.40)	791 (4.22)
13	1013 (4.82)	744 (4.49)	829 (4.70)	1001 (5.10)	897 (4.79)
14	1085 (5.16)	814 (4.92)	899 (5.09)	1094 (5.57)	973 (5.20)
15	1035 (4.92)	882 (5.32)	940 (5.32)	1023 (5.21)	970 (5.18)
16	1140 (5.42)	836 (5.05)	946 (5.36)	1046 (5.32)	992 (5.30)
17	1309 (6.22)	861 (5.20)	954 (5.40)	1193 (6.08)	1079 (5.76)
18	1401 (6.66)	926 (5.59)	926 (5.24)	1353 (6.89)	1151 (6.15)
19	1325 (6.30)	969 (5.85)	1001 (5.66)	1309 (6.66)	1150 (6.14)
20	1025 (4.87)	873 (5.27)	954 (5.40)	1049 (5.34)	975 (5.21)
21	940 (4.47)	732 (4.42)	831 (4.71)	933 (4.75)	859 (4.59)
22	930 (4.42)	713 (4.31)	799 (4.52)	891 (4.53)	833 (4.45)
23	916 (4.35)	739 (4.47)	814 (4.61)	812 (4.14)	820 (4.38)
24	796 (3.78)	783 (4.73)	806 (4.57)	740 (3.77)	781 (4.17)

Minneapolis/St. Paul: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	741 (3.54)	726 (4.27)	744 (4.06)	653 (3.32)	716 (3.77)
2	711 (3.40)	640 (3.76)	683 (3.73)	618 (3.14)	663 (3.49)
3	574 (2.74)	620 (3.64)	642 (3.51)	505 (2.57)	585 (3.08)
4	379 (1.81)	493 (2.90)	512 (2.79)	359 (1.83)	436 (2.30)
5	334 (1.59)	343 (2.01)	371 (2.02)	299 (1.52)	336 (1.77)
6	323 (1.54)	297 (1.74)	328 (1.79)	273 (1.39)	305 (1.61)
7	415 (1.98)	301 (1.77)	286 (1.56)	329 (1.67)	332 (1.75)
8	630 (3.01)	383 (2.25)	375 (2.05)	488 (2.48)	469 (2.47)
9	1067 (5.10)	652 (3.83)	627 (3.42)	873 (4.44)	804 (4.24)
10	1068 (5.10)	848 (4.98)	837 (4.57)	1020 (5.18)	943 (4.97)
11	965 (4.61)	787 (4.62)	859 (4.69)	957 (4.86)	892 (4.70)
12	994 (4.75)	758 (4.46)	877 (4.79)	967 (4.91)	899 (4.74)
13	987 (4.72)	733 (4.30)	848 (4.63)	967 (4.91)	884 (4.66)
14	1184 (5.66)	885 (5.20)	983 (5.37)	1163 (5.91)	1054 (5.55)
15	1177 (5.62)	998 (5.86)	1121 (6.12)	1138 (5.78)	1108 (5.84)
16	1188 (5.68)	918 (5.40)	1027 (5.61)	1116 (5.67)	1062 (5.60)
17	1380 (6.59)	952 (5.59)	980 (5.35)	1319 (6.70)	1157 (6.10)
18	1195 (5.71)	891 (5.24)	944 (5.16)	1181 (6.00)	1053 (5.55)
19	1202 (5.74)	910 (5.35)	954 (5.21)	1192 (6.06)	1064 (5.61)
20	985 (4.71)	902 (5.30)	1003 (5.48)	1033 (5.25)	981 (5.17)
21	867 (4.14)	689 (4.05)	825 (4.51)	848 (4.31)	807 (4.25)
22	853 (4.08)	691 (4.06)	801 (4.37)	817 (4.15)	790 (4.16)
23	919 (4.39)	787 (4.63)	864 (4.72)	817 (4.15)	847 (4.46)
24	791 (3.78)	813 (4.78)	824 (4.50)	744 (3.78)	793 (4.18)

Minneapolis/St. Paul: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	744 (3.64)	721 (4.49)	743 (4.33)	650 (3.42)	714 (3.93)
2	715 (3.49)	644 (4.01)	688 (4.01)	620 (3.26)	666 (3.67)
3	577 (2.82)	621 (3.87)	646 (3.76)	507 (2.67)	588 (3.24)
4	380 (1.86)	495 (3.08)	514 (3.00)	361 (1.90)	438 (2.41)
5	334 (1.63)	343 (2.14)	372 (2.17)	300 (1.58)	337 (1.86)
6	310 (1.51)	294 (1.83)	329 (1.92)	265 (1.40)	300 (1.65)
7	360 (1.76)	290 (1.81)	284 (1.65)	296 (1.56)	307 (1.69)
8	666 (3.25)	343 (2.14)	343 (2.00)	481 (2.54)	457 (2.52)
9	1021 (4.99)	530 (3.30)	501 (2.92)	797 (4.20)	711 (3.92)
10	964 (4.71)	742 (4.62)	740 (4.31)	894 (4.71)	835 (4.59)
11	895 (4.37)	754 (4.70)	786 (4.58)	900 (4.74)	834 (4.59)
12	921 (4.50)	691 (4.30)	751 (4.37)	909 (4.79)	818 (4.50)
13	1105 (5.40)	807 (5.03)	836 (4.87)	1112 (5.86)	965 (5.31)
14	1115 (5.45)	857 (5.33)	926 (5.40)	1136 (5.98)	1008 (5.55)
15	1048 (5.12)	892 (5.55)	972 (5.66)	1024 (5.40)	984 (5.42)
16	1126 (5.50)	807 (5.02)	902 (5.25)	1015 (5.35)	962 (5.30)
17	1126 (5.50)	756 (4.71)	855 (4.98)	1023 (5.39)	939 (5.17)
18	1204 (5.89)	837 (5.21)	924 (5.39)	1144 (6.03)	1027 (5.65)
19	1314 (6.42)	908 (5.65)	949 (5.53)	1262 (6.65)	1108 (6.10)
20	1003 (4.90)	845 (5.26)	935 (5.45)	1014 (5.34)	949 (5.23)
21	926 (4.53)	701 (4.37)	806 (4.69)	901 (4.74)	833 (4.59)
22	865 (4.23)	668 (4.16)	764 (4.45)	822 (4.33)	780 (4.29)
23	953 (4.66)	738 (4.59)	800 (4.66)	826 (4.35)	829 (4.56)
24	793 (3.87)	776 (4.83)	799 (4.66)	727 (3.83)	774 (4.26)

Minneapolis/St. Paul: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	717 (2.81)	695 (3.50)	711 (3.32)	639 (2.67)	690 (3.05)
2	723 (2.84)	630 (3.17)	660 (3.08)	636 (2.66)	662 (2.92)
3	552 (2.17)	611 (3.08)	629 (2.94)	497 (2.08)	572 (2.52)
4	369 (1.45)	481 (2.42)	495 (2.31)	353 (1.48)	425 (1.88)
5	326 (1.28)	337 (1.70)	363 (1.69)	295 (1.23)	330 (1.46)
6	304 (1.19)	299 (1.51)	324 (1.51)	267 (1.12)	299 (1.32)
7	587 (2.30)	360 (1.81)	309 (1.45)	461 (1.93)	429 (1.89)
8	1113 (4.37)	679 (3.42)	688 (3.22)	882 (3.69)	839 (3.70)
9	1604 (6.30)	1060 (5.34)	1071 (5.01)	1367 (5.71)	1274 (5.62)
10	1340 (5.26)	1095 (5.51)	1194 (5.58)	1272 (5.32)	1225 (5.41)
11	1265 (4.96)	989 (4.98)	1151 (5.38)	1237 (5.17)	1160 (5.12)
12	1283 (5.04)	970 (4.88)	1190 (5.56)	1226 (5.13)	1167 (5.15)
13	1475 (5.79)	973 (4.90)	1083 (5.06)	1439 (6.01)	1242 (5.48)
14	1453 (5.70)	1114 (5.61)	1209 (5.65)	1425 (5.96)	1300 (5.74)
15	1313 (5.15)	1086 (5.47)	1201 (5.61)	1267 (5.30)	1217 (5.37)
16	1456 (5.72)	1088 (5.48)	1227 (5.74)	1367 (5.72)	1284 (5.67)
17	1710 (6.71)	1185 (5.97)	1188 (5.55)	1674 (7.00)	1439 (6.35)
18	1426 (5.60)	1203 (6.06)	1272 (5.94)	1482 (6.20)	1346 (5.94)
19	1295 (5.08)	1198 (6.03)	1417 (6.62)	1324 (5.53)	1309 (5.78)
20	1105 (4.34)	880 (4.43)	989 (4.62)	1109 (4.63)	1021 (4.50)
21	1028 (4.03)	709 (3.57)	745 (3.48)	999 (4.18)	870 (3.84)
22	1105 (4.34)	712 (3.58)	755 (3.53)	1002 (4.19)	893 (3.94)
23	1049 (4.12)	743 (3.74)	767 (3.59)	911 (3.81)	867 (3.83)
24	878 (3.45)	767 (3.86)	760 (3.55)	791 (3.31)	799 (3.53)

Minneapolis/St. Paul: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	716 (3.30)	700 (4.09)	727 (4.00)	640 (3.12)	696 (3.59)
2	690 (3.18)	625 (3.65)	665 (3.66)	613 (2.98)	648 (3.35)
3	553 (2.55)	607 (3.55)	626 (3.44)	498 (2.42)	571 (2.95)
4	372 (1.72)	481 (2.81)	495 (2.72)	356 (1.73)	426 (2.20)
5	325 (1.50)	338 (1.98)	365 (2.01)	295 (1.44)	331 (1.71)
6	302 (1.39)	294 (1.72)	321 (1.77)	263 (1.28)	295 (1.52)
7	381 (1.76)	298 (1.74)	282 (1.55)	317 (1.54)	319 (1.65)
8	800 (3.69)	445 (2.60)	404 (2.22)	629 (3.06)	569 (2.93)
9	1203 (5.55)	671 (3.92)	595 (3.28)	992 (4.83)	864 (4.46)
10	1001 (4.61)	767 (4.48)	761 (4.19)	939 (4.57)	866 (4.47)
11	855 (3.94)	749 (4.37)	814 (4.48)	872 (4.25)	823 (4.25)
12	896 (4.13)	717 (4.19)	810 (4.46)	908 (4.42)	833 (4.30)
13	944 (4.35)	770 (4.50)	874 (4.81)	971 (4.73)	890 (4.59)
14	1087 (5.01)	842 (4.92)	947 (5.21)	1105 (5.38)	995 (5.14)
15	1157 (5.34)	967 (5.65)	1031 (5.67)	1151 (5.60)	1076 (5.56)
16	1486 (6.85)	1001 (5.85)	1035 (5.69)	1380 (6.72)	1224 (6.32)
17	1494 (6.89)	1003 (5.86)	1040 (5.72)	1422 (6.92)	1239 (6.40)
18	1533 (7.07)	1054 (6.16)	1080 (5.94)	1485 (7.23)	1287 (6.65)
19	1423 (6.56)	1035 (6.05)	1082 (5.95)	1397 (6.80)	1234 (6.37)
20	1042 (4.81)	890 (5.20)	1013 (5.57)	1065 (5.19)	1003 (5.18)
21	931 (4.29)	709 (4.14)	839 (4.62)	906 (4.41)	846 (4.37)
22	849 (3.91)	686 (4.01)	794 (4.37)	826 (4.02)	788 (4.07)
23	873 (4.03)	712 (4.16)	783 (4.31)	786 (3.83)	789 (4.07)
24	771 (3.56)	756 (4.41)	790 (4.35)	722 (3.52)	760 (3.92)

Minneapolis/St. Paul: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	723 (3.71)	705 (4.45)	728 (4.26)	639 (3.48)	699 (3.95)
2	697 (3.57)	630 (3.97)	670 (3.92)	613 (3.33)	652 (3.68)
3	562 (2.88)	612 (3.86)	633 (3.70)	500 (2.72)	577 (3.25)
4	374 (1.91)	486 (3.07)	502 (2.93)	356 (1.94)	430 (2.43)
5	329 (1.68)	339 (2.14)	366 (2.14)	297 (1.61)	332 (1.88)
6	313 (1.60)	296 (1.86)	324 (1.89)	270 (1.47)	300 (1.70)
7	368 (1.89)	291 (1.83)	279 (1.63)	304 (1.65)	310 (1.75)
8	713 (3.65)	401 (2.53)	385 (2.25)	547 (2.97)	510 (2.88)
9	1039 (5.33)	570 (3.59)	555 (3.24)	822 (4.47)	746 (4.21)
10	959 (4.91)	735 (4.63)	740 (4.33)	894 (4.86)	832 (4.69)
11	796 (4.08)	730 (4.60)	798 (4.66)	817 (4.44)	785 (4.43)
12	837 (4.29)	673 (4.24)	774 (4.52)	839 (4.56)	781 (4.41)
13	902 (4.62)	728 (4.59)	802 (4.69)	924 (5.03)	839 (4.74)
14	971 (4.98)	745 (4.70)	845 (4.94)	983 (5.35)	886 (5.00)
15	877 (4.50)	844 (5.32)	925 (5.41)	905 (4.92)	888 (5.01)
16	944 (4.84)	774 (4.88)	877 (5.13)	899 (4.89)	874 (4.93)
17	1114 (5.71)	802 (5.06)	881 (5.14)	1055 (5.74)	963 (5.44)
18	1306 (6.69)	875 (5.52)	908 (5.30)	1260 (6.85)	1087 (6.13)
19	1225 (6.28)	941 (5.93)	1015 (5.93)	1215 (6.61)	1099 (6.20)
20	1019 (5.23)	855 (5.39)	948 (5.54)	1037 (5.64)	965 (5.45)
21	910 (4.67)	694 (4.37)	814 (4.75)	886 (4.82)	826 (4.66)
22	845 (4.33)	659 (4.16)	759 (4.44)	811 (4.41)	769 (4.34)
23	893 (4.57)	705 (4.44)	781 (4.56)	786 (4.27)	791 (4.46)
24	793 (4.06)	770 (4.86)	805 (4.70)	730 (3.97)	774 (4.37)

Minneapolis/St. Paul: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	741 (3.50)	726 (4.35)	755 (4.25)	658 (3.31)	720 (3.81)
2	707 (3.34)	644 (3.86)	687 (3.87)	624 (3.14)	665 (3.53)
3	563 (2.66)	618 (3.70)	640 (3.60)	504 (2.53)	581 (3.08)
4	375 (1.77)	487 (2.92)	502 (2.83)	358 (1.80)	431 (2.28)
5	329 (1.56)	340 (2.04)	367 (2.06)	298 (1.50)	334 (1.77)
6	309 (1.46)	296 (1.78)	325 (1.83)	268 (1.35)	300 (1.59)
7	398 (1.88)	307 (1.84)	293 (1.65)	328 (1.65)	331 (1.76)
8	804 (3.80)	423 (2.54)	398 (2.24)	608 (3.06)	557 (2.95)
9	1082 (5.11)	621 (3.72)	586 (3.30)	881 (4.43)	791 (4.19)
10	1011 (4.77)	774 (4.64)	769 (4.33)	948 (4.77)	875 (4.64)
11	901 (4.25)	743 (4.45)	793 (4.47)	902 (4.54)	834 (4.42)
12	911 (4.30)	698 (4.19)	786 (4.43)	907 (4.56)	826 (4.38)
13	1023 (4.83)	742 (4.45)	820 (4.62)	1014 (5.10)	900 (4.77)
14	1073 (5.07)	811 (4.86)	892 (5.02)	1082 (5.44)	964 (5.11)
15	1050 (4.96)	897 (5.37)	965 (5.44)	1041 (5.24)	988 (5.24)
16	1166 (5.51)	853 (5.12)	934 (5.26)	1084 (5.45)	1009 (5.35)
17	1302 (6.15)	896 (5.37)	950 (5.35)	1230 (6.18)	1094 (5.80)
18	1443 (6.81)	988 (5.92)	1015 (5.72)	1399 (7.03)	1210 (6.42)
19	1342 (6.34)	976 (5.85)	1024 (5.77)	1317 (6.63)	1164 (6.17)
20	1055 (4.98)	877 (5.26)	972 (5.48)	1069 (5.38)	993 (5.26)
21	958 (4.53)	732 (4.39)	848 (4.78)	937 (4.71)	869 (4.60)
22	902 (4.26)	701 (4.20)	800 (4.51)	861 (4.33)	816 (4.32)
23	923 (4.36)	738 (4.42)	807 (4.54)	819 (4.12)	822 (4.35)
24	804 (3.80)	793 (4.76)	827 (4.66)	748 (3.76)	793 (4.20)

New York City: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	807 (3.48)	780 (3.84)	830 (3.95)	778 (3.60)	799 (3.71)
2	737 (3.18)	751 (3.70)	772 (3.68)	737 (3.41)	749 (3.48)
3	597 (2.58)	660 (3.25)	676 (3.22)	614 (2.84)	637 (2.96)
4	502 (2.17)	536 (2.64)	571 (2.72)	508 (2.35)	529 (2.46)
5	449 (1.94)	450 (2.22)	489 (2.33)	448 (2.07)	459 (2.13)
6	448 (1.93)	406 (2.00)	445 (2.12)	428 (1.98)	432 (2.01)
7	542 (2.34)	465 (2.29)	473 (2.25)	477 (2.21)	489 (2.27)
8	966 (4.17)	711 (3.50)	669 (3.19)	752 (3.48)	774 (3.60)
9	1228 (5.30)	927 (4.56)	872 (4.15)	976 (4.52)	1000 (4.65)
10	1234 (5.32)	1020 (5.02)	991 (4.72)	1032 (4.78)	1068 (4.96)
11	1115 (4.81)	1024 (5.04)	1009 (4.80)	984 (4.55)	1032 (4.80)
12	1060 (4.57)	1007 (4.96)	991 (4.72)	969 (4.49)	1006 (4.68)
13	1073 (4.63)	986 (4.85)	985 (4.69)	974 (4.51)	1004 (4.67)
14	1031 (4.45)	928 (4.57)	944 (4.50)	933 (4.32)	959 (4.46)
15	1071 (4.62)	940 (4.63)	939 (4.47)	981 (4.54)	982 (4.57)
16	1201 (5.18)	965 (4.75)	965 (4.60)	1086 (5.03)	1054 (4.90)
17	1237 (5.34)	996 (4.90)	1031 (4.91)	1168 (5.41)	1108 (5.15)
18	1416 (6.11)	1088 (5.35)	1151 (5.48)	1339 (6.20)	1248 (5.80)
19	1386 (5.98)	1067 (5.25)	1146 (5.46)	1316 (6.09)	1228 (5.71)
20	1246 (5.38)	1022 (5.03)	1122 (5.34)	1188 (5.50)	1144 (5.32)
21	1110 (4.79)	972 (4.78)	1067 (5.08)	1091 (5.05)	1060 (4.93)
22	976 (4.21)	918 (4.52)	1007 (4.79)	1018 (4.71)	980 (4.55)
23	902 (3.89)	883 (4.35)	961 (4.58)	942 (4.36)	922 (4.29)
24	844 (3.64)	820 (4.04)	892 (4.25)	863 (3.99)	855 (3.97)

New York City: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	764 (3.62)	727 (3.95)	769 (4.08)	699 (3.65)	740 (3.82)
2	681 (3.22)	673 (3.65)	684 (3.63)	649 (3.39)	672 (3.47)
3	557 (2.64)	583 (3.17)	593 (3.15)	546 (2.85)	570 (2.94)
4	475 (2.25)	484 (2.63)	505 (2.68)	462 (2.41)	482 (2.48)
5	431 (2.04)	410 (2.23)	433 (2.30)	411 (2.14)	421 (2.17)
6	437 (2.07)	375 (2.04)	402 (2.13)	398 (2.07)	403 (2.08)
7	556 (2.63)	434 (2.36)	418 (2.22)	472 (2.46)	470 (2.42)
8	885 (4.19)	751 (4.08)	653 (3.46)	755 (3.94)	760 (3.92)
9	1170 (5.54)	943 (5.13)	854 (4.54)	952 (4.96)	979 (5.05)
10	1195 (5.66)	971 (5.28)	929 (4.93)	985 (5.14)	1019 (5.26)
11	1029 (4.87)	920 (5.00)	895 (4.75)	879 (4.59)	930 (4.80)
12	949 (4.49)	839 (4.56)	815 (4.33)	819 (4.27)	855 (4.41)
13	872 (4.13)	799 (4.34)	795 (4.22)	777 (4.05)	811 (4.18)
14	887 (4.20)	798 (4.33)	782 (4.15)	810 (4.23)	819 (4.23)
15	1002 (4.74)	967 (5.25)	898 (4.77)	1004 (5.24)	968 (4.99)
16	953 (4.51)	815 (4.43)	852 (4.52)	844 (4.40)	866 (4.47)
17	1067 (5.05)	869 (4.72)	917 (4.87)	981 (5.11)	958 (4.94)
18	1143 (5.41)	938 (5.10)	1044 (5.54)	1054 (5.50)	1045 (5.39)
19	1202 (5.69)	902 (4.90)	982 (5.21)	1074 (5.60)	1039 (5.36)
20	1166 (5.52)	885 (4.81)	947 (5.03)	1055 (5.50)	1013 (5.23)
21	1072 (5.07)	866 (4.71)	947 (5.03)	995 (5.19)	970 (5.00)
22	963 (4.56)	851 (4.62)	935 (4.96)	928 (4.84)	919 (4.74)
23	862 (4.08)	848 (4.61)	953 (5.06)	856 (4.46)	880 (4.54)
24	808 (3.82)	759 (4.12)	835 (4.43)	769 (4.01)	793 (4.09)

New York City: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	878 (3.71)	885 (4.05)	911 (4.09)	806 (3.72)	870 (3.89)
2	784 (3.31)	825 (3.77)	817 (3.67)	752 (3.47)	794 (3.55)
3	628 (2.65)	713 (3.26)	707 (3.17)	623 (2.88)	668 (2.99)
4	525 (2.22)	582 (2.66)	593 (2.66)	517 (2.39)	554 (2.48)
5	470 (1.98)	478 (2.19)	497 (2.23)	446 (2.06)	473 (2.11)
6	472 (1.99)	428 (1.96)	456 (2.05)	425 (1.97)	445 (1.99)
7	586 (2.47)	484 (2.21)	470 (2.11)	492 (2.27)	507 (2.27)
8	924 (3.90)	793 (3.63)	711 (3.19)	754 (3.48)	795 (3.55)
9	1248 (5.27)	1039 (4.76)	961 (4.31)	995 (4.60)	1060 (4.74)
10	1308 (5.52)	1131 (5.18)	1072 (4.81)	1085 (5.02)	1148 (5.14)
11	1152 (4.86)	1087 (4.97)	1053 (4.72)	994 (4.59)	1071 (4.79)
12	1071 (4.52)	1006 (4.60)	975 (4.38)	939 (4.34)	998 (4.46)
13	1009 (4.26)	967 (4.42)	957 (4.29)	910 (4.20)	960 (4.29)
14	1013 (4.28)	954 (4.36)	940 (4.22)	932 (4.31)	959 (4.29)
15	1135 (4.79)	1133 (5.18)	1067 (4.79)	1132 (5.23)	1117 (4.99)
16	1098 (4.64)	997 (4.56)	1036 (4.65)	991 (4.58)	1030 (4.61)
17	1227 (5.18)	1072 (4.90)	1116 (5.01)	1161 (5.37)	1144 (5.11)
18	1309 (5.53)	1147 (5.25)	1263 (5.67)	1232 (5.69)	1238 (5.54)
19	1357 (5.73)	1094 (5.01)	1197 (5.37)	1230 (5.68)	1219 (5.45)
20	1336 (5.64)	1058 (4.84)	1141 (5.12)	1196 (5.53)	1182 (5.29)
21	1194 (5.04)	1035 (4.74)	1132 (5.08)	1116 (5.16)	1119 (5.01)
22	1081 (4.56)	1026 (4.69)	1111 (4.98)	1062 (4.91)	1070 (4.78)
23	972 (4.10)	1009 (4.62)	1116 (5.01)	971 (4.49)	1017 (4.55)
24	910 (3.84)	915 (4.19)	989 (4.44)	876 (4.05)	923 (4.13)

New York City: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	784 (3.57)	800 (4.08)	842 (4.21)	728 (3.64)	788 (3.87)
2	710 (3.23)	749 (3.82)	761 (3.80)	684 (3.42)	726 (3.56)
3	574 (2.61)	654 (3.34)	665 (3.32)	572 (2.86)	616 (3.02)
4	483 (2.20)	533 (2.72)	555 (2.77)	478 (2.39)	513 (2.51)
5	437 (1.99)	448 (2.29)	470 (2.35)	424 (2.12)	445 (2.18)
6	442 (2.01)	403 (2.06)	427 (2.13)	409 (2.04)	420 (2.06)
7	528 (2.40)	464 (2.37)	458 (2.29)	471 (2.36)	480 (2.35)
8	789 (3.59)	612 (3.12)	566 (2.83)	625 (3.13)	647 (3.18)
9	1179 (5.37)	862 (4.40)	783 (3.91)	902 (4.51)	930 (4.56)
10	1175 (5.35)	1020 (5.20)	973 (4.87)	978 (4.89)	1036 (5.08)
11	1098 (5.00)	983 (5.02)	949 (4.75)	921 (4.61)	987 (4.84)
12	1025 (4.66)	913 (4.66)	878 (4.39)	876 (4.38)	923 (4.53)
13	959 (4.37)	912 (4.65)	902 (4.51)	878 (4.39)	913 (4.48)
14	927 (4.22)	850 (4.34)	862 (4.31)	832 (4.16)	868 (4.26)
15	1017 (4.63)	954 (4.87)	940 (4.70)	956 (4.78)	966 (4.74)
16	1133 (5.16)	924 (4.72)	927 (4.63)	985 (4.93)	992 (4.86)
17	1156 (5.26)	987 (5.03)	1022 (5.11)	1075 (5.38)	1060 (5.20)
18	1373 (6.25)	1072 (5.47)	1115 (5.58)	1281 (6.41)	1210 (5.93)
19	1252 (5.70)	999 (5.10)	1067 (5.34)	1159 (5.80)	1119 (5.49)
20	1191 (5.42)	942 (4.81)	1001 (5.00)	1095 (5.48)	1057 (5.19)
21	1079 (4.91)	939 (4.79)	1021 (5.10)	1041 (5.21)	1020 (5.00)
22	967 (4.40)	892 (4.55)	977 (4.88)	957 (4.79)	948 (4.65)
23	881 (4.01)	866 (4.42)	956 (4.78)	868 (4.34)	893 (4.38)
24	808 (3.68)	817 (4.17)	890 (4.45)	794 (3.97)	827 (4.06)

New York City: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	785 (3.47)	787 (3.92)	818 (3.98)	755 (3.63)	786 (3.75)
2	713 (3.16)	751 (3.74)	757 (3.68)	712 (3.42)	733 (3.49)
3	578 (2.56)	648 (3.23)	653 (3.18)	592 (2.85)	618 (2.94)
4	483 (2.14)	520 (2.59)	544 (2.65)	483 (2.32)	507 (2.42)
5	438 (1.94)	438 (2.18)	465 (2.26)	429 (2.06)	442 (2.11)
6	439 (1.94)	398 (1.98)	429 (2.09)	412 (1.98)	420 (2.00)
7	555 (2.46)	465 (2.32)	459 (2.23)	480 (2.31)	490 (2.33)
8	894 (3.96)	694 (3.46)	635 (3.09)	699 (3.36)	730 (3.48)
9	1171 (5.19)	913 (4.55)	847 (4.12)	918 (4.42)	961 (4.58)
10	1237 (5.48)	1017 (5.07)	981 (4.77)	1013 (4.87)	1061 (5.06)
11	1113 (4.93)	1036 (5.16)	1021 (4.97)	974 (4.68)	1035 (4.93)
12	1057 (4.68)	1031 (5.14)	994 (4.83)	983 (4.73)	1016 (4.84)
13	1066 (4.72)	971 (4.84)	951 (4.63)	959 (4.61)	986 (4.70)
14	1013 (4.49)	885 (4.41)	903 (4.39)	882 (4.24)	920 (4.38)
15	1055 (4.67)	914 (4.55)	925 (4.50)	941 (4.53)	958 (4.56)
16	1162 (5.14)	953 (4.75)	990 (4.81)	1022 (4.92)	1031 (4.91)
17	1245 (5.51)	982 (4.89)	1012 (4.92)	1141 (5.49)	1094 (5.21)
18	1306 (5.78)	1026 (5.12)	1115 (5.43)	1209 (5.82)	1164 (5.54)
19	1354 (6.00)	1021 (5.09)	1093 (5.32)	1235 (5.94)	1175 (5.60)
20	1228 (5.44)	1014 (5.05)	1076 (5.23)	1162 (5.59)	1120 (5.33)
21	1059 (4.69)	964 (4.81)	1049 (5.10)	1050 (5.05)	1030 (4.91)
22	939 (4.16)	920 (4.59)	1001 (4.87)	988 (4.75)	962 (4.58)
23	878 (3.89)	894 (4.45)	958 (4.66)	916 (4.41)	912 (4.34)
24	817 (3.62)	823 (4.10)	882 (4.29)	832 (4.00)	839 (4.00)

New York City: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	792 (3.48)	761 (3.83)	804 (3.92)	756 (3.58)	778 (3.69)
2	721 (3.17)	724 (3.64)	741 (3.61)	711 (3.37)	724 (3.44)
3	582 (2.55)	633 (3.18)	648 (3.16)	593 (2.81)	614 (2.92)
4	495 (2.17)	521 (2.62)	550 (2.68)	498 (2.36)	516 (2.45)
5	442 (1.94)	437 (2.20)	472 (2.30)	439 (2.08)	448 (2.12)
6	445 (1.96)	396 (1.99)	428 (2.09)	421 (2.00)	423 (2.01)
7	537 (2.36)	454 (2.28)	457 (2.22)	474 (2.25)	480 (2.28)
8	947 (4.16)	710 (3.57)	671 (3.27)	741 (3.51)	767 (3.64)
9	1206 (5.30)	918 (4.61)	866 (4.22)	955 (4.53)	985 (4.68)
10	1232 (5.41)	1019 (5.13)	982 (4.78)	1032 (4.89)	1066 (5.06)
11	1102 (4.84)	1009 (5.08)	995 (4.85)	965 (4.57)	1018 (4.83)
12	1031 (4.53)	981 (4.93)	975 (4.75)	938 (4.44)	981 (4.66)
13	1027 (4.51)	953 (4.79)	962 (4.69)	936 (4.43)	969 (4.60)
14	998 (4.38)	909 (4.57)	927 (4.52)	910 (4.31)	936 (4.44)
15	1049 (4.61)	932 (4.68)	921 (4.49)	973 (4.61)	968 (4.60)
16	1176 (5.16)	931 (4.68)	935 (4.55)	1053 (4.99)	1023 (4.86)
17	1225 (5.38)	976 (4.91)	1009 (4.91)	1154 (5.47)	1091 (5.18)
18	1399 (6.15)	1071 (5.39)	1126 (5.48)	1314 (6.23)	1227 (5.82)
19	1354 (5.95)	1052 (5.29)	1128 (5.50)	1284 (6.08)	1204 (5.72)
20	1214 (5.33)	987 (4.96)	1095 (5.33)	1142 (5.41)	1109 (5.27)
21	1096 (4.81)	944 (4.74)	1041 (5.07)	1062 (5.03)	1035 (4.92)
22	966 (4.24)	902 (4.53)	977 (4.76)	998 (4.73)	961 (4.56)
23	894 (3.93)	868 (4.37)	949 (4.62)	922 (4.37)	909 (4.31)
24	833 (3.66)	799 (4.02)	869 (4.23)	836 (3.96)	834 (3.96)

New York City: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	791 (3.47)	757 (3.81)	813 (3.95)	763 (3.57)	781 (3.69)
2	715 (3.13)	719 (3.62)	750 (3.65)	714 (3.34)	725 (3.43)
3	583 (2.56)	630 (3.17)	656 (3.19)	597 (2.79)	616 (2.92)
4	491 (2.15)	512 (2.57)	551 (2.68)	495 (2.32)	512 (2.42)
5	439 (1.93)	432 (2.17)	473 (2.30)	437 (2.04)	445 (2.11)
6	439 (1.92)	393 (1.98)	436 (2.12)	417 (1.95)	421 (1.99)
7	528 (2.32)	438 (2.20)	454 (2.21)	455 (2.13)	468 (2.21)
8	969 (4.25)	701 (3.52)	655 (3.18)	759 (3.55)	770 (3.64)
9	1277 (5.60)	943 (4.74)	876 (4.26)	1021 (4.78)	1028 (4.86)
10	1194 (5.24)	985 (4.95)	950 (4.62)	1009 (4.72)	1034 (4.89)
11	1088 (4.77)	1009 (5.08)	977 (4.75)	974 (4.56)	1012 (4.78)
12	1047 (4.59)	990 (4.98)	962 (4.68)	967 (4.52)	991 (4.69)
13	1072 (4.70)	978 (4.92)	969 (4.71)	976 (4.57)	998 (4.72)
14	1022 (4.48)	920 (4.63)	936 (4.55)	927 (4.34)	951 (4.50)
15	1027 (4.50)	937 (4.71)	968 (4.71)	945 (4.43)	969 (4.58)
16	1134 (4.98)	944 (4.75)	946 (4.60)	1052 (4.92)	1019 (4.82)
17	1145 (5.02)	965 (4.85)	1000 (4.86)	1111 (5.20)	1055 (4.99)
18	1438 (6.31)	1070 (5.38)	1123 (5.46)	1362 (6.37)	1248 (5.90)
19	1408 (6.18)	1056 (5.31)	1131 (5.50)	1340 (6.27)	1233 (5.83)
20	1237 (5.43)	1019 (5.12)	1116 (5.42)	1205 (5.64)	1144 (5.41)
21	1106 (4.85)	960 (4.83)	1056 (5.14)	1095 (5.12)	1054 (4.99)
22	949 (4.16)	884 (4.45)	985 (4.79)	986 (4.61)	951 (4.50)
23	864 (3.79)	839 (4.22)	913 (4.44)	905 (4.24)	881 (4.16)
24	833 (3.65)	801 (4.03)	871 (4.24)	855 (4.00)	840 (3.97)

New York City: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	819 (3.45)	812 (3.91)	883 (4.10)	810 (3.65)	831 (3.77)
2	758 (3.19)	797 (3.84)	824 (3.82)	784 (3.53)	791 (3.58)
3	617 (2.60)	703 (3.39)	717 (3.33)	652 (2.93)	672 (3.05)
4	520 (2.19)	571 (2.75)	607 (2.82)	539 (2.43)	559 (2.54)
5	463 (1.95)	479 (2.31)	518 (2.40)	474 (2.13)	483 (2.19)
6	459 (1.93)	428 (2.06)	468 (2.17)	448 (2.02)	451 (2.04)
7	516 (2.17)	472 (2.27)	486 (2.26)	472 (2.12)	486 (2.20)
8	1188 (5.00)	781 (3.76)	692 (3.21)	898 (4.04)	888 (4.03)
9	1299 (5.47)	992 (4.78)	928 (4.31)	1049 (4.72)	1066 (4.83)
10	1247 (5.25)	1016 (4.90)	1014 (4.70)	1036 (4.66)	1077 (4.88)
11	1129 (4.76)	980 (4.72)	991 (4.60)	958 (4.31)	1014 (4.60)
12	1037 (4.37)	956 (4.61)	975 (4.52)	918 (4.13)	971 (4.40)
13	1084 (4.56)	1004 (4.84)	1030 (4.78)	992 (4.46)	1027 (4.66)
14	1033 (4.35)	901 (4.34)	932 (4.33)	922 (4.15)	947 (4.29)
15	999 (4.21)	951 (4.58)	917 (4.25)	990 (4.45)	964 (4.37)
16	1173 (4.94)	927 (4.47)	929 (4.31)	1053 (4.74)	1020 (4.62)
17	1291 (5.44)	949 (4.57)	974 (4.52)	1153 (5.19)	1091 (4.95)
18	1487 (6.26)	1160 (5.59)	1204 (5.59)	1462 (6.57)	1328 (6.02)
19	1426 (6.01)	1075 (5.18)	1156 (5.36)	1330 (5.98)	1246 (5.65)
20	1301 (5.48)	1108 (5.34)	1182 (5.49)	1274 (5.73)	1216 (5.51)
21	1176 (4.95)	991 (4.77)	1080 (5.01)	1136 (5.11)	1096 (4.97)
22	989 (4.16)	946 (4.56)	1078 (5.00)	1036 (4.66)	1013 (4.59)
23	892 (3.76)	907 (4.37)	1016 (4.72)	960 (4.32)	944 (4.28)
24	838 (3.53)	847 (4.08)	948 (4.40)	882 (3.97)	879 (3.99)

New York City: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	755 (3.36)	739 (3.77)	790 (3.88)	716 (3.48)	750 (3.62)
2	682 (3.04)	693 (3.53)	719 (3.53)	670 (3.25)	691 (3.33)
3	560 (2.50)	605 (3.08)	625 (3.07)	565 (2.74)	589 (2.84)
4	478 (2.13)	501 (2.56)	532 (2.62)	477 (2.32)	497 (2.40)
5	431 (1.92)	425 (2.17)	457 (2.25)	424 (2.06)	434 (2.09)
6	433 (1.93)	385 (1.97)	417 (2.05)	408 (1.98)	411 (1.98)
7	516 (2.30)	432 (2.20)	436 (2.14)	454 (2.21)	459 (2.21)
8	984 (4.38)	711 (3.62)	642 (3.15)	765 (3.72)	775 (3.73)
9	1259 (5.61)	925 (4.72)	838 (4.12)	986 (4.79)	1001 (4.83)
10	1221 (5.44)	1001 (5.10)	968 (4.76)	1008 (4.90)	1049 (5.06)
11	1098 (4.89)	1008 (5.14)	996 (4.89)	951 (4.62)	1013 (4.88)
12	1038 (4.62)	985 (5.02)	970 (4.76)	943 (4.58)	984 (4.74)
13	1024 (4.56)	952 (4.85)	954 (4.69)	929 (4.51)	964 (4.65)
14	970 (4.32)	884 (4.51)	911 (4.48)	871 (4.23)	909 (4.38)
15	1054 (4.70)	936 (4.77)	945 (4.64)	965 (4.69)	975 (4.70)
16	1235 (5.50)	975 (4.97)	968 (4.76)	1101 (5.35)	1069 (5.15)
17	1217 (5.42)	983 (5.01)	1030 (5.06)	1128 (5.48)	1089 (5.25)
18	1363 (6.07)	1045 (5.33)	1116 (5.48)	1255 (6.09)	1194 (5.76)
19	1381 (6.15)	1044 (5.32)	1127 (5.54)	1265 (6.14)	1204 (5.80)
20	1202 (5.35)	1001 (5.11)	1141 (5.61)	1122 (5.45)	1116 (5.38)
21	1043 (4.64)	929 (4.74)	1042 (5.12)	1016 (4.93)	1007 (4.86)
22	893 (3.98)	856 (4.36)	955 (4.69)	925 (4.49)	908 (4.37)
23	832 (3.71)	828 (4.22)	916 (4.50)	859 (4.17)	859 (4.14)
24	780 (3.47)	771 (3.93)	854 (4.20)	786 (3.82)	798 (3.85)

New York City: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	946 (3.87)	907 (4.27)	941 (4.32)	883 (3.93)	919 (4.09)
2	820 (3.35)	841 (3.96)	819 (3.76)	808 (3.60)	822 (3.66)
3	637 (2.60)	708 (3.33)	706 (3.24)	648 (2.88)	675 (3.00)
4	521 (2.13)	563 (2.65)	582 (2.67)	526 (2.34)	548 (2.44)
5	445 (1.82)	455 (2.14)	486 (2.23)	441 (1.96)	457 (2.03)
6	444 (1.81)	405 (1.91)	439 (2.01)	417 (1.85)	426 (1.89)
7	570 (2.33)	469 (2.21)	471 (2.16)	490 (2.18)	500 (2.22)
8	858 (3.51)	661 (3.11)	700 (3.21)	657 (2.92)	718 (3.19)
9	1146 (4.68)	944 (4.44)	1042 (4.78)	864 (3.85)	998 (4.44)
10	1335 (5.46)	1122 (5.28)	1160 (5.32)	1092 (4.86)	1177 (5.23)
11	1161 (4.74)	1152 (5.42)	1163 (5.33)	1060 (4.72)	1134 (5.04)
12	1092 (4.46)	1029 (4.84)	957 (4.39)	1005 (4.48)	1020 (4.54)
13	1142 (4.67)	1030 (4.85)	1066 (4.89)	1033 (4.60)	1068 (4.75)
14	1091 (4.46)	945 (4.45)	993 (4.55)	975 (4.34)	1001 (4.45)
15	1106 (4.52)	925 (4.35)	915 (4.19)	996 (4.43)	985 (4.38)
16	1416 (5.79)	1018 (4.79)	971 (4.45)	1241 (5.52)	1160 (5.16)
17	1468 (6.00)	1122 (5.28)	1138 (5.22)	1380 (6.14)	1276 (5.68)
18	1421 (5.81)	1056 (4.97)	1151 (5.28)	1281 (5.70)	1227 (5.46)
19	1460 (5.97)	1001 (4.71)	1056 (4.84)	1280 (5.70)	1199 (5.33)
20	1324 (5.41)	1040 (4.89)	1029 (4.72)	1252 (5.58)	1161 (5.16)
21	1129 (4.62)	973 (4.58)	1019 (4.67)	1108 (4.93)	1057 (4.70)
22	1012 (4.14)	1003 (4.72)	1146 (5.26)	1064 (4.74)	1057 (4.70)
23	956 (3.91)	956 (4.50)	965 (4.42)	1004 (4.47)	970 (4.31)
24	965 (3.94)	921 (4.34)	896 (4.11)	957 (4.26)	934 (4.16)

New York City: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	819 (3.32)	806 (3.74)	859 (3.93)	786 (3.43)	818 (3.60)
2	747 (3.03)	773 (3.59)	796 (3.64)	741 (3.24)	764 (3.36)
3	599 (2.43)	667 (3.09)	680 (3.11)	612 (2.68)	640 (2.81)
4	507 (2.05)	544 (2.53)	576 (2.63)	510 (2.23)	534 (2.35)
5	456 (1.85)	458 (2.12)	492 (2.25)	452 (1.97)	464 (2.04)
6	458 (1.86)	419 (1.95)	459 (2.10)	435 (1.90)	443 (1.95)
7	607 (2.46)	519 (2.41)	515 (2.36)	530 (2.32)	542 (2.39)
8	1098 (4.45)	825 (3.83)	785 (3.59)	851 (3.72)	888 (3.91)
9	1378 (5.58)	1046 (4.85)	986 (4.51)	1089 (4.76)	1124 (4.94)
10	1378 (5.58)	1103 (5.12)	1022 (4.68)	1132 (4.95)	1158 (5.09)
11	1233 (4.99)	1080 (5.01)	1019 (4.66)	1066 (4.66)	1099 (4.83)
12	1160 (4.70)	1063 (4.93)	1016 (4.65)	1046 (4.57)	1071 (4.71)
13	1197 (4.85)	1038 (4.81)	1002 (4.58)	1060 (4.63)	1074 (4.72)
14	1151 (4.66)	990 (4.59)	976 (4.46)	1024 (4.47)	1035 (4.55)
15	1141 (4.62)	1011 (4.69)	973 (4.45)	1063 (4.65)	1047 (4.60)
16	1242 (5.03)	1038 (4.82)	1012 (4.63)	1158 (5.06)	1112 (4.89)
17	1400 (5.67)	1115 (5.17)	1092 (5.00)	1338 (5.85)	1235 (5.43)
18	1512 (6.12)	1217 (5.65)	1261 (5.77)	1474 (6.44)	1365 (6.01)
19	1405 (5.69)	1102 (5.12)	1179 (5.39)	1344 (5.87)	1257 (5.53)
20	1249 (5.06)	1020 (4.73)	1120 (5.13)	1174 (5.13)	1141 (5.02)
21	1132 (4.59)	993 (4.61)	1057 (4.84)	1115 (4.87)	1074 (4.72)
22	1022 (4.14)	966 (4.48)	1052 (4.81)	1057 (4.62)	1025 (4.51)
23	927 (3.75)	904 (4.20)	984 (4.50)	948 (4.14)	941 (4.14)
24	877 (3.55)	854 (3.96)	940 (4.30)	877 (3.83)	887 (3.90)

New York City: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	791 (3.53)	782 (3.99)	834 (4.14)	746 (3.63)	788 (3.82)
2	715 (3.19)	735 (3.75)	754 (3.74)	698 (3.40)	726 (3.51)
3	582 (2.60)	639 (3.26)	652 (3.24)	584 (2.84)	614 (2.97)
4	494 (2.21)	524 (2.68)	551 (2.74)	490 (2.38)	515 (2.49)
5	443 (1.98)	441 (2.25)	471 (2.34)	433 (2.10)	447 (2.16)
6	445 (1.99)	397 (2.03)	426 (2.12)	415 (2.02)	421 (2.04)
7	509 (2.27)	427 (2.18)	434 (2.15)	442 (2.15)	453 (2.19)
8	819 (3.66)	617 (3.15)	579 (2.88)	643 (3.13)	664 (3.21)
9	1118 (4.99)	880 (4.49)	810 (4.02)	904 (4.40)	927 (4.49)
10	1229 (5.49)	1016 (5.19)	972 (4.83)	1028 (5.00)	1061 (5.13)
11	1111 (4.96)	987 (5.04)	963 (4.78)	943 (4.59)	1000 (4.84)
12	1051 (4.69)	970 (4.95)	942 (4.68)	937 (4.56)	974 (4.72)
13	1018 (4.55)	923 (4.71)	927 (4.60)	910 (4.43)	944 (4.57)
14	1012 (4.52)	891 (4.55)	906 (4.50)	899 (4.38)	926 (4.48)
15	1030 (4.60)	921 (4.70)	918 (4.56)	929 (4.52)	949 (4.59)
16	1130 (5.05)	921 (4.70)	922 (4.58)	1004 (4.89)	994 (4.81)
17	1248 (5.58)	963 (4.92)	974 (4.83)	1158 (5.63)	1085 (5.25)
18	1276 (5.70)	982 (5.01)	1033 (5.13)	1194 (5.81)	1121 (5.43)
19	1302 (5.82)	1006 (5.13)	1085 (5.39)	1217 (5.92)	1152 (5.58)
20	1224 (5.47)	984 (5.02)	1071 (5.32)	1137 (5.54)	1104 (5.34)
21	1114 (4.98)	960 (4.90)	1045 (5.19)	1077 (5.24)	1049 (5.08)
22	984 (4.39)	943 (4.81)	1030 (5.11)	1015 (4.94)	993 (4.81)
23	902 (4.03)	877 (4.48)	962 (4.77)	918 (4.47)	915 (4.43)
24	840 (3.75)	807 (4.12)	882 (4.38)	829 (4.03)	840 (4.06)

New York City: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	818 (3.47)	801 (3.94)	844 (4.03)	785 (3.62)	812 (3.76)
2	740 (3.14)	764 (3.76)	778 (3.71)	736 (3.40)	755 (3.49)
3	597 (2.53)	672 (3.30)	685 (3.27)	612 (2.82)	641 (2.97)
4	500 (2.12)	541 (2.66)	570 (2.72)	505 (2.33)	529 (2.45)
5	449 (1.91)	454 (2.23)	487 (2.32)	446 (2.06)	459 (2.12)
6	454 (1.93)	410 (2.02)	443 (2.11)	430 (1.98)	434 (2.01)
7	543 (2.31)	461 (2.27)	471 (2.25)	471 (2.17)	486 (2.25)
8	993 (4.22)	724 (3.56)	690 (3.29)	761 (3.51)	791 (3.66)
9	1280 (5.44)	945 (4.65)	890 (4.25)	1011 (4.66)	1030 (4.77)
10	1247 (5.30)	994 (4.89)	950 (4.53)	1029 (4.75)	1054 (4.88)
11	1109 (4.71)	972 (4.78)	956 (4.56)	953 (4.40)	997 (4.61)
12	1058 (4.49)	953 (4.69)	947 (4.52)	935 (4.31)	973 (4.50)
13	1092 (4.64)	956 (4.70)	961 (4.58)	960 (4.43)	992 (4.59)
14	1063 (4.51)	912 (4.49)	915 (4.36)	952 (4.39)	960 (4.44)
15	1082 (4.60)	909 (4.47)	904 (4.31)	974 (4.50)	967 (4.47)
16	1163 (4.94)	918 (4.52)	933 (4.45)	1034 (4.77)	1011 (4.68)
17	1309 (5.56)	993 (4.89)	1007 (4.80)	1202 (5.55)	1127 (5.21)
18	1514 (6.43)	1146 (5.64)	1215 (5.79)	1406 (6.49)	1320 (6.10)
19	1417 (6.02)	1083 (5.33)	1178 (5.62)	1326 (6.12)	1250 (5.78)
20	1247 (5.30)	1005 (4.94)	1088 (5.19)	1180 (5.45)	1130 (5.23)
21	1134 (4.82)	999 (4.91)	1085 (5.17)	1114 (5.14)	1083 (5.01)
22	983 (4.18)	947 (4.66)	1028 (4.90)	1028 (4.75)	997 (4.61)
23	909 (3.86)	924 (4.55)	1025 (4.89)	955 (4.41)	954 (4.41)
24	841 (3.57)	844 (4.15)	917 (4.37)	861 (3.98)	866 (4.01)

New York City: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	771 (3.49)	769 (3.83)	820 (3.91)	729 (3.59)	772 (3.71)
2	703 (3.19)	742 (3.70)	769 (3.67)	691 (3.41)	726 (3.49)
3	574 (2.60)	654 (3.26)	676 (3.22)	582 (2.87)	622 (2.98)
4	487 (2.21)	538 (2.68)	574 (2.74)	488 (2.40)	522 (2.50)
5	438 (1.99)	454 (2.26)	491 (2.34)	432 (2.13)	454 (2.18)
6	440 (1.99)	408 (2.03)	444 (2.12)	413 (2.04)	426 (2.05)
7	493 (2.24)	436 (2.18)	451 (2.15)	435 (2.15)	454 (2.18)
8	935 (4.24)	691 (3.44)	604 (2.88)	737 (3.63)	741 (3.56)
9	1128 (5.11)	820 (4.09)	816 (3.89)	831 (4.10)	898 (4.31)
10	1243 (5.64)	954 (4.75)	961 (4.58)	1004 (4.95)	1040 (4.99)
11	1238 (5.61)	1106 (5.51)	1063 (5.07)	1060 (5.23)	1116 (5.35)
12	1152 (5.22)	1065 (5.31)	1056 (5.04)	974 (4.80)	1061 (5.09)
13	1204 (5.46)	1020 (5.08)	1021 (4.87)	1003 (4.95)	1062 (5.09)
14	1021 (4.63)	906 (4.52)	920 (4.39)	894 (4.41)	935 (4.49)
15	961 (4.36)	963 (4.80)	982 (4.68)	915 (4.51)	955 (4.58)
16	1061 (4.81)	1000 (4.98)	1032 (4.92)	1026 (5.06)	1030 (4.94)
17	1121 (5.08)	1085 (5.41)	1196 (5.70)	1073 (5.29)	1119 (5.37)
18	1184 (5.37)	1089 (5.43)	1214 (5.79)	1145 (5.64)	1158 (5.56)
19	1215 (5.51)	1010 (5.03)	1116 (5.32)	1135 (5.60)	1119 (5.37)
20	1105 (5.01)	884 (4.41)	970 (4.63)	1020 (5.03)	995 (4.77)
21	1022 (4.63)	930 (4.64)	1056 (5.04)	1039 (5.12)	1012 (4.86)
22	911 (4.13)	893 (4.45)	949 (4.53)	977 (4.82)	933 (4.48)
23	853 (3.87)	860 (4.28)	926 (4.42)	885 (4.36)	881 (4.23)
24	794 (3.60)	789 (3.93)	863 (4.12)	795 (3.92)	810 (3.89)

New York City: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	813 (3.27)	776 (3.63)	822 (3.80)	770 (3.35)	795 (3.50)
2	731 (2.94)	748 (3.49)	769 (3.55)	726 (3.16)	743 (3.27)
3	596 (2.40)	663 (3.10)	678 (3.13)	613 (2.67)	638 (2.81)
4	505 (2.03)	541 (2.53)	573 (2.65)	510 (2.22)	532 (2.34)
5	452 (1.82)	454 (2.12)	490 (2.26)	449 (1.95)	461 (2.03)
6	456 (1.83)	420 (1.96)	454 (2.10)	435 (1.89)	441 (1.94)
7	659 (2.65)	537 (2.51)	519 (2.40)	560 (2.44)	568 (2.50)
8	1178 (4.74)	892 (4.17)	849 (3.92)	929 (4.04)	961 (4.23)
9	1400 (5.64)	1062 (4.96)	1016 (4.69)	1124 (4.89)	1149 (5.06)
10	1362 (5.48)	1127 (5.26)	1049 (4.85)	1161 (5.05)	1174 (5.17)
11	1205 (4.85)	1101 (5.15)	1024 (4.73)	1082 (4.71)	1102 (4.85)
12	1141 (4.59)	1070 (5.00)	981 (4.53)	1055 (4.59)	1061 (4.67)
13	1165 (4.69)	1056 (4.93)	1039 (4.80)	1054 (4.58)	1078 (4.75)
14	1144 (4.61)	978 (4.57)	962 (4.45)	1021 (4.44)	1026 (4.52)
15	1107 (4.45)	945 (4.41)	884 (4.09)	1013 (4.41)	987 (4.34)
16	1171 (4.72)	944 (4.41)	899 (4.16)	1069 (4.65)	1020 (4.49)
17	1350 (5.43)	1079 (5.04)	1085 (5.01)	1282 (5.57)	1198 (5.28)
18	1709 (6.88)	1233 (5.76)	1315 (6.08)	1583 (6.88)	1459 (6.43)
19	1464 (5.89)	1096 (5.12)	1148 (5.31)	1381 (6.01)	1272 (5.60)
20	1236 (4.98)	1010 (4.72)	1104 (5.10)	1177 (5.12)	1132 (4.98)
21	1162 (4.68)	1021 (4.77)	1130 (5.22)	1135 (4.94)	1112 (4.90)
22	1049 (4.22)	942 (4.40)	1021 (4.72)	1054 (4.58)	1016 (4.47)
23	930 (3.75)	883 (4.13)	939 (4.34)	949 (4.13)	925 (4.08)
24	856 (3.45)	823 (3.85)	887 (4.10)	862 (3.75)	857 (3.78)

New York City: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	775 (3.52)	765 (4.03)	818 (4.17)	737 (3.68)	774 (3.84)
2	707 (3.21)	737 (3.88)	763 (3.89)	698 (3.49)	727 (3.60)
3	577 (2.62)	646 (3.40)	666 (3.39)	586 (2.92)	619 (3.07)
4	489 (2.22)	527 (2.78)	558 (2.84)	490 (2.45)	516 (2.56)
5	440 (2.00)	445 (2.35)	482 (2.45)	433 (2.16)	450 (2.23)
6	440 (2.00)	401 (2.12)	437 (2.22)	414 (2.07)	423 (2.10)
7	499 (2.27)	432 (2.28)	445 (2.27)	439 (2.19)	454 (2.25)
8	775 (3.52)	578 (3.05)	559 (2.85)	592 (2.96)	625 (3.10)
9	1099 (4.99)	807 (4.26)	778 (3.96)	842 (4.21)	881 (4.37)
10	1198 (5.44)	956 (5.04)	917 (4.67)	973 (4.86)	1010 (5.01)
11	1111 (5.05)	964 (5.08)	923 (4.70)	949 (4.74)	986 (4.89)
12	1098 (4.99)	979 (5.16)	949 (4.83)	966 (4.83)	997 (4.95)
13	1056 (4.80)	889 (4.69)	890 (4.53)	902 (4.50)	934 (4.63)
14	1033 (4.69)	867 (4.57)	861 (4.39)	904 (4.51)	916 (4.54)
15	1083 (4.92)	894 (4.71)	875 (4.46)	964 (4.82)	954 (4.73)
16	1108 (5.03)	855 (4.50)	887 (4.52)	945 (4.72)	948 (4.70)
17	1189 (5.40)	863 (4.55)	905 (4.61)	1019 (5.09)	993 (4.93)
18	1236 (5.61)	933 (4.92)	992 (5.06)	1154 (5.76)	1078 (5.35)
19	1266 (5.75)	979 (5.16)	1065 (5.43)	1188 (5.93)	1124 (5.58)
20	1199 (5.44)	981 (5.17)	1074 (5.47)	1141 (5.70)	1098 (5.45)
21	1051 (4.77)	952 (5.02)	1067 (5.44)	1023 (5.11)	1023 (5.08)
22	927 (4.21)	886 (4.67)	951 (4.85)	956 (4.78)	930 (4.62)
23	863 (3.92)	835 (4.40)	901 (4.59)	884 (4.41)	871 (4.32)
24	806 (3.66)	799 (4.21)	865 (4.41)	822 (4.10)	823 (4.08)

New York City: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	806 (3.48)	778 (3.86)	825 (3.99)	782 (3.65)	798 (3.73)
2	736 (3.18)	755 (3.75)	766 (3.70)	744 (3.47)	750 (3.51)
3	601 (2.59)	670 (3.33)	678 (3.28)	625 (2.91)	644 (3.01)
4	501 (2.16)	538 (2.67)	570 (2.75)	507 (2.37)	529 (2.48)
5	446 (1.92)	449 (2.23)	485 (2.34)	443 (2.07)	456 (2.13)
6	464 (2.00)	409 (2.03)	441 (2.13)	434 (2.03)	437 (2.04)
7	595 (2.56)	493 (2.45)	490 (2.36)	509 (2.38)	521 (2.44)
8	1009 (4.35)	760 (3.77)	717 (3.46)	771 (3.60)	813 (3.81)
9	1205 (5.19)	942 (4.68)	906 (4.38)	950 (4.43)	1000 (4.68)
10	1232 (5.31)	1008 (5.00)	985 (4.76)	1012 (4.72)	1058 (4.95)
11	1140 (4.92)	986 (4.90)	973 (4.70)	971 (4.53)	1017 (4.76)
12	1041 (4.49)	956 (4.75)	937 (4.52)	929 (4.33)	965 (4.52)
13	1107 (4.77)	987 (4.90)	980 (4.73)	989 (4.61)	1015 (4.75)
14	1089 (4.70)	948 (4.71)	966 (4.66)	973 (4.54)	994 (4.65)
15	1076 (4.64)	917 (4.55)	894 (4.32)	985 (4.59)	968 (4.53)
16	1151 (4.97)	934 (4.64)	954 (4.61)	1024 (4.78)	1015 (4.75)
17	1270 (5.48)	960 (4.76)	1006 (4.86)	1122 (5.23)	1089 (5.10)
18	1364 (5.88)	1023 (5.08)	1036 (5.00)	1281 (5.97)	1175 (5.50)
19	1341 (5.78)	1050 (5.21)	1110 (5.36)	1286 (6.00)	1196 (5.60)
20	1192 (5.14)	981 (4.87)	1064 (5.14)	1149 (5.36)	1096 (5.13)
21	1092 (4.71)	970 (4.81)	1048 (5.06)	1104 (5.15)	1054 (4.93)
22	1012 (4.36)	940 (4.67)	1030 (4.98)	1065 (4.96)	1012 (4.74)
23	890 (3.84)	886 (4.40)	969 (4.68)	936 (4.36)	920 (4.31)
24	830 (3.58)	806 (4.00)	875 (4.23)	852 (3.97)	841 (3.94)

New York City: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	778 (3.46)	753 (3.75)	792 (3.76)	751 (3.56)	768 (3.63)
2	707 (3.14)	718 (3.58)	739 (3.51)	702 (3.32)	717 (3.38)
3	579 (2.57)	636 (3.17)	653 (3.10)	591 (2.80)	615 (2.90)
4	492 (2.18)	523 (2.61)	555 (2.64)	495 (2.34)	516 (2.44)
5	441 (1.96)	441 (2.19)	476 (2.26)	438 (2.07)	449 (2.12)
6	457 (2.03)	398 (1.98)	430 (2.04)	426 (2.01)	427 (2.02)
7	557 (2.47)	446 (2.22)	452 (2.15)	475 (2.25)	482 (2.28)
8	793 (3.52)	653 (3.25)	643 (3.06)	663 (3.14)	687 (3.24)
9	1217 (5.40)	968 (4.82)	895 (4.26)	1003 (4.75)	1020 (4.81)
10	1327 (5.90)	1111 (5.53)	1078 (5.13)	1145 (5.42)	1165 (5.50)
11	1188 (5.28)	1074 (5.35)	1092 (5.19)	1045 (4.94)	1099 (5.19)
12	1128 (5.01)	1041 (5.19)	1059 (5.04)	994 (4.71)	1055 (4.98)
13	1019 (4.52)	937 (4.67)	969 (4.61)	897 (4.25)	955 (4.51)
14	1129 (5.01)	966 (4.81)	1005 (4.78)	980 (4.64)	1020 (4.81)
15	1171 (5.20)	1019 (5.08)	1092 (5.19)	1060 (5.02)	1085 (5.12)
16	1185 (5.27)	998 (4.97)	1070 (5.09)	1112 (5.27)	1091 (5.15)
17	1333 (5.92)	1036 (5.16)	1046 (4.98)	1263 (5.98)	1169 (5.52)
18	1160 (5.15)	952 (4.74)	1045 (4.97)	1131 (5.35)	1072 (5.06)
19	1174 (5.21)	949 (4.73)	1013 (4.82)	1142 (5.40)	1069 (5.05)
20	1142 (5.07)	1012 (5.04)	1114 (5.30)	1156 (5.47)	1106 (5.22)
21	956 (4.25)	875 (4.36)	1014 (4.82)	934 (4.42)	945 (4.46)
22	896 (3.98)	870 (4.33)	966 (4.60)	935 (4.43)	917 (4.33)
23	872 (3.87)	893 (4.45)	968 (4.60)	930 (4.40)	916 (4.32)
24	814 (3.62)	810 (4.03)	861 (4.09)	860 (4.07)	836 (3.95)

New York City: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	775 (3.58)	743 (3.94)	786 (4.01)	740 (3.71)	761 (3.81)
2	709 (3.27)	722 (3.83)	741 (3.78)	703 (3.53)	719 (3.59)
3	580 (2.68)	639 (3.39)	654 (3.34)	592 (2.97)	616 (3.08)
4	492 (2.27)	525 (2.79)	557 (2.84)	495 (2.48)	517 (2.59)
5	441 (2.04)	442 (2.35)	476 (2.43)	438 (2.19)	449 (2.25)
6	441 (2.04)	397 (2.11)	430 (2.20)	418 (2.09)	421 (2.11)
7	495 (2.29)	430 (2.28)	447 (2.28)	439 (2.20)	453 (2.26)
8	791 (3.65)	586 (3.11)	587 (3.00)	603 (3.02)	641 (3.21)
9	1110 (5.13)	805 (4.27)	752 (3.84)	854 (4.28)	879 (4.40)
10	1167 (5.39)	961 (5.10)	926 (4.73)	977 (4.90)	1007 (5.04)
11	1109 (5.12)	1011 (5.37)	965 (4.93)	988 (4.95)	1018 (5.09)
12	1054 (4.87)	961 (5.10)	902 (4.60)	957 (4.80)	968 (4.84)
13	1153 (5.32)	1042 (5.53)	964 (4.92)	1077 (5.40)	1058 (5.29)
14	1075 (4.97)	960 (5.10)	925 (4.72)	991 (4.97)	988 (4.94)
15	1026 (4.74)	891 (4.73)	896 (4.57)	932 (4.67)	936 (4.68)
16	1088 (5.02)	858 (4.56)	903 (4.61)	953 (4.78)	950 (4.75)
17	1046 (4.83)	809 (4.30)	884 (4.52)	921 (4.62)	914 (4.57)
18	1126 (5.20)	888 (4.71)	1066 (5.44)	1027 (5.15)	1026 (5.13)
19	1265 (5.84)	936 (4.97)	1065 (5.44)	1161 (5.82)	1106 (5.53)
20	1113 (5.14)	898 (4.77)	1009 (5.15)	1042 (5.23)	1015 (5.08)
21	1020 (4.71)	885 (4.70)	967 (4.94)	996 (4.99)	967 (4.84)
22	907 (4.19)	843 (4.47)	935 (4.77)	936 (4.69)	905 (4.53)
23	879 (4.06)	844 (4.48)	922 (4.71)	900 (4.51)	886 (4.43)
24	791 (3.65)	761 (4.04)	825 (4.21)	803 (4.03)	795 (3.98)

New York City: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	761 (2.74)	723 (3.05)	764 (3.11)	729 (2.89)	744 (2.94)
2	715 (2.57)	693 (2.92)	712 (2.90)	694 (2.75)	703 (2.78)
3	566 (2.04)	609 (2.57)	631 (2.57)	579 (2.29)	596 (2.35)
4	483 (1.74)	500 (2.11)	534 (2.18)	483 (1.91)	500 (1.97)
5	434 (1.56)	423 (1.78)	459 (1.87)	429 (1.70)	436 (1.72)
6	443 (1.59)	394 (1.66)	423 (1.72)	425 (1.68)	421 (1.66)
7	786 (2.82)	549 (2.31)	487 (1.98)	648 (2.57)	617 (2.43)
8	1331 (4.78)	1113 (4.69)	1058 (4.31)	1078 (4.27)	1144 (4.52)
9	1913 (6.88)	1445 (6.09)	1362 (5.55)	1470 (5.82)	1546 (6.10)
10	1676 (6.03)	1436 (6.05)	1392 (5.67)	1357 (5.37)	1464 (5.78)
11	1547 (5.56)	1379 (5.81)	1371 (5.58)	1299 (5.14)	1398 (5.52)
12	1440 (5.18)	1311 (5.52)	1365 (5.56)	1199 (4.75)	1328 (5.24)
13	1479 (5.32)	1215 (5.12)	1205 (4.90)	1243 (4.92)	1285 (5.07)
14	1442 (5.19)	1177 (4.96)	1154 (4.70)	1226 (4.86)	1249 (4.93)
15	1362 (4.90)	1183 (4.98)	1180 (4.80)	1240 (4.91)	1241 (4.90)
16	1458 (5.24)	1227 (5.17)	1299 (5.29)	1349 (5.34)	1333 (5.26)
17	1701 (6.12)	1325 (5.58)	1336 (5.44)	1642 (6.50)	1500 (5.92)
18	1459 (5.25)	1311 (5.52)	1415 (5.76)	1524 (6.04)	1428 (5.64)
19	1359 (4.89)	1263 (5.32)	1487 (6.05)	1392 (5.51)	1375 (5.43)
20	1260 (4.53)	1018 (4.29)	1245 (5.07)	1175 (4.65)	1174 (4.64)
21	1172 (4.21)	926 (3.90)	978 (3.98)	1146 (4.54)	1055 (4.17)
22	1127 (4.05)	900 (3.79)	971 (3.95)	1095 (4.33)	1023 (4.04)
23	1001 (3.60)	847 (3.57)	930 (3.79)	975 (3.86)	938 (3.70)
24	895 (3.22)	765 (3.22)	806 (3.28)	857 (3.40)	831 (3.28)

New York City: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	758 (3.19)	736 (3.61)	791 (3.77)	716 (3.29)	750 (3.46)
2	685 (2.88)	690 (3.38)	718 (3.42)	669 (3.08)	690 (3.18)
3	563 (2.37)	601 (2.95)	622 (2.96)	564 (2.59)	588 (2.71)
4	480 (2.02)	499 (2.44)	530 (2.53)	476 (2.19)	496 (2.29)
5	429 (1.81)	422 (2.07)	455 (2.17)	421 (1.94)	432 (1.99)
6	432 (1.82)	383 (1.88)	415 (1.97)	405 (1.86)	408 (1.88)
7	529 (2.23)	432 (2.12)	436 (2.08)	458 (2.11)	464 (2.13)
8	998 (4.20)	755 (3.70)	679 (3.23)	801 (3.68)	807 (3.72)
9	1413 (5.94)	1006 (4.93)	882 (4.20)	1100 (5.06)	1099 (5.06)
10	1263 (5.31)	1022 (5.01)	985 (4.69)	1038 (4.78)	1076 (4.95)
11	1113 (4.68)	1028 (5.04)	1014 (4.83)	972 (4.47)	1031 (4.75)
12	1080 (4.54)	1013 (4.97)	989 (4.71)	981 (4.51)	1015 (4.68)
13	1044 (4.39)	997 (4.89)	1008 (4.80)	964 (4.43)	1003 (4.62)
14	1073 (4.51)	940 (4.61)	960 (4.57)	949 (4.36)	980 (4.51)
15	1188 (5.00)	1015 (4.98)	1017 (4.85)	1077 (4.95)	1074 (4.94)
16	1471 (6.19)	1104 (5.41)	1053 (5.02)	1311 (6.03)	1234 (5.68)
17	1457 (6.13)	1099 (5.39)	1109 (5.28)	1324 (6.09)	1247 (5.74)
18	1505 (6.33)	1125 (5.51)	1176 (5.60)	1387 (6.38)	1297 (5.97)
19	1492 (6.28)	1089 (5.34)	1145 (5.45)	1351 (6.22)	1268 (5.84)
20	1204 (5.07)	1032 (5.06)	1175 (5.60)	1151 (5.30)	1141 (5.25)
21	1053 (4.43)	920 (4.51)	1052 (5.01)	1011 (4.65)	1009 (4.64)
22	916 (3.85)	886 (4.34)	1002 (4.77)	955 (4.39)	940 (4.33)
23	839 (3.53)	838 (4.11)	931 (4.43)	873 (4.01)	871 (4.01)
24	788 (3.31)	767 (3.76)	851 (4.05)	787 (3.62)	798 (3.68)

New York City: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	775 (3.62)	748 (3.89)	792 (3.97)	737 (3.70)	763 (3.79)
2	708 (3.30)	722 (3.76)	742 (3.72)	700 (3.51)	718 (3.57)
3	579 (2.70)	638 (3.32)	654 (3.28)	589 (2.96)	615 (3.06)
4	491 (2.29)	525 (2.73)	556 (2.79)	493 (2.47)	516 (2.57)
5	441 (2.06)	442 (2.30)	476 (2.38)	436 (2.19)	449 (2.23)
6	451 (2.11)	402 (2.09)	432 (2.17)	425 (2.13)	427 (2.12)
7	512 (2.39)	433 (2.25)	444 (2.23)	448 (2.25)	459 (2.28)
8	876 (4.09)	688 (3.58)	642 (3.22)	700 (3.51)	726 (3.61)
9	1178 (5.50)	868 (4.51)	808 (4.05)	899 (4.51)	937 (4.66)
10	1190 (5.55)	973 (5.06)	933 (4.68)	978 (4.91)	1018 (5.06)
11	1029 (4.80)	1011 (5.26)	1019 (5.11)	924 (4.64)	996 (4.95)
12	1000 (4.67)	971 (5.05)	972 (4.87)	909 (4.56)	962 (4.78)
13	1011 (4.72)	973 (5.06)	955 (4.79)	954 (4.78)	973 (4.83)
14	951 (4.44)	866 (4.51)	895 (4.49)	850 (4.27)	890 (4.42)
15	922 (4.30)	884 (4.60)	892 (4.48)	890 (4.47)	897 (4.46)
16	976 (4.56)	864 (4.50)	894 (4.48)	916 (4.59)	912 (4.53)
17	1089 (5.08)	896 (4.66)	919 (4.61)	1013 (5.08)	979 (4.86)
18	1251 (5.84)	958 (4.98)	1019 (5.11)	1154 (5.79)	1095 (5.44)
19	1230 (5.74)	1006 (5.23)	1091 (5.47)	1188 (5.96)	1128 (5.61)
20	1168 (5.45)	962 (5.01)	1064 (5.33)	1108 (5.56)	1075 (5.34)
21	1029 (4.80)	906 (4.71)	1015 (5.09)	996 (5.00)	986 (4.90)
22	911 (4.25)	862 (4.49)	945 (4.74)	942 (4.72)	915 (4.55)
23	848 (3.96)	841 (4.38)	933 (4.68)	874 (4.38)	874 (4.34)
24	810 (3.78)	781 (4.06)	853 (4.28)	809 (4.06)	813 (4.04)

New York City: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	796 (3.42)	777 (3.84)	825 (3.97)	758 (3.54)	789 (3.68)
2	721 (3.09)	740 (3.65)	759 (3.65)	712 (3.32)	733 (3.42)
3	585 (2.51)	646 (3.19)	661 (3.18)	595 (2.78)	622 (2.90)
4	494 (2.12)	528 (2.61)	558 (2.68)	496 (2.31)	519 (2.42)
5	444 (1.90)	444 (2.19)	477 (2.29)	438 (2.04)	451 (2.10)
6	448 (1.92)	403 (1.99)	436 (2.09)	422 (1.97)	427 (1.99)
7	555 (2.38)	464 (2.29)	466 (2.24)	481 (2.25)	491 (2.29)
8	980 (4.21)	721 (3.56)	669 (3.21)	759 (3.54)	781 (3.65)
9	1256 (5.39)	942 (4.65)	875 (4.20)	989 (4.62)	1014 (4.73)
10	1271 (5.46)	1034 (5.10)	990 (4.76)	1050 (4.90)	1085 (5.06)
11	1148 (4.93)	1029 (5.08)	1001 (4.81)	993 (4.63)	1042 (4.86)
12	1088 (4.67)	1006 (4.97)	979 (4.71)	976 (4.56)	1012 (4.72)
13	1106 (4.75)	981 (4.84)	971 (4.67)	982 (4.58)	1009 (4.71)
14	1068 (4.58)	929 (4.59)	934 (4.49)	951 (4.44)	970 (4.52)
15	1083 (4.65)	942 (4.65)	936 (4.50)	987 (4.61)	987 (4.60)
16	1184 (5.08)	956 (4.72)	959 (4.61)	1065 (4.97)	1041 (4.85)
17	1287 (5.52)	1004 (4.96)	1026 (4.93)	1188 (5.55)	1126 (5.25)
18	1416 (6.08)	1083 (5.35)	1141 (5.48)	1323 (6.18)	1240 (5.79)
19	1367 (5.87)	1050 (5.18)	1128 (5.42)	1279 (5.97)	1205 (5.62)
20	1216 (5.22)	999 (4.93)	1105 (5.31)	1147 (5.35)	1116 (5.21)
21	1095 (4.70)	966 (4.77)	1061 (5.10)	1072 (5.00)	1049 (4.89)
22	970 (4.16)	917 (4.53)	1003 (4.82)	1001 (4.68)	973 (4.54)
23	890 (3.82)	877 (4.33)	959 (4.61)	918 (4.29)	911 (4.25)
24	831 (3.57)	814 (4.02)	888 (4.27)	838 (3.91)	843 (3.93)

Philadelphia: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	552 (3.71)	353 (3.76)	435 (4.03)	471 (3.74)	452 (3.80)
2	500 (3.36)	332 (3.54)	389 (3.60)	430 (3.41)	412 (3.47)
3	436 (2.93)	300 (3.20)	329 (3.05)	375 (2.98)	360 (3.02)
4	414 (2.78)	273 (2.92)	290 (2.69)	353 (2.81)	332 (2.79)
5	378 (2.54)	245 (2.62)	249 (2.30)	308 (2.45)	295 (2.48)
6	364 (2.45)	232 (2.47)	237 (2.20)	294 (2.34)	281 (2.36)
7	442 (2.97)	282 (3.00)	269 (2.49)	361 (2.86)	338 (2.84)
8	784 (5.27)	464 (4.95)	438 (4.06)	616 (4.90)	575 (4.83)
9	963 (6.47)	558 (5.95)	540 (5.01)	760 (6.04)	704 (5.92)
10	897 (6.03)	546 (5.83)	572 (5.30)	720 (5.72)	683 (5.74)
11	738 (4.96)	497 (5.30)	541 (5.01)	592 (4.71)	591 (4.97)
12	659 (4.42)	459 (4.90)	504 (4.67)	522 (4.15)	536 (4.50)
13	632 (4.24)	434 (4.63)	489 (4.53)	497 (3.95)	512 (4.31)
14	577 (3.88)	405 (4.31)	469 (4.34)	465 (3.69)	478 (4.02)
15	583 (3.92)	413 (4.41)	465 (4.31)	472 (3.75)	483 (4.06)
16	629 (4.22)	428 (4.56)	486 (4.50)	515 (4.09)	514 (4.32)
17	663 (4.45)	432 (4.61)	511 (4.73)	559 (4.44)	541 (4.55)
18	787 (5.29)	448 (4.77)	540 (5.00)	687 (5.46)	615 (5.17)
19	784 (5.26)	416 (4.43)	520 (4.82)	710 (5.64)	607 (5.10)
20	694 (4.66)	379 (4.04)	513 (4.76)	650 (5.16)	559 (4.69)
21	645 (4.33)	365 (3.89)	521 (4.83)	605 (4.81)	534 (4.49)
22	604 (4.06)	374 (3.98)	518 (4.80)	572 (4.54)	517 (4.34)
23	591 (3.97)	378 (4.03)	497 (4.61)	533 (4.24)	500 (4.20)
24	573 (3.85)	366 (3.91)	470 (4.35)	517 (4.11)	481 (4.04)

Philadelphia: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	636 (3.80)	456 (3.81)	509 (4.09)	535 (3.77)	534 (3.86)
2	585 (3.50)	444 (3.71)	430 (3.45)	491 (3.46)	487 (3.52)
3	517 (3.10)	395 (3.29)	353 (2.84)	427 (3.01)	423 (3.06)
4	509 (3.05)	368 (3.07)	292 (2.35)	409 (2.88)	394 (2.85)
5	445 (2.67)	298 (2.49)	228 (1.83)	327 (2.31)	324 (2.34)
6	416 (2.49)	283 (2.36)	219 (1.76)	318 (2.24)	309 (2.23)
7	527 (3.15)	340 (2.84)	239 (1.92)	403 (2.84)	377 (2.73)
8	822 (4.92)	604 (5.04)	456 (3.66)	698 (4.92)	644 (4.66)
9	979 (5.86)	679 (5.67)	619 (4.97)	861 (6.07)	784 (5.67)
10	964 (5.77)	651 (5.43)	667 (5.35)	832 (5.86)	778 (5.62)
11	822 (4.92)	582 (4.86)	614 (4.93)	661 (4.66)	669 (4.84)
12	736 (4.40)	519 (4.33)	552 (4.43)	580 (4.09)	596 (4.31)
13	663 (3.97)	487 (4.06)	522 (4.19)	528 (3.72)	550 (3.98)
14	653 (3.91)	497 (4.15)	523 (4.20)	538 (3.79)	552 (4.00)
15	767 (4.59)	631 (5.27)	607 (4.88)	650 (4.58)	663 (4.80)
16	686 (4.10)	551 (4.60)	586 (4.70)	539 (3.80)	590 (4.27)
17	782 (4.68)	588 (4.91)	636 (5.11)	628 (4.42)	658 (4.76)
18	822 (4.92)	599 (5.01)	676 (5.43)	696 (4.91)	698 (5.05)
19	845 (5.05)	536 (4.47)	624 (5.00)	741 (5.22)	686 (4.96)
20	778 (4.65)	494 (4.12)	596 (4.78)	743 (5.24)	652 (4.72)
21	721 (4.31)	481 (4.01)	641 (5.15)	699 (4.93)	635 (4.60)
22	694 (4.15)	507 (4.23)	650 (5.22)	665 (4.68)	629 (4.55)
23	684 (4.09)	522 (4.36)	646 (5.19)	632 (4.46)	621 (4.49)
24	663 (3.97)	467 (3.90)	572 (4.59)	587 (4.13)	572 (4.14)

Philadelphia: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	651 (3.95)	481 (3.95)	552 (4.08)	579 (3.93)	566 (3.98)
2	589 (3.58)	458 (3.75)	468 (3.46)	517 (3.51)	508 (3.57)
3	531 (3.23)	415 (3.40)	391 (2.89)	456 (3.09)	448 (3.15)
4	515 (3.13)	380 (3.12)	329 (2.43)	434 (2.95)	414 (2.91)
5	439 (2.67)	310 (2.54)	263 (1.94)	342 (2.32)	338 (2.38)
6	410 (2.49)	282 (2.32)	246 (1.82)	324 (2.20)	315 (2.22)
7	513 (3.11)	340 (2.79)	273 (2.02)	413 (2.80)	384 (2.70)
8	814 (4.95)	596 (4.88)	488 (3.61)	696 (4.73)	648 (4.56)
9	990 (6.01)	680 (5.58)	655 (4.84)	869 (5.90)	798 (5.61)
10	958 (5.82)	661 (5.42)	699 (5.17)	839 (5.70)	789 (5.55)
11	797 (4.84)	593 (4.86)	650 (4.81)	668 (4.53)	677 (4.76)
12	701 (4.26)	529 (4.34)	588 (4.35)	593 (4.03)	603 (4.24)
13	638 (3.88)	495 (4.06)	568 (4.20)	550 (3.73)	563 (3.96)
14	626 (3.80)	496 (4.07)	576 (4.26)	551 (3.74)	562 (3.95)
15	713 (4.33)	614 (5.04)	651 (4.81)	656 (4.45)	658 (4.63)
16	658 (3.99)	566 (4.64)	644 (4.76)	572 (3.88)	610 (4.29)
17	763 (4.64)	609 (5.00)	705 (5.21)	672 (4.56)	687 (4.83)
18	804 (4.89)	608 (4.99)	738 (5.46)	737 (5.00)	722 (5.07)
19	813 (4.94)	542 (4.45)	680 (5.03)	770 (5.23)	701 (4.93)
20	769 (4.67)	499 (4.09)	660 (4.88)	763 (5.18)	673 (4.73)
21	711 (4.32)	489 (4.01)	702 (5.19)	718 (4.88)	655 (4.61)
22	693 (4.21)	525 (4.30)	702 (5.19)	702 (4.77)	656 (4.61)
23	686 (4.17)	536 (4.39)	682 (5.05)	671 (4.56)	644 (4.53)
24	681 (4.13)	491 (4.02)	616 (4.56)	636 (4.32)	606 (4.26)

Philadelphia: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	587 (3.81)	417 (3.92)	480 (4.23)	504 (3.83)	497 (3.93)
2	539 (3.49)	399 (3.75)	417 (3.67)	463 (3.52)	454 (3.60)
3	475 (3.08)	360 (3.39)	348 (3.06)	403 (3.06)	396 (3.14)
4	464 (3.01)	331 (3.12)	294 (2.58)	387 (2.94)	369 (2.92)
5	411 (2.67)	278 (2.62)	236 (2.07)	319 (2.42)	311 (2.46)
6	388 (2.51)	261 (2.45)	221 (1.95)	306 (2.33)	293 (2.32)
7	467 (3.03)	320 (3.01)	252 (2.22)	377 (2.87)	353 (2.80)
8	675 (4.37)	458 (4.31)	388 (3.41)	542 (4.13)	515 (4.08)
9	917 (5.95)	574 (5.39)	527 (4.63)	756 (5.75)	692 (5.48)
10	895 (5.80)	599 (5.64)	604 (5.31)	754 (5.73)	712 (5.64)
11	784 (5.08)	537 (5.05)	561 (4.94)	616 (4.68)	624 (4.94)
12	696 (4.51)	480 (4.52)	506 (4.45)	538 (4.09)	554 (4.39)
13	637 (4.13)	467 (4.39)	491 (4.32)	513 (3.90)	526 (4.17)
14	589 (3.82)	437 (4.11)	474 (4.17)	478 (3.64)	494 (3.91)
15	648 (4.20)	506 (4.76)	524 (4.61)	534 (4.06)	553 (4.37)
16	686 (4.45)	505 (4.75)	529 (4.66)	546 (4.15)	566 (4.48)
17	721 (4.68)	535 (5.03)	590 (5.20)	598 (4.55)	611 (4.84)
18	853 (5.53)	549 (5.17)	614 (5.40)	747 (5.68)	690 (5.46)
19	775 (5.02)	476 (4.48)	552 (4.86)	708 (5.38)	627 (4.97)
20	707 (4.58)	422 (3.97)	517 (4.55)	681 (5.18)	582 (4.60)
21	658 (4.26)	421 (3.96)	580 (5.10)	649 (4.93)	577 (4.57)
22	628 (4.07)	435 (4.09)	580 (5.10)	612 (4.65)	564 (4.46)
23	623 (4.04)	441 (4.15)	558 (4.91)	571 (4.34)	548 (4.34)
24	602 (3.90)	423 (3.98)	522 (4.59)	550 (4.18)	524 (4.15)

Philadelphia: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	581 (3.74)	395 (3.82)	457 (4.04)	504 (3.82)	484 (3.85)
2	532 (3.42)	380 (3.68)	407 (3.60)	463 (3.51)	445 (3.54)
3	467 (3.01)	339 (3.28)	338 (2.99)	402 (3.05)	386 (3.07)
4	441 (2.84)	304 (2.94)	289 (2.56)	371 (2.81)	351 (2.79)
5	398 (2.56)	262 (2.54)	239 (2.12)	314 (2.38)	303 (2.41)
6	379 (2.44)	249 (2.42)	230 (2.04)	302 (2.28)	290 (2.30)
7	476 (3.07)	309 (2.99)	260 (2.30)	379 (2.87)	355 (2.83)
8	755 (4.86)	487 (4.72)	416 (3.68)	599 (4.54)	563 (4.48)
9	939 (6.05)	584 (5.65)	539 (4.77)	760 (5.75)	704 (5.60)
10	930 (5.99)	582 (5.64)	598 (5.29)	754 (5.71)	715 (5.69)
11	787 (5.07)	545 (5.28)	585 (5.18)	629 (4.76)	636 (5.06)
12	718 (4.62)	518 (5.01)	545 (4.83)	579 (4.39)	590 (4.69)
13	681 (4.39)	472 (4.57)	505 (4.47)	537 (4.07)	548 (4.36)
14	610 (3.93)	430 (4.16)	481 (4.26)	482 (3.65)	500 (3.98)
15	624 (4.02)	454 (4.40)	499 (4.42)	497 (3.77)	518 (4.12)
16	669 (4.31)	485 (4.69)	540 (4.78)	538 (4.08)	558 (4.43)
17	731 (4.71)	491 (4.76)	551 (4.87)	604 (4.58)	594 (4.72)
18	779 (5.02)	487 (4.72)	581 (5.14)	676 (5.12)	630 (5.01)
19	808 (5.21)	453 (4.39)	548 (4.85)	728 (5.51)	634 (5.04)
20	729 (4.70)	425 (4.12)	538 (4.76)	701 (5.31)	598 (4.75)
21	648 (4.18)	409 (3.96)	561 (4.97)	636 (4.82)	564 (4.48)
22	618 (3.98)	425 (4.12)	564 (4.99)	612 (4.63)	555 (4.41)
23	622 (4.00)	431 (4.18)	533 (4.72)	579 (4.39)	541 (4.30)
24	600 (3.87)	408 (3.95)	496 (4.39)	553 (4.19)	514 (4.09)

Philadelphia: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	566 (3.72)	367 (3.75)	442 (3.98)	482 (3.74)	464 (3.79)
2	516 (3.39)	348 (3.56)	393 (3.54)	440 (3.42)	424 (3.46)
3	449 (2.95)	314 (3.21)	333 (2.99)	384 (2.98)	370 (3.02)
4	431 (2.83)	289 (2.96)	292 (2.63)	365 (2.83)	344 (2.81)
5	389 (2.55)	254 (2.60)	247 (2.22)	312 (2.42)	300 (2.45)
6	374 (2.46)	240 (2.45)	233 (2.10)	299 (2.32)	286 (2.34)
7	453 (2.98)	290 (2.97)	266 (2.39)	368 (2.86)	344 (2.81)
8	789 (5.19)	481 (4.92)	448 (4.03)	623 (4.84)	584 (4.78)
9	960 (6.31)	569 (5.82)	555 (5.00)	767 (5.95)	712 (5.82)
10	913 (6.00)	566 (5.78)	591 (5.32)	741 (5.75)	702 (5.74)
11	752 (4.94)	512 (5.23)	560 (5.04)	603 (4.68)	606 (4.95)
12	667 (4.38)	472 (4.82)	524 (4.72)	530 (4.11)	547 (4.47)
13	633 (4.16)	445 (4.55)	507 (4.57)	502 (3.90)	521 (4.26)
14	587 (3.86)	423 (4.32)	490 (4.41)	476 (3.70)	494 (4.03)
15	606 (3.98)	439 (4.49)	483 (4.35)	494 (3.83)	505 (4.13)
16	649 (4.27)	446 (4.56)	502 (4.51)	526 (4.08)	530 (4.33)
17	693 (4.56)	460 (4.70)	533 (4.80)	584 (4.53)	567 (4.63)
18	814 (5.35)	477 (4.87)	559 (5.03)	710 (5.51)	639 (5.22)
19	798 (5.25)	442 (4.52)	542 (4.88)	728 (5.65)	627 (5.12)
20	699 (4.59)	395 (4.04)	535 (4.81)	657 (5.10)	571 (4.67)
21	657 (4.32)	382 (3.91)	544 (4.89)	619 (4.80)	550 (4.50)
22	621 (4.08)	395 (4.03)	532 (4.79)	591 (4.59)	535 (4.37)
23	610 (4.01)	400 (4.08)	520 (4.68)	553 (4.29)	520 (4.25)
24	588 (3.87)	380 (3.89)	482 (4.34)	529 (4.10)	495 (4.04)

Philadelphia: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	560 (3.69)	363 (3.75)	450 (4.02)	476 (3.70)	462 (3.78)
2	505 (3.33)	342 (3.53)	398 (3.56)	432 (3.35)	419 (3.43)
3	441 (2.91)	309 (3.19)	337 (3.01)	378 (2.93)	366 (3.00)
4	417 (2.75)	280 (2.89)	293 (2.62)	354 (2.75)	336 (2.75)
5	378 (2.50)	249 (2.57)	251 (2.24)	306 (2.38)	296 (2.42)
6	364 (2.40)	235 (2.43)	243 (2.17)	293 (2.28)	284 (2.32)
7	434 (2.87)	275 (2.84)	270 (2.42)	349 (2.71)	332 (2.72)
8	798 (5.26)	469 (4.84)	444 (3.97)	632 (4.90)	585 (4.79)
9	1010 (6.67)	577 (5.96)	563 (5.04)	807 (6.26)	738 (6.04)
10	885 (5.84)	547 (5.64)	573 (5.13)	727 (5.64)	682 (5.58)
11	743 (4.91)	509 (5.25)	545 (4.88)	610 (4.73)	601 (4.92)
12	674 (4.45)	473 (4.88)	516 (4.62)	546 (4.23)	552 (4.52)
13	656 (4.33)	453 (4.67)	507 (4.54)	522 (4.05)	534 (4.37)
14	597 (3.94)	423 (4.36)	490 (4.39)	483 (3.75)	498 (4.08)
15	587 (3.87)	435 (4.49)	505 (4.52)	475 (3.69)	500 (4.09)
16	631 (4.16)	446 (4.60)	510 (4.57)	522 (4.05)	527 (4.31)
17	652 (4.30)	449 (4.64)	528 (4.73)	557 (4.32)	546 (4.47)
18	834 (5.50)	474 (4.89)	567 (5.08)	730 (5.67)	651 (5.33)
19	822 (5.43)	442 (4.56)	551 (4.93)	747 (5.80)	640 (5.24)
20	719 (4.75)	406 (4.19)	547 (4.90)	684 (5.30)	589 (4.82)
21	666 (4.40)	388 (4.01)	554 (4.96)	629 (4.88)	559 (4.58)
22	607 (4.00)	384 (3.96)	542 (4.85)	572 (4.44)	526 (4.30)
23	586 (3.87)	382 (3.94)	503 (4.50)	529 (4.11)	500 (4.09)
24	585 (3.86)	379 (3.91)	488 (4.37)	528 (4.10)	495 (4.05)

Philadelphia: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	545 (3.65)	365 (3.85)	462 (4.18)	471 (3.72)	461 (3.83)
2	499 (3.34)	347 (3.66)	407 (3.68)	437 (3.45)	423 (3.51)
3	438 (2.93)	310 (3.27)	339 (3.06)	381 (3.01)	367 (3.05)
4	421 (2.82)	286 (3.01)	298 (2.69)	363 (2.87)	341 (2.84)
5	383 (2.57)	254 (2.68)	255 (2.31)	316 (2.49)	302 (2.51)
6	367 (2.45)	237 (2.50)	242 (2.18)	302 (2.39)	287 (2.38)
7	419 (2.81)	275 (2.90)	268 (2.42)	351 (2.77)	328 (2.73)
8	915 (6.13)	493 (5.20)	446 (4.03)	712 (5.62)	640 (5.32)
9	987 (6.61)	575 (6.07)	563 (5.09)	802 (6.33)	731 (6.08)
10	876 (5.86)	537 (5.67)	589 (5.32)	719 (5.67)	679 (5.65)
11	720 (4.82)	470 (4.95)	536 (4.84)	573 (4.52)	574 (4.77)
12	623 (4.17)	430 (4.54)	505 (4.56)	493 (3.89)	512 (4.26)
13	620 (4.15)	437 (4.61)	517 (4.67)	498 (3.93)	518 (4.30)
14	563 (3.77)	390 (4.12)	475 (4.29)	449 (3.54)	469 (3.90)
15	556 (3.72)	416 (4.39)	460 (4.16)	470 (3.71)	475 (3.95)
16	600 (4.02)	410 (4.32)	468 (4.23)	483 (3.82)	490 (4.07)
17	668 (4.48)	414 (4.37)	488 (4.41)	531 (4.19)	525 (4.36)
18	830 (5.55)	481 (5.08)	562 (5.08)	735 (5.80)	651 (5.42)
19	797 (5.34)	421 (4.44)	522 (4.72)	698 (5.51)	609 (5.06)
20	727 (4.87)	413 (4.35)	540 (4.88)	682 (5.39)	590 (4.91)
21	663 (4.44)	373 (3.93)	532 (4.81)	608 (4.80)	544 (4.52)
22	595 (3.98)	387 (4.08)	563 (5.09)	561 (4.43)	526 (4.38)
23	570 (3.82)	387 (4.08)	534 (4.82)	523 (4.13)	503 (4.19)
24	555 (3.72)	373 (3.94)	495 (4.47)	507 (4.00)	482 (4.01)

Philadelphia: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	559 (3.63)	376 (3.70)	452 (3.95)	479 (3.66)	466 (3.73)
2	510 (3.31)	358 (3.53)	399 (3.49)	438 (3.35)	426 (3.41)
3	451 (2.93)	325 (3.20)	337 (2.95)	385 (2.94)	374 (2.99)
4	435 (2.83)	300 (2.96)	294 (2.57)	368 (2.81)	349 (2.79)
5	392 (2.55)	261 (2.58)	246 (2.15)	312 (2.39)	303 (2.42)
6	374 (2.43)	246 (2.42)	233 (2.04)	299 (2.29)	288 (2.30)
7	443 (2.88)	288 (2.83)	257 (2.25)	359 (2.74)	336 (2.69)
8	819 (5.32)	493 (4.86)	435 (3.80)	650 (4.96)	598 (4.78)
9	996 (6.47)	582 (5.74)	547 (4.78)	802 (6.13)	731 (5.84)
10	914 (5.94)	570 (5.61)	597 (5.22)	750 (5.73)	707 (5.65)
11	767 (4.98)	528 (5.21)	578 (5.05)	617 (4.72)	622 (4.97)
12	693 (4.51)	494 (4.87)	541 (4.73)	558 (4.26)	571 (4.57)
13	654 (4.25)	465 (4.58)	520 (4.55)	523 (4.00)	540 (4.32)
14	591 (3.84)	432 (4.25)	499 (4.36)	480 (3.67)	500 (4.00)
15	632 (4.11)	467 (4.60)	521 (4.55)	515 (3.94)	533 (4.26)
16	714 (4.64)	497 (4.90)	542 (4.74)	580 (4.43)	583 (4.66)
17	716 (4.65)	492 (4.84)	561 (4.91)	602 (4.60)	592 (4.74)
18	812 (5.28)	495 (4.88)	582 (5.09)	708 (5.41)	649 (5.19)
19	822 (5.34)	464 (4.57)	567 (4.96)	745 (5.69)	649 (5.19)
20	709 (4.61)	425 (4.19)	586 (5.12)	671 (5.13)	598 (4.78)
21	639 (4.15)	401 (3.95)	574 (5.01)	614 (4.70)	557 (4.45)
22	588 (3.82)	398 (3.93)	552 (4.83)	571 (4.36)	527 (4.22)
23	586 (3.81)	404 (3.98)	525 (4.59)	539 (4.12)	513 (4.10)
24	571 (3.71)	387 (3.82)	496 (4.33)	520 (3.98)	494 (3.95)

Philadelphia: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	678 (4.11)	446 (4.12)	519 (4.32)	569 (4.09)	553 (4.16)
2	603 (3.66)	414 (3.83)	426 (3.54)	515 (3.70)	489 (3.68)
3	512 (3.11)	363 (3.36)	356 (2.96)	438 (3.14)	417 (3.13)
4	470 (2.85)	321 (2.97)	300 (2.49)	394 (2.83)	371 (2.79)
5	399 (2.42)	267 (2.46)	244 (2.03)	317 (2.28)	306 (2.30)
6	376 (2.28)	248 (2.29)	231 (1.92)	300 (2.15)	288 (2.17)
7	481 (2.92)	309 (2.85)	277 (2.30)	382 (2.75)	362 (2.72)
8	709 (4.30)	473 (4.37)	499 (4.15)	555 (3.99)	558 (4.20)
9	891 (5.41)	600 (5.54)	670 (5.57)	708 (5.09)	717 (5.39)
10	979 (5.94)	633 (5.85)	700 (5.82)	790 (5.68)	775 (5.83)
11	819 (4.97)	599 (5.54)	654 (5.44)	671 (4.82)	685 (5.15)
12	727 (4.41)	510 (4.71)	516 (4.29)	582 (4.18)	583 (4.38)
13	712 (4.32)	502 (4.64)	578 (4.81)	567 (4.07)	589 (4.43)
14	651 (3.95)	463 (4.28)	548 (4.56)	521 (3.75)	546 (4.10)
15	649 (3.94)	461 (4.26)	510 (4.24)	518 (3.72)	534 (4.02)
16	801 (4.86)	517 (4.78)	542 (4.51)	636 (4.57)	623 (4.69)
17	860 (5.22)	559 (5.17)	630 (5.24)	725 (5.21)	693 (5.21)
18	831 (5.04)	496 (4.58)	591 (4.91)	703 (5.05)	655 (4.92)
19	844 (5.12)	441 (4.07)	521 (4.33)	736 (5.28)	635 (4.77)
20	775 (4.71)	429 (3.97)	489 (4.07)	740 (5.31)	608 (4.57)
21	679 (4.12)	407 (3.76)	539 (4.49)	657 (4.72)	570 (4.29)
22	662 (4.02)	463 (4.28)	661 (5.50)	648 (4.65)	609 (4.58)
23	670 (4.07)	453 (4.19)	531 (4.42)	626 (4.49)	570 (4.29)
24	696 (4.23)	445 (4.11)	489 (4.07)	622 (4.47)	563 (4.23)

Philadelphia: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	569 (3.53)	378 (3.65)	460 (3.98)	486 (3.58)	473 (3.67)
2	518 (3.21)	358 (3.46)	408 (3.54)	443 (3.26)	432 (3.35)
3	449 (2.78)	317 (3.06)	336 (2.91)	383 (2.82)	371 (2.88)
4	431 (2.67)	291 (2.82)	294 (2.54)	363 (2.67)	344 (2.67)
5	392 (2.43)	257 (2.48)	248 (2.15)	314 (2.31)	302 (2.34)
6	378 (2.34)	247 (2.39)	243 (2.11)	304 (2.23)	292 (2.27)
7	504 (3.12)	326 (3.15)	294 (2.55)	410 (3.02)	383 (2.97)
8	889 (5.51)	541 (5.23)	511 (4.43)	699 (5.15)	659 (5.11)
9	1062 (6.58)	625 (6.05)	617 (5.34)	845 (6.22)	786 (6.10)
10	984 (6.10)	596 (5.76)	600 (5.20)	787 (5.79)	741 (5.75)
11	816 (5.06)	536 (5.19)	561 (4.86)	649 (4.77)	640 (4.96)
12	727 (4.51)	500 (4.84)	536 (4.64)	576 (4.24)	584 (4.53)
13	710 (4.40)	471 (4.56)	514 (4.46)	553 (4.07)	562 (4.36)
14	654 (4.06)	447 (4.32)	500 (4.33)	518 (3.81)	529 (4.11)
15	642 (3.98)	463 (4.48)	494 (4.28)	523 (3.85)	530 (4.11)
16	683 (4.24)	484 (4.69)	531 (4.60)	564 (4.15)	565 (4.38)
17	789 (4.89)	512 (4.95)	568 (4.92)	664 (4.88)	633 (4.91)
18	879 (5.45)	531 (5.13)	613 (5.31)	780 (5.74)	700 (5.43)
19	817 (5.07)	455 (4.40)	555 (4.81)	742 (5.46)	642 (4.98)
20	705 (4.37)	399 (3.86)	530 (4.59)	656 (4.83)	572 (4.44)
21	668 (4.14)	392 (3.79)	534 (4.63)	632 (4.65)	556 (4.32)
22	643 (3.99)	413 (4.00)	561 (4.86)	608 (4.47)	556 (4.32)
23	616 (3.82)	404 (3.91)	525 (4.55)	552 (4.06)	524 (4.07)
24	603 (3.74)	396 (3.83)	509 (4.41)	539 (3.96)	512 (3.97)

Philadelphia: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	571 (3.78)	385 (3.89)	463 (4.21)	487 (3.81)	476 (3.91)
2	519 (3.43)	364 (3.67)	401 (3.65)	443 (3.47)	431 (3.54)
3	456 (3.02)	325 (3.28)	334 (3.03)	387 (3.03)	375 (3.08)
4	441 (2.92)	300 (3.03)	290 (2.63)	370 (2.89)	350 (2.87)
5	396 (2.62)	260 (2.62)	241 (2.19)	313 (2.45)	302 (2.48)
6	378 (2.50)	244 (2.46)	227 (2.06)	300 (2.35)	287 (2.35)
7	430 (2.85)	276 (2.78)	243 (2.21)	342 (2.67)	322 (2.64)
8	686 (4.54)	434 (4.38)	391 (3.55)	546 (4.27)	514 (4.21)
9	893 (5.92)	557 (5.62)	524 (4.76)	738 (5.77)	677 (5.55)
10	912 (6.04)	576 (5.81)	597 (5.42)	751 (5.87)	708 (5.81)
11	762 (5.05)	512 (5.17)	550 (5.00)	601 (4.70)	606 (4.97)
12	689 (4.56)	480 (4.84)	520 (4.73)	542 (4.24)	557 (4.57)
13	637 (4.22)	444 (4.48)	498 (4.52)	501 (3.92)	520 (4.26)
14	603 (4.00)	427 (4.31)	485 (4.40)	483 (3.78)	499 (4.10)
15	605 (4.01)	447 (4.51)	478 (4.34)	484 (3.79)	503 (4.13)
16	645 (4.27)	459 (4.63)	494 (4.48)	520 (4.07)	529 (4.34)
17	722 (4.78)	475 (4.79)	525 (4.77)	602 (4.71)	580 (4.76)
18	753 (4.99)	461 (4.65)	531 (4.83)	654 (5.11)	599 (4.92)
19	774 (5.13)	442 (4.46)	538 (4.89)	702 (5.49)	614 (5.03)
20	707 (4.68)	407 (4.10)	528 (4.80)	668 (5.22)	577 (4.74)
21	666 (4.41)	399 (4.03)	547 (4.97)	638 (4.99)	563 (4.61)
22	636 (4.21)	427 (4.31)	567 (5.15)	615 (4.81)	561 (4.60)
23	619 (4.10)	416 (4.20)	536 (4.87)	564 (4.41)	534 (4.38)
24	599 (3.97)	393 (3.97)	496 (4.50)	537 (4.20)	506 (4.15)

Philadelphia: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	572 (3.71)	378 (3.84)	451 (4.03)	488 (3.77)	472 (3.82)
2	515 (3.34)	357 (3.62)	398 (3.56)	441 (3.41)	427 (3.46)
3	450 (2.92)	321 (3.26)	335 (3.00)	384 (2.96)	372 (3.02)
4	429 (2.78)	291 (2.96)	289 (2.59)	361 (2.79)	342 (2.78)
5	388 (2.52)	255 (2.59)	244 (2.18)	310 (2.39)	299 (2.42)
6	376 (2.44)	242 (2.45)	233 (2.08)	300 (2.32)	287 (2.33)
7	449 (2.92)	287 (2.91)	266 (2.38)	359 (2.77)	340 (2.76)
8	806 (5.23)	486 (4.94)	459 (4.11)	630 (4.86)	594 (4.82)
9	994 (6.45)	579 (5.88)	577 (5.16)	796 (6.14)	736 (5.96)
10	905 (5.87)	549 (5.58)	575 (5.14)	732 (5.66)	690 (5.59)
11	741 (4.81)	491 (4.98)	542 (4.85)	590 (4.56)	591 (4.79)
12	667 (4.33)	455 (4.62)	514 (4.60)	523 (4.04)	539 (4.37)
13	653 (4.24)	440 (4.46)	506 (4.52)	505 (3.90)	525 (4.26)
14	611 (3.96)	418 (4.24)	480 (4.30)	487 (3.76)	498 (4.04)
15	606 (3.93)	421 (4.28)	476 (4.26)	480 (3.71)	495 (4.01)
16	630 (4.09)	434 (4.40)	491 (4.40)	504 (3.90)	515 (4.17)
17	728 (4.72)	465 (4.72)	532 (4.76)	592 (4.57)	578 (4.69)
18	870 (5.65)	508 (5.15)	596 (5.34)	742 (5.73)	678 (5.50)
19	824 (5.35)	454 (4.61)	559 (5.00)	735 (5.68)	643 (5.21)
20	710 (4.60)	400 (4.06)	518 (4.64)	665 (5.14)	573 (4.64)
21	670 (4.35)	399 (4.05)	553 (4.95)	636 (4.91)	564 (4.57)
22	621 (4.03)	408 (4.15)	543 (4.86)	596 (4.60)	542 (4.39)
23	613 (3.98)	419 (4.25)	548 (4.90)	561 (4.33)	535 (4.34)
24	587 (3.81)	393 (3.99)	489 (4.38)	533 (4.11)	500 (4.05)

Philadelphia: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	561 (3.72)	384 (3.74)	458 (3.99)	480 (3.75)	470 (3.80)
2	514 (3.41)	372 (3.62)	410 (3.57)	441 (3.46)	434 (3.50)
3	454 (3.01)	336 (3.28)	345 (3.01)	387 (3.03)	380 (3.07)
4	440 (2.92)	311 (3.03)	300 (2.61)	371 (2.90)	355 (2.87)
5	395 (2.62)	269 (2.62)	248 (2.16)	313 (2.45)	306 (2.47)
6	376 (2.49)	252 (2.46)	234 (2.04)	300 (2.35)	290 (2.34)
7	423 (2.80)	284 (2.77)	250 (2.18)	339 (2.66)	324 (2.61)
8	798 (5.28)	488 (4.75)	410 (3.57)	635 (4.97)	582 (4.69)
9	879 (5.83)	528 (5.14)	540 (4.71)	684 (5.36)	657 (5.30)
10	918 (6.09)	551 (5.36)	609 (5.31)	738 (5.77)	703 (5.67)
11	873 (5.79)	575 (5.60)	602 (5.25)	682 (5.34)	682 (5.51)
12	760 (5.04)	523 (5.09)	570 (4.97)	572 (4.48)	606 (4.89)
13	738 (4.89)	489 (4.77)	539 (4.69)	555 (4.34)	579 (4.68)
14	606 (4.01)	437 (4.26)	480 (4.18)	484 (3.79)	501 (4.04)
15	582 (3.86)	477 (4.65)	524 (4.57)	486 (3.80)	517 (4.17)
16	633 (4.20)	510 (4.97)	570 (4.96)	543 (4.25)	564 (4.55)
17	670 (4.44)	537 (5.23)	621 (5.41)	567 (4.44)	599 (4.83)
18	710 (4.70)	509 (4.96)	603 (5.26)	634 (4.97)	614 (4.95)
19	729 (4.83)	444 (4.33)	530 (4.62)	662 (5.18)	591 (4.77)
20	641 (4.25)	372 (3.62)	484 (4.22)	606 (4.74)	525 (4.24)
21	624 (4.14)	402 (3.91)	590 (5.14)	625 (4.89)	560 (4.52)
22	598 (3.96)	412 (4.01)	543 (4.74)	600 (4.70)	539 (4.35)
23	595 (3.95)	414 (4.04)	529 (4.61)	551 (4.31)	522 (4.21)
24	572 (3.79)	389 (3.79)	488 (4.25)	519 (4.07)	492 (3.97)

Philadelphia: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	563 (3.46)	364 (3.54)	441 (3.83)	476 (3.46)	461 (3.56)
2	506 (3.11)	347 (3.37)	397 (3.45)	434 (3.16)	421 (3.25)
3	447 (2.75)	316 (3.06)	337 (2.93)	383 (2.79)	370 (2.86)
4	429 (2.64)	290 (2.81)	295 (2.56)	364 (2.65)	344 (2.66)
5	389 (2.39)	255 (2.48)	249 (2.16)	312 (2.27)	301 (2.32)
6	378 (2.32)	246 (2.39)	240 (2.09)	305 (2.22)	292 (2.26)
7	542 (3.33)	337 (3.27)	292 (2.54)	436 (3.17)	401 (3.10)
8	960 (5.90)	585 (5.68)	559 (4.85)	765 (5.57)	716 (5.53)
9	1089 (6.70)	640 (6.22)	652 (5.66)	876 (6.37)	813 (6.28)
10	990 (6.09)	613 (5.95)	631 (5.48)	813 (5.92)	761 (5.88)
11	813 (5.00)	551 (5.35)	579 (5.03)	664 (4.83)	651 (5.03)
12	729 (4.48)	505 (4.90)	522 (4.53)	588 (4.28)	585 (4.52)
13	704 (4.33)	482 (4.68)	550 (4.77)	557 (4.05)	573 (4.42)
14	657 (4.04)	444 (4.31)	513 (4.45)	522 (3.80)	534 (4.12)
15	623 (3.83)	430 (4.18)	454 (3.94)	502 (3.65)	502 (3.88)
16	639 (3.93)	437 (4.25)	462 (4.01)	522 (3.80)	515 (3.98)
17	748 (4.60)	492 (4.78)	551 (4.79)	631 (4.59)	605 (4.68)
18	970 (5.96)	536 (5.21)	655 (5.69)	837 (6.09)	749 (5.79)
19	843 (5.18)	450 (4.37)	539 (4.68)	762 (5.54)	648 (5.01)
20	701 (4.31)	395 (3.84)	519 (4.51)	661 (4.81)	569 (4.39)
21	684 (4.20)	405 (3.93)	571 (4.96)	645 (4.70)	576 (4.45)
22	651 (4.00)	401 (3.89)	537 (4.67)	605 (4.40)	548 (4.24)
23	618 (3.80)	394 (3.82)	492 (4.27)	552 (4.02)	514 (3.97)
24	592 (3.64)	382 (3.71)	479 (4.16)	530 (3.86)	496 (3.83)

Philadelphia: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	557 (3.79)	375 (3.94)	450 (4.20)	477 (3.86)	465 (3.93)
2	509 (3.47)	361 (3.79)	401 (3.74)	439 (3.55)	427 (3.62)
3	449 (3.06)	325 (3.41)	337 (3.14)	384 (3.10)	373 (3.16)
4	435 (2.96)	299 (3.13)	293 (2.73)	367 (2.97)	348 (2.95)
5	392 (2.67)	261 (2.74)	249 (2.33)	312 (2.52)	303 (2.57)
6	374 (2.54)	245 (2.58)	235 (2.19)	298 (2.41)	288 (2.43)
7	423 (2.88)	278 (2.92)	251 (2.34)	340 (2.75)	323 (2.73)
8	643 (4.38)	408 (4.28)	378 (3.52)	503 (4.06)	482 (4.08)
9	862 (5.87)	517 (5.42)	507 (4.73)	688 (5.56)	643 (5.44)
10	881 (6.00)	539 (5.66)	554 (5.17)	711 (5.75)	671 (5.67)
11	759 (5.17)	498 (5.23)	521 (4.86)	600 (4.85)	594 (5.03)
12	711 (4.84)	480 (5.04)	511 (4.76)	556 (4.49)	564 (4.77)
13	644 (4.38)	422 (4.43)	465 (4.34)	492 (3.98)	505 (4.28)
14	605 (4.12)	411 (4.31)	452 (4.22)	482 (3.89)	487 (4.12)
15	620 (4.22)	433 (4.54)	473 (4.42)	498 (4.02)	506 (4.28)
16	608 (4.14)	423 (4.44)	494 (4.61)	482 (3.90)	502 (4.25)
17	659 (4.49)	422 (4.42)	500 (4.66)	517 (4.18)	524 (4.43)
18	719 (4.89)	435 (4.56)	517 (4.83)	625 (5.05)	573 (4.85)
19	750 (5.11)	427 (4.48)	528 (4.93)	682 (5.51)	596 (5.05)
20	694 (4.72)	404 (4.24)	535 (4.99)	668 (5.40)	575 (4.87)
21	627 (4.27)	393 (4.12)	570 (5.32)	604 (4.89)	549 (4.64)
22	594 (4.05)	395 (4.15)	522 (4.87)	576 (4.65)	522 (4.42)
23	590 (4.02)	392 (4.11)	497 (4.63)	539 (4.35)	504 (4.27)
24	578 (3.94)	387 (4.06)	480 (4.47)	529 (4.28)	493 (4.18)

Philadelphia: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	564 (3.70)	371 (3.80)	455 (4.15)	486 (3.78)	469 (3.84)
2	514 (3.37)	355 (3.63)	399 (3.63)	446 (3.46)	428 (3.51)
3	454 (2.98)	322 (3.29)	339 (3.09)	392 (3.05)	376 (3.08)
4	430 (2.82)	291 (2.98)	293 (2.67)	364 (2.83)	344 (2.82)
5	386 (2.54)	253 (2.59)	246 (2.24)	309 (2.40)	298 (2.44)
6	384 (2.52)	242 (2.47)	233 (2.12)	305 (2.37)	290 (2.38)
7	494 (3.24)	310 (3.17)	274 (2.50)	395 (3.07)	368 (3.01)
8	819 (5.38)	501 (5.13)	443 (4.04)	639 (4.97)	600 (4.91)
9	942 (6.18)	571 (5.84)	549 (5.00)	752 (5.85)	702 (5.75)
10	895 (5.87)	556 (5.68)	582 (5.30)	723 (5.62)	688 (5.64)
11	759 (4.98)	498 (5.10)	541 (4.92)	601 (4.67)	599 (4.91)
12	661 (4.34)	456 (4.66)	496 (4.51)	524 (4.07)	534 (4.37)
13	666 (4.37)	453 (4.63)	502 (4.57)	523 (4.06)	535 (4.39)
14	624 (4.10)	434 (4.43)	505 (4.60)	500 (3.89)	515 (4.22)
15	604 (3.96)	423 (4.32)	461 (4.20)	488 (3.79)	494 (4.04)
16	625 (4.10)	439 (4.49)	493 (4.49)	502 (3.91)	514 (4.21)
17	692 (4.54)	446 (4.56)	518 (4.71)	547 (4.25)	550 (4.51)
18	787 (5.16)	453 (4.63)	508 (4.62)	676 (5.26)	606 (4.96)
19	792 (5.19)	440 (4.50)	531 (4.83)	718 (5.58)	620 (5.08)
20	683 (4.48)	390 (3.99)	503 (4.58)	651 (5.06)	557 (4.56)
21	652 (4.28)	387 (3.95)	535 (4.87)	634 (4.93)	552 (4.52)
22	639 (4.19)	410 (4.19)	569 (5.19)	617 (4.80)	559 (4.58)
23	598 (3.93)	402 (4.11)	520 (4.74)	548 (4.26)	517 (4.24)
24	577 (3.79)	378 (3.87)	485 (4.42)	526 (4.09)	492 (4.03)

Philadelphia: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	557 (3.68)	363 (3.65)	436 (3.82)	478 (3.70)	458 (3.71)
2	503 (3.32)	344 (3.45)	389 (3.40)	433 (3.35)	417 (3.37)
3	444 (2.93)	311 (3.13)	328 (2.87)	381 (2.95)	366 (2.96)
4	429 (2.84)	287 (2.89)	287 (2.51)	364 (2.81)	342 (2.77)
5	388 (2.57)	252 (2.53)	240 (2.10)	311 (2.41)	298 (2.41)
6	382 (2.53)	238 (2.39)	227 (1.98)	303 (2.34)	287 (2.32)
7	465 (3.07)	286 (2.87)	257 (2.25)	368 (2.84)	343 (2.78)
8	682 (4.51)	457 (4.59)	432 (3.78)	564 (4.36)	533 (4.31)
9	981 (6.49)	608 (6.11)	570 (4.99)	809 (6.26)	741 (6.00)
10	989 (6.54)	619 (6.22)	652 (5.70)	811 (6.27)	767 (6.21)
11	811 (5.36)	550 (5.52)	623 (5.45)	644 (4.98)	656 (5.31)
12	726 (4.80)	502 (5.05)	567 (4.96)	560 (4.34)	589 (4.77)
13	628 (4.15)	440 (4.42)	509 (4.46)	486 (3.76)	516 (4.17)
14	652 (4.31)	452 (4.54)	538 (4.71)	512 (3.97)	538 (4.36)
15	665 (4.40)	489 (4.91)	593 (5.19)	541 (4.18)	572 (4.63)
16	667 (4.41)	488 (4.90)	596 (5.21)	562 (4.35)	578 (4.68)
17	763 (5.04)	490 (4.92)	566 (4.96)	650 (5.03)	617 (4.99)
18	682 (4.51)	431 (4.33)	524 (4.58)	608 (4.70)	561 (4.54)
19	707 (4.68)	403 (4.05)	488 (4.27)	653 (5.05)	562 (4.55)
20	672 (4.44)	407 (4.09)	544 (4.76)	675 (5.22)	574 (4.65)
21	574 (3.80)	355 (3.57)	533 (4.66)	550 (4.26)	503 (4.07)
22	575 (3.80)	383 (3.85)	527 (4.61)	557 (4.31)	511 (4.14)
23	600 (3.96)	412 (4.14)	522 (4.57)	561 (4.34)	524 (4.24)
24	582 (3.85)	387 (3.89)	479 (4.19)	545 (4.21)	498 (4.03)

Philadelphia: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	553 (3.80)	360 (3.83)	433 (4.07)	472 (3.85)	454 (3.88)
2	505 (3.48)	347 (3.70)	390 (3.66)	435 (3.55)	419 (3.58)
3	446 (3.07)	314 (3.35)	329 (3.09)	383 (3.12)	368 (3.14)
4	432 (2.97)	290 (3.09)	287 (2.70)	366 (2.98)	343 (2.94)
5	390 (2.69)	253 (2.70)	240 (2.25)	312 (2.55)	298 (2.55)
6	373 (2.57)	238 (2.54)	226 (2.12)	298 (2.43)	283 (2.42)
7	420 (2.89)	275 (2.93)	251 (2.35)	339 (2.76)	321 (2.74)
8	659 (4.54)	413 (4.40)	399 (3.75)	510 (4.16)	495 (4.23)
9	884 (6.08)	516 (5.50)	489 (4.59)	697 (5.69)	646 (5.52)
10	883 (6.08)	544 (5.80)	558 (5.23)	718 (5.86)	675 (5.77)
11	780 (5.37)	524 (5.58)	545 (5.11)	628 (5.12)	619 (5.29)
12	695 (4.78)	470 (5.01)	491 (4.61)	548 (4.47)	550 (4.71)
13	730 (5.03)	494 (5.27)	507 (4.76)	590 (4.82)	580 (4.96)
14	642 (4.42)	450 (4.80)	480 (4.50)	530 (4.32)	525 (4.49)
15	592 (4.08)	425 (4.53)	469 (4.40)	479 (3.91)	491 (4.20)
16	599 (4.13)	419 (4.46)	489 (4.59)	484 (3.95)	497 (4.25)
17	583 (4.01)	391 (4.16)	483 (4.53)	463 (3.78)	479 (4.10)
18	646 (4.44)	409 (4.36)	560 (5.25)	545 (4.45)	540 (4.61)
19	740 (5.09)	404 (4.30)	540 (5.06)	659 (5.37)	585 (5.00)
20	638 (4.39)	363 (3.87)	495 (4.64)	607 (4.95)	526 (4.49)
21	607 (4.18)	357 (3.80)	504 (4.73)	585 (4.78)	513 (4.39)
22	574 (3.95)	373 (3.98)	522 (4.90)	557 (4.55)	507 (4.33)
23	596 (4.11)	391 (4.17)	510 (4.79)	542 (4.42)	510 (4.36)
24	559 (3.85)	364 (3.87)	460 (4.31)	509 (4.15)	473 (4.04)

Philadelphia: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	553 (3.01)	359 (3.06)	433 (3.18)	473 (3.09)	454 (3.08)
2	522 (2.84)	345 (2.94)	389 (2.86)	439 (2.87)	423 (2.87)
3	445 (2.42)	315 (2.68)	334 (2.46)	382 (2.49)	369 (2.50)
4	426 (2.32)	288 (2.45)	291 (2.14)	360 (2.35)	341 (2.31)
5	386 (2.10)	253 (2.15)	245 (1.81)	308 (2.01)	298 (2.02)
6	378 (2.05)	245 (2.09)	236 (1.74)	306 (2.00)	291 (1.97)
7	654 (3.56)	363 (3.09)	292 (2.15)	519 (3.39)	456 (3.09)
8	1107 (6.02)	716 (6.10)	681 (5.01)	890 (5.81)	848 (5.75)
9	1427 (7.76)	831 (7.08)	836 (6.15)	1103 (7.20)	1048 (7.11)
10	1172 (6.38)	753 (6.41)	793 (5.83)	915 (5.97)	907 (6.15)
11	1003 (5.46)	678 (5.78)	754 (5.55)	772 (5.04)	801 (5.43)
12	881 (4.79)	608 (5.18)	695 (5.11)	654 (4.27)	709 (4.81)
13	860 (4.67)	560 (4.77)	656 (4.82)	655 (4.28)	682 (4.62)
14	815 (4.43)	540 (4.60)	624 (4.59)	621 (4.05)	649 (4.40)
15	763 (4.15)	557 (4.75)	642 (4.72)	622 (4.06)	646 (4.38)
16	819 (4.45)	590 (5.02)	743 (5.47)	669 (4.37)	705 (4.78)
17	990 (5.39)	621 (5.29)	724 (5.32)	855 (5.58)	797 (5.40)
18	897 (4.88)	583 (4.97)	700 (5.15)	844 (5.51)	756 (5.13)
19	830 (4.51)	530 (4.52)	677 (4.98)	799 (5.22)	709 (4.81)
20	732 (3.98)	426 (3.63)	690 (5.08)	683 (4.46)	633 (4.29)
21	706 (3.84)	395 (3.36)	582 (4.28)	671 (4.38)	588 (3.99)
22	718 (3.90)	409 (3.49)	579 (4.26)	647 (4.22)	588 (3.99)
23	675 (3.67)	402 (3.42)	540 (3.97)	587 (3.83)	551 (3.73)
24	627 (3.41)	373 (3.18)	460 (3.38)	544 (3.55)	501 (3.39)

Philadelphia: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	561 (3.46)	377 (3.56)	459 (3.87)	480 (3.48)	469 (3.58)
2	513 (3.16)	358 (3.39)	402 (3.39)	438 (3.17)	427 (3.26)
3	454 (2.80)	324 (3.06)	337 (2.84)	385 (2.79)	375 (2.86)
4	437 (2.69)	300 (2.84)	294 (2.48)	367 (2.66)	349 (2.66)
5	391 (2.41)	260 (2.46)	246 (2.08)	310 (2.25)	302 (2.30)
6	373 (2.30)	244 (2.31)	232 (1.96)	297 (2.15)	286 (2.18)
7	452 (2.78)	288 (2.73)	259 (2.19)	362 (2.62)	340 (2.59)
8	844 (5.20)	522 (4.93)	460 (3.88)	684 (4.96)	627 (4.78)
9	1110 (6.83)	628 (5.94)	572 (4.82)	889 (6.44)	798 (6.09)
10	947 (5.83)	583 (5.51)	610 (5.14)	774 (5.61)	727 (5.55)
11	780 (4.80)	540 (5.11)	586 (4.94)	633 (4.59)	634 (4.84)
12	720 (4.43)	509 (4.81)	549 (4.63)	580 (4.21)	589 (4.49)
13	673 (4.14)	489 (4.63)	554 (4.67)	546 (3.95)	565 (4.31)
14	651 (4.01)	460 (4.35)	529 (4.46)	522 (3.78)	540 (4.12)
15	708 (4.36)	510 (4.83)	563 (4.75)	575 (4.17)	589 (4.49)
16	853 (5.25)	564 (5.34)	589 (4.96)	689 (5.00)	673 (5.14)
17	856 (5.27)	547 (5.17)	598 (5.04)	713 (5.17)	678 (5.17)
18	900 (5.54)	531 (5.02)	610 (5.14)	791 (5.73)	707 (5.40)
19	882 (5.43)	482 (4.56)	575 (4.85)	798 (5.78)	684 (5.21)
20	720 (4.43)	441 (4.17)	614 (5.18)	693 (5.02)	617 (4.71)
21	643 (3.96)	400 (3.79)	589 (4.96)	612 (4.43)	561 (4.28)
22	607 (3.73)	416 (3.94)	587 (4.95)	591 (4.28)	550 (4.20)
23	594 (3.65)	412 (3.89)	543 (4.58)	549 (3.98)	524 (4.00)
24	577 (3.55)	387 (3.66)	503 (4.24)	521 (3.78)	497 (3.79)

Philadelphia: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	552 (3.81)	363 (3.79)	436 (4.04)	471 (3.83)	455 (3.86)
2	505 (3.49)	349 (3.65)	392 (3.62)	433 (3.52)	419 (3.56)
3	445 (3.08)	316 (3.30)	331 (3.07)	381 (3.10)	368 (3.13)
4	431 (2.98)	292 (3.06)	290 (2.68)	364 (2.96)	344 (2.92)
5	389 (2.69)	255 (2.67)	242 (2.25)	310 (2.52)	299 (2.54)
6	380 (2.63)	243 (2.54)	230 (2.13)	303 (2.47)	289 (2.45)
7	431 (2.98)	276 (2.89)	252 (2.33)	346 (2.81)	326 (2.77)
8	740 (5.11)	472 (4.94)	427 (3.95)	593 (4.83)	557 (4.73)
9	921 (6.37)	543 (5.68)	512 (4.74)	726 (5.91)	675 (5.73)
10	883 (6.10)	546 (5.71)	560 (5.19)	716 (5.82)	676 (5.74)
11	724 (5.00)	523 (5.47)	591 (5.47)	591 (4.81)	607 (5.15)
12	657 (4.54)	475 (4.97)	537 (4.97)	523 (4.26)	548 (4.65)
13	639 (4.41)	461 (4.82)	506 (4.68)	520 (4.23)	531 (4.51)
14	564 (3.90)	407 (4.26)	476 (4.41)	453 (3.69)	475 (4.03)
15	546 (3.77)	424 (4.43)	477 (4.41)	458 (3.73)	476 (4.04)
16	555 (3.83)	422 (4.41)	477 (4.42)	467 (3.80)	480 (4.08)
17	625 (4.32)	429 (4.49)	487 (4.50)	516 (4.20)	514 (4.36)
18	731 (5.05)	437 (4.57)	515 (4.77)	622 (5.06)	576 (4.89)
19	737 (5.09)	430 (4.50)	518 (4.80)	678 (5.51)	590 (5.01)
20	676 (4.67)	390 (4.08)	523 (4.84)	643 (5.23)	558 (4.74)
21	613 (4.23)	368 (3.85)	529 (4.90)	583 (4.74)	523 (4.44)
22	580 (4.01)	380 (3.97)	515 (4.77)	560 (4.55)	509 (4.32)
23	577 (3.99)	389 (4.07)	510 (4.73)	525 (4.27)	500 (4.25)
24	570 (3.94)	373 (3.90)	470 (4.35)	513 (4.17)	481 (4.09)

Philadelphia: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	569 (3.65)	378 (3.75)	454 (4.02)	486 (3.69)	472 (3.77)
2	517 (3.32)	359 (3.56)	401 (3.55)	443 (3.37)	430 (3.43)
3	453 (2.91)	323 (3.20)	336 (2.98)	387 (2.94)	375 (2.99)
4	435 (2.79)	296 (2.93)	292 (2.59)	367 (2.79)	347 (2.77)
5	392 (2.52)	258 (2.56)	245 (2.17)	312 (2.37)	302 (2.41)
6	378 (2.42)	245 (2.42)	233 (2.07)	302 (2.29)	289 (2.31)
7	467 (3.00)	299 (2.96)	266 (2.35)	375 (2.85)	351 (2.80)
8	807 (5.19)	492 (4.88)	445 (3.94)	637 (4.84)	595 (4.75)
9	986 (6.33)	586 (5.81)	560 (4.96)	793 (6.03)	730 (5.83)
10	935 (6.00)	578 (5.72)	597 (5.29)	760 (5.77)	717 (5.72)
11	784 (5.04)	527 (5.22)	566 (5.01)	625 (4.75)	625 (4.99)
12	706 (4.53)	490 (4.85)	531 (4.70)	558 (4.24)	570 (4.56)
13	680 (4.37)	463 (4.59)	513 (4.54)	533 (4.05)	547 (4.37)
14	628 (4.03)	438 (4.34)	495 (4.38)	502 (3.82)	515 (4.12)
15	626 (4.02)	452 (4.48)	497 (4.40)	506 (3.84)	520 (4.15)
16	664 (4.26)	468 (4.64)	518 (4.59)	540 (4.10)	547 (4.37)
17	734 (4.71)	483 (4.79)	548 (4.85)	607 (4.62)	593 (4.73)
18	828 (5.32)	494 (4.89)	576 (5.10)	720 (5.47)	654 (5.22)
19	806 (5.18)	451 (4.47)	550 (4.87)	730 (5.55)	634 (5.06)
20	702 (4.51)	407 (4.03)	543 (4.80)	665 (5.05)	579 (4.62)
21	656 (4.21)	398 (3.94)	558 (4.94)	628 (4.77)	560 (4.47)
22	621 (3.99)	408 (4.04)	553 (4.89)	597 (4.53)	545 (4.35)
23	608 (3.91)	409 (4.05)	527 (4.67)	555 (4.22)	525 (4.19)
24	590 (3.79)	391 (3.88)	494 (4.37)	533 (4.05)	502 (4.01)

Phoenix: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1071 (5.00)	610 (5.08)	650 (4.80)	1179 (4.89)	877 (4.94)
2	971 (4.53)	536 (4.46)	568 (4.19)	1047 (4.34)	780 (4.39)
3	857 (4.01)	482 (4.02)	506 (3.74)	949 (3.93)	698 (3.93)
4	729 (3.40)	425 (3.54)	450 (3.32)	848 (3.52)	613 (3.45)
5	656 (3.06)	393 (3.27)	410 (3.02)	774 (3.21)	558 (3.14)
6	637 (2.97)	407 (3.39)	412 (3.04)	739 (3.06)	549 (3.09)
7	796 (3.72)	559 (4.66)	519 (3.83)	891 (3.70)	691 (3.89)
8	1361 (6.36)	770 (6.41)	712 (5.25)	1421 (5.89)	1065 (6.00)
9	1683 (7.86)	704 (5.87)	695 (5.13)	1674 (6.94)	1188 (6.69)
10	1451 (6.78)	552 (4.60)	577 (4.26)	1380 (5.72)	989 (5.56)
11	1018 (4.76)	461 (3.84)	507 (3.74)	955 (3.96)	734 (4.13)
12	763 (3.56)	424 (3.54)	492 (3.63)	731 (3.03)	602 (3.39)
13	629 (2.94)	421 (3.50)	501 (3.70)	634 (2.63)	546 (3.07)
14	516 (2.41)	393 (3.27)	486 (3.59)	538 (2.23)	483 (2.72)
15	471 (2.20)	383 (3.19)	485 (3.58)	506 (2.10)	461 (2.60)
16	456 (2.13)	379 (3.15)	485 (3.58)	497 (2.06)	454 (2.56)
17	454 (2.12)	374 (3.11)	489 (3.61)	522 (2.17)	460 (2.59)
18	523 (2.44)	386 (3.22)	515 (3.80)	731 (3.03)	539 (3.04)
19	657 (3.07)	375 (3.12)	528 (3.89)	1075 (4.46)	659 (3.71)
20	901 (4.21)	399 (3.32)	615 (4.54)	1408 (5.84)	831 (4.68)
21	1123 (5.25)	506 (4.21)	716 (5.28)	1473 (6.11)	955 (5.37)
22	1227 (5.73)	652 (5.43)	767 (5.66)	1431 (5.94)	1019 (5.74)
23	1258 (5.88)	726 (6.05)	760 (5.61)	1395 (5.78)	1034 (5.82)
24	1201 (5.61)	688 (5.73)	709 (5.23)	1312 (5.44)	977 (5.50)

Phoenix: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1117 (5.42)	605 (5.05)	660 (4.96)	1238 (5.23)	905 (5.20)
2	1011 (4.91)	556 (4.65)	584 (4.39)	1106 (4.67)	814 (4.68)
3	889 (4.31)	521 (4.35)	532 (3.99)	1007 (4.25)	737 (4.24)
4	757 (3.68)	482 (4.03)	487 (3.66)	911 (3.85)	659 (3.79)
5	663 (3.22)	453 (3.78)	447 (3.36)	819 (3.46)	596 (3.43)
6	625 (3.03)	464 (3.88)	457 (3.44)	772 (3.26)	580 (3.33)
7	768 (3.73)	569 (4.75)	512 (3.85)	928 (3.92)	694 (3.99)
8	1467 (7.12)	807 (6.74)	673 (5.05)	1631 (6.89)	1144 (6.58)
9	1623 (7.88)	736 (6.15)	676 (5.08)	1713 (7.23)	1186 (6.82)
10	1342 (6.51)	595 (4.97)	581 (4.36)	1360 (5.74)	968 (5.57)
11	908 (4.41)	486 (4.06)	498 (3.74)	888 (3.75)	694 (3.99)
12	644 (3.12)	409 (3.42)	438 (3.29)	619 (2.62)	527 (3.03)
13	522 (2.53)	385 (3.21)	426 (3.20)	513 (2.17)	461 (2.65)
14	483 (2.34)	381 (3.19)	427 (3.21)	485 (2.05)	444 (2.55)
15	560 (2.72)	447 (3.73)	487 (3.66)	565 (2.38)	514 (2.96)
16	385 (1.87)	348 (2.91)	461 (3.46)	394 (1.66)	397 (2.28)
17	407 (1.97)	361 (3.01)	495 (3.72)	442 (1.87)	427 (2.45)
18	434 (2.11)	355 (2.97)	508 (3.82)	562 (2.37)	465 (2.67)
19	525 (2.55)	331 (2.76)	486 (3.65)	841 (3.55)	546 (3.14)
20	780 (3.78)	340 (2.84)	523 (3.93)	1240 (5.24)	721 (4.15)
21	1024 (4.97)	438 (3.66)	671 (5.04)	1416 (5.98)	888 (5.11)
22	1183 (5.74)	573 (4.78)	749 (5.63)	1438 (6.07)	986 (5.67)
23	1288 (6.25)	687 (5.74)	803 (6.03)	1475 (6.23)	1063 (6.11)
24	1201 (5.83)	643 (5.37)	732 (5.50)	1324 (5.59)	974 (5.60)

Phoenix: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1199 (5.62)	630 (5.26)	684 (5.04)	1347 (5.44)	965 (5.39)
2	1097 (5.14)	574 (4.79)	603 (4.45)	1218 (4.92)	873 (4.87)
3	963 (4.52)	531 (4.43)	547 (4.04)	1109 (4.48)	787 (4.40)
4	819 (3.84)	484 (4.04)	497 (3.67)	996 (4.02)	699 (3.90)
5	692 (3.25)	439 (3.67)	451 (3.32)	864 (3.49)	612 (3.42)
6	642 (3.01)	447 (3.73)	458 (3.38)	802 (3.24)	587 (3.28)
7	768 (3.60)	554 (4.63)	515 (3.80)	935 (3.77)	693 (3.87)
8	1362 (6.39)	763 (6.37)	666 (4.92)	1523 (6.15)	1078 (6.02)
9	1597 (7.49)	711 (5.93)	686 (5.06)	1696 (6.85)	1171 (6.54)
10	1387 (6.51)	584 (4.88)	596 (4.40)	1414 (5.71)	994 (5.55)
11	953 (4.47)	475 (3.97)	510 (3.77)	946 (3.82)	721 (4.02)
12	678 (3.18)	400 (3.34)	452 (3.33)	670 (2.70)	550 (3.07)
13	551 (2.59)	379 (3.16)	441 (3.25)	557 (2.25)	482 (2.69)
14	496 (2.33)	372 (3.10)	441 (3.25)	510 (2.06)	455 (2.54)
15	553 (2.59)	421 (3.52)	488 (3.60)	574 (2.32)	509 (2.84)
16	404 (1.89)	345 (2.88)	464 (3.42)	427 (1.72)	410 (2.29)
17	433 (2.03)	360 (3.01)	493 (3.63)	486 (1.96)	443 (2.48)
18	459 (2.15)	353 (2.95)	505 (3.73)	616 (2.49)	484 (2.70)
19	545 (2.56)	329 (2.74)	491 (3.62)	875 (3.53)	561 (3.13)
20	775 (3.64)	343 (2.86)	542 (4.00)	1236 (4.99)	725 (4.05)
21	1035 (4.86)	455 (3.80)	693 (5.12)	1428 (5.77)	904 (5.05)
22	1263 (5.93)	623 (5.20)	769 (5.68)	1534 (6.19)	1047 (5.85)
23	1360 (6.38)	725 (6.05)	812 (5.99)	1563 (6.31)	1115 (6.23)
24	1287 (6.04)	683 (5.70)	751 (5.54)	1443 (5.82)	1040 (5.81)

Phoenix: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1107 (5.40)	623 (5.28)	661 (5.01)	1241 (5.26)	908 (5.26)
2	1003 (4.89)	561 (4.75)	589 (4.47)	1103 (4.67)	814 (4.71)
3	886 (4.32)	517 (4.37)	535 (4.05)	998 (4.23)	734 (4.25)
4	754 (3.68)	460 (3.90)	475 (3.60)	897 (3.80)	646 (3.74)
5	669 (3.26)	424 (3.59)	431 (3.26)	813 (3.44)	584 (3.38)
6	638 (3.11)	430 (3.64)	424 (3.22)	766 (3.24)	564 (3.27)
7	804 (3.92)	575 (4.87)	522 (3.96)	936 (3.96)	709 (4.10)
8	1148 (5.61)	707 (5.99)	641 (4.86)	1258 (5.33)	938 (5.43)
9	1505 (7.35)	665 (5.63)	645 (4.89)	1557 (6.59)	1092 (6.32)
10	1355 (6.62)	544 (4.60)	551 (4.18)	1332 (5.64)	945 (5.47)
11	927 (4.53)	445 (3.77)	478 (3.63)	890 (3.77)	685 (3.96)
12	664 (3.24)	379 (3.20)	428 (3.25)	637 (2.70)	527 (3.05)
13	572 (2.79)	388 (3.28)	443 (3.36)	575 (2.43)	494 (2.86)
14	465 (2.27)	362 (3.06)	434 (3.29)	485 (2.05)	437 (2.53)
15	482 (2.35)	396 (3.35)	478 (3.62)	514 (2.18)	468 (2.71)
16	422 (2.06)	362 (3.07)	463 (3.51)	456 (1.93)	426 (2.47)
17	435 (2.12)	374 (3.17)	495 (3.75)	497 (2.10)	451 (2.61)
18	519 (2.54)	392 (3.32)	523 (3.96)	720 (3.05)	539 (3.12)
19	572 (2.79)	344 (2.91)	478 (3.62)	944 (4.00)	585 (3.39)
20	816 (3.98)	349 (2.96)	524 (3.97)	1318 (5.58)	753 (4.36)
21	1108 (5.41)	493 (4.17)	712 (5.40)	1496 (6.34)	953 (5.52)
22	1199 (5.85)	631 (5.34)	774 (5.87)	1437 (6.08)	1010 (5.85)
23	1226 (5.99)	706 (5.98)	771 (5.85)	1394 (5.90)	1024 (5.93)
24	1211 (5.91)	687 (5.81)	718 (5.44)	1347 (5.70)	990 (5.73)

Phoenix: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1165 (5.34)	637 (5.22)	666 (4.86)	1299 (5.20)	941 (5.18)
2	1061 (4.86)	569 (4.66)	592 (4.32)	1160 (4.65)	845 (4.65)
3	925 (4.24)	512 (4.20)	530 (3.87)	1041 (4.17)	752 (4.14)
4	758 (3.47)	443 (3.63)	468 (3.41)	898 (3.60)	642 (3.53)
5	676 (3.10)	410 (3.36)	426 (3.11)	815 (3.27)	582 (3.20)
6	654 (3.00)	430 (3.52)	437 (3.19)	777 (3.12)	575 (3.16)
7	820 (3.76)	571 (4.68)	522 (3.80)	940 (3.77)	713 (3.92)
8	1309 (6.00)	743 (6.09)	663 (4.83)	1399 (5.61)	1028 (5.66)
9	1625 (7.45)	688 (5.64)	667 (4.86)	1655 (6.63)	1157 (6.37)
10	1426 (6.54)	558 (4.57)	584 (4.26)	1390 (5.57)	988 (5.44)
11	1022 (4.68)	483 (3.96)	539 (3.93)	981 (3.93)	755 (4.16)
12	810 (3.71)	454 (3.72)	512 (3.74)	789 (3.16)	641 (3.53)
13	631 (2.89)	421 (3.45)	493 (3.60)	643 (2.58)	547 (3.01)
14	486 (2.22)	376 (3.08)	469 (3.42)	512 (2.05)	461 (2.54)
15	455 (2.09)	382 (3.13)	494 (3.60)	492 (1.97)	456 (2.51)
16	439 (2.01)	382 (3.13)	511 (3.73)	482 (1.93)	454 (2.50)
17	452 (2.07)	380 (3.11)	506 (3.69)	525 (2.10)	466 (2.56)
18	483 (2.21)	380 (3.12)	533 (3.88)	665 (2.66)	516 (2.84)
19	606 (2.78)	362 (2.97)	520 (3.80)	1003 (4.02)	624 (3.43)
20	918 (4.20)	393 (3.22)	587 (4.28)	1457 (5.84)	839 (4.62)
21	1153 (5.28)	504 (4.13)	713 (5.20)	1539 (6.17)	977 (5.38)
22	1309 (6.00)	674 (5.52)	792 (5.78)	1546 (6.19)	1080 (5.94)
23	1355 (6.21)	747 (6.12)	770 (5.62)	1525 (6.11)	1099 (6.05)
24	1289 (5.90)	708 (5.80)	719 (5.24)	1425 (5.71)	1035 (5.69)

Phoenix: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1080 (5.05)	599 (5.03)	649 (4.74)	1181 (4.92)	877 (4.94)
2	977 (4.57)	528 (4.43)	567 (4.15)	1051 (4.38)	780 (4.40)
3	866 (4.05)	478 (4.01)	510 (3.72)	958 (3.99)	703 (3.96)
4	743 (3.48)	427 (3.58)	457 (3.34)	867 (3.61)	623 (3.51)
5	664 (3.11)	396 (3.32)	418 (3.05)	786 (3.28)	566 (3.19)
6	643 (3.01)	408 (3.42)	416 (3.04)	750 (3.12)	554 (3.12)
7	804 (3.76)	562 (4.71)	527 (3.85)	903 (3.76)	699 (3.94)
8	1360 (6.36)	777 (6.52)	730 (5.34)	1422 (5.92)	1071 (6.04)
9	1657 (7.75)	707 (5.93)	709 (5.18)	1649 (6.87)	1179 (6.64)
10	1450 (6.79)	561 (4.71)	592 (4.33)	1381 (5.75)	995 (5.61)
11	1005 (4.70)	464 (3.90)	522 (3.82)	945 (3.94)	733 (4.13)
12	747 (3.49)	426 (3.57)	507 (3.70)	717 (2.99)	599 (3.37)
13	618 (2.89)	418 (3.51)	512 (3.74)	619 (2.58)	542 (3.05)
14	517 (2.42)	394 (3.30)	496 (3.63)	537 (2.24)	486 (2.74)
15	486 (2.27)	386 (3.24)	488 (3.57)	517 (2.15)	469 (2.65)
16	450 (2.11)	372 (3.12)	489 (3.57)	486 (2.02)	449 (2.53)
17	459 (2.15)	373 (3.13)	498 (3.64)	524 (2.18)	464 (2.61)
18	528 (2.47)	380 (3.19)	512 (3.74)	733 (3.05)	539 (3.04)
19	661 (3.09)	368 (3.09)	525 (3.84)	1068 (4.45)	656 (3.70)
20	861 (4.03)	385 (3.23)	613 (4.48)	1339 (5.57)	800 (4.51)
21	1092 (5.11)	492 (4.13)	717 (5.24)	1435 (5.97)	934 (5.27)
22	1233 (5.77)	632 (5.30)	751 (5.49)	1436 (5.98)	1013 (5.71)
23	1269 (5.94)	715 (6.00)	770 (5.63)	1404 (5.85)	1039 (5.86)
24	1201 (5.62)	670 (5.63)	710 (5.18)	1304 (5.43)	971 (5.47)

Phoenix: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1031 (4.85)	595 (5.02)	642 (4.77)	1118 (4.73)	846 (4.82)
2	928 (4.37)	518 (4.37)	554 (4.12)	987 (4.17)	746 (4.25)
3	820 (3.86)	464 (3.92)	492 (3.66)	896 (3.79)	668 (3.81)
4	695 (3.27)	407 (3.43)	435 (3.24)	799 (3.38)	584 (3.33)
5	628 (2.95)	377 (3.18)	397 (2.95)	730 (3.09)	533 (3.04)
6	609 (2.86)	397 (3.34)	413 (3.07)	696 (2.95)	528 (3.01)
7	722 (3.39)	528 (4.45)	508 (3.77)	800 (3.38)	639 (3.64)
8	1362 (6.40)	763 (6.43)	708 (5.26)	1399 (5.92)	1057 (6.02)
9	1741 (8.19)	717 (6.05)	704 (5.23)	1702 (7.20)	1214 (6.92)
10	1453 (6.83)	542 (4.57)	562 (4.17)	1357 (5.74)	977 (5.57)
11	1041 (4.90)	453 (3.82)	484 (3.60)	960 (4.06)	734 (4.18)
12	780 (3.67)	423 (3.57)	483 (3.59)	738 (3.12)	606 (3.45)
13	648 (3.05)	423 (3.57)	497 (3.69)	645 (2.73)	553 (3.15)
14	528 (2.48)	396 (3.34)	487 (3.62)	544 (2.30)	489 (2.79)
15	470 (2.21)	387 (3.26)	503 (3.74)	498 (2.11)	465 (2.65)
16	464 (2.18)	380 (3.21)	484 (3.60)	501 (2.12)	458 (2.61)
17	458 (2.15)	370 (3.12)	479 (3.56)	520 (2.20)	457 (2.60)
18	551 (2.59)	396 (3.34)	525 (3.90)	771 (3.26)	561 (3.20)
19	696 (3.27)	385 (3.25)	546 (4.06)	1117 (4.72)	687 (3.91)
20	960 (4.51)	416 (3.51)	631 (4.69)	1459 (6.17)	867 (4.94)
21	1135 (5.34)	515 (4.34)	724 (5.38)	1461 (6.18)	959 (5.46)
22	1168 (5.49)	638 (5.38)	767 (5.70)	1350 (5.71)	981 (5.59)
23	1196 (5.63)	693 (5.84)	729 (5.42)	1315 (5.56)	983 (5.60)
24	1180 (5.55)	678 (5.72)	704 (5.23)	1273 (5.39)	958 (5.46)

Phoenix: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	979 (4.75)	605 (5.20)	609 (4.94)	1053 (4.65)	811 (4.83)
2	904 (4.39)	525 (4.51)	523 (4.24)	947 (4.19)	724 (4.31)
3	793 (3.85)	459 (3.95)	452 (3.66)	848 (3.75)	638 (3.80)
4	689 (3.34)	403 (3.46)	400 (3.24)	769 (3.40)	565 (3.36)
5	630 (3.06)	373 (3.20)	365 (2.96)	709 (3.13)	519 (3.09)
6	619 (3.00)	387 (3.32)	365 (2.96)	681 (3.01)	513 (3.05)
7	752 (3.65)	533 (4.58)	467 (3.79)	808 (3.57)	640 (3.81)
8	1497 (7.27)	780 (6.70)	673 (5.46)	1514 (6.69)	1115 (6.64)
9	1778 (8.63)	695 (5.97)	657 (5.33)	1717 (7.59)	1210 (7.20)
10	1413 (6.86)	512 (4.40)	526 (4.26)	1297 (5.73)	936 (5.57)
11	927 (4.50)	405 (3.48)	436 (3.54)	839 (3.71)	651 (3.88)
12	663 (3.22)	374 (3.21)	430 (3.49)	619 (2.74)	521 (3.10)
13	592 (2.87)	402 (3.46)	457 (3.70)	584 (2.58)	509 (3.03)
14	464 (2.25)	367 (3.15)	434 (3.52)	476 (2.10)	435 (2.59)
15	475 (2.31)	375 (3.22)	414 (3.35)	503 (2.22)	442 (2.63)
16	411 (1.99)	340 (2.92)	401 (3.25)	441 (1.95)	398 (2.37)
17	393 (1.91)	329 (2.83)	400 (3.24)	447 (1.97)	392 (2.34)
18	576 (2.80)	401 (3.44)	468 (3.80)	836 (3.69)	571 (3.40)
19	625 (3.04)	363 (3.12)	471 (3.82)	1032 (4.56)	624 (3.71)
20	993 (4.82)	422 (3.63)	575 (4.66)	1499 (6.62)	873 (5.20)
21	1065 (5.17)	494 (4.25)	655 (5.31)	1344 (5.94)	890 (5.30)
22	1130 (5.48)	676 (5.81)	759 (6.16)	1272 (5.62)	959 (5.71)
23	1147 (5.57)	736 (6.32)	732 (5.94)	1236 (5.46)	962 (5.73)
24	1082 (5.25)	682 (5.86)	661 (5.36)	1160 (5.13)	896 (5.34)

Phoenix: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1067 (5.03)	593 (4.96)	649 (4.72)	1176 (4.90)	871 (4.91)
2	970 (4.58)	528 (4.42)	572 (4.16)	1050 (4.37)	780 (4.40)
3	863 (4.07)	482 (4.03)	515 (3.75)	963 (4.01)	706 (3.98)
4	740 (3.49)	433 (3.63)	465 (3.38)	872 (3.63)	628 (3.54)
5	664 (3.13)	404 (3.39)	425 (3.09)	796 (3.32)	572 (3.23)
6	639 (3.01)	417 (3.49)	427 (3.10)	756 (3.15)	560 (3.16)
7	769 (3.63)	550 (4.60)	516 (3.76)	881 (3.67)	679 (3.83)
8	1389 (6.55)	778 (6.51)	706 (5.14)	1473 (6.14)	1086 (6.13)
9	1686 (7.95)	714 (5.98)	693 (5.04)	1704 (7.10)	1198 (6.76)
10	1443 (6.80)	564 (4.72)	592 (4.30)	1399 (5.83)	998 (5.63)
11	1010 (4.76)	473 (3.96)	528 (3.84)	963 (4.01)	743 (4.19)
12	764 (3.60)	437 (3.66)	507 (3.69)	739 (3.08)	611 (3.45)
13	622 (2.93)	423 (3.54)	504 (3.67)	627 (2.61)	544 (3.07)
14	503 (2.37)	388 (3.25)	487 (3.54)	522 (2.17)	475 (2.68)
15	487 (2.30)	400 (3.35)	513 (3.73)	518 (2.16)	480 (2.71)
16	477 (2.25)	393 (3.29)	505 (3.67)	517 (2.15)	473 (2.67)
17	455 (2.14)	375 (3.14)	502 (3.65)	520 (2.16)	463 (2.61)
18	507 (2.39)	375 (3.14)	514 (3.74)	700 (2.92)	524 (2.96)
19	652 (3.08)	367 (3.07)	532 (3.87)	1053 (4.39)	652 (3.68)
20	861 (4.06)	401 (3.36)	653 (4.75)	1336 (5.56)	813 (4.59)
21	1069 (5.04)	490 (4.10)	723 (5.26)	1413 (5.89)	924 (5.21)
22	1170 (5.52)	617 (5.17)	761 (5.54)	1379 (5.74)	982 (5.54)
23	1220 (5.76)	686 (5.74)	749 (5.45)	1365 (5.68)	1005 (5.67)
24	1177 (5.55)	659 (5.52)	713 (5.18)	1288 (5.36)	959 (5.41)

Phoenix: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1254 (5.62)	713 (5.52)	758 (5.21)	1400 (5.48)	1031 (5.48)
2	1149 (5.15)	619 (4.79)	619 (4.26)	1267 (4.96)	913 (4.85)
3	973 (4.36)	553 (4.28)	558 (3.84)	1105 (4.32)	797 (4.23)
4	810 (3.63)	482 (3.73)	491 (3.38)	960 (3.76)	685 (3.64)
5	678 (3.04)	424 (3.29)	436 (3.00)	816 (3.19)	588 (3.13)
6	633 (2.84)	430 (3.33)	436 (3.00)	754 (2.95)	563 (2.99)
7	806 (3.61)	595 (4.61)	565 (3.89)	926 (3.63)	723 (3.84)
8	1158 (5.19)	780 (6.04)	805 (5.54)	1253 (4.90)	999 (5.31)
9	1445 (6.48)	716 (5.54)	797 (5.49)	1487 (5.82)	1111 (5.90)
10	1425 (6.39)	609 (4.71)	678 (4.67)	1385 (5.42)	1023 (5.44)
11	1065 (4.78)	529 (4.09)	592 (4.07)	1015 (3.97)	799 (4.25)
12	776 (3.48)	428 (3.31)	458 (3.15)	753 (2.95)	603 (3.20)
13	641 (2.88)	463 (3.58)	575 (3.96)	649 (2.54)	582 (3.09)
14	521 (2.34)	430 (3.33)	565 (3.89)	544 (2.13)	515 (2.74)
15	472 (2.12)	397 (3.07)	507 (3.49)	504 (1.97)	470 (2.50)
16	500 (2.24)	407 (3.15)	508 (3.50)	544 (2.13)	490 (2.60)
17	537 (2.41)	440 (3.41)	577 (3.97)	624 (2.44)	545 (2.90)
18	484 (2.17)	379 (2.93)	530 (3.65)	665 (2.60)	515 (2.74)
19	582 (2.61)	347 (2.68)	497 (3.42)	960 (3.76)	597 (3.17)
20	952 (4.27)	364 (2.82)	488 (3.36)	1518 (5.94)	831 (4.42)
21	1166 (5.23)	490 (3.79)	674 (4.64)	1555 (6.08)	971 (5.16)
22	1390 (6.23)	813 (6.29)	995 (6.85)	1642 (6.43)	1210 (6.43)
23	1464 (6.57)	779 (6.03)	749 (5.15)	1649 (6.45)	1160 (6.16)
24	1416 (6.35)	731 (5.66)	672 (4.63)	1578 (6.18)	1099 (5.84)

Phoenix: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1096 (4.89)	622 (5.00)	665 (4.81)	1203 (4.77)	896 (4.85)
2	988 (4.41)	546 (4.40)	583 (4.22)	1065 (4.22)	795 (4.31)
3	866 (3.86)	485 (3.90)	508 (3.67)	957 (3.79)	704 (3.81)
4	739 (3.30)	429 (3.45)	452 (3.27)	860 (3.41)	620 (3.36)
5	666 (2.97)	398 (3.20)	411 (2.97)	787 (3.12)	565 (3.06)
6	653 (2.91)	425 (3.42)	431 (3.12)	760 (3.01)	567 (3.07)
7	901 (4.02)	612 (4.93)	554 (4.01)	1005 (3.99)	768 (4.16)
8	1522 (6.79)	831 (6.68)	782 (5.66)	1585 (6.28)	1179 (6.38)
9	1799 (8.03)	740 (5.96)	738 (5.34)	1784 (7.07)	1264 (6.85)
10	1501 (6.70)	563 (4.53)	567 (4.10)	1428 (5.66)	1013 (5.49)
11	1055 (4.71)	469 (3.77)	493 (3.57)	992 (3.93)	752 (4.07)
12	802 (3.58)	440 (3.54)	494 (3.57)	773 (3.06)	627 (3.39)
13	660 (2.95)	431 (3.47)	498 (3.60)	667 (2.65)	564 (3.05)
14	544 (2.43)	408 (3.28)	490 (3.55)	572 (2.27)	504 (2.73)
15	513 (2.29)	400 (3.22)	477 (3.45)	551 (2.18)	485 (2.63)
16	499 (2.23)	402 (3.24)	494 (3.57)	546 (2.16)	485 (2.63)
17	525 (2.34)	412 (3.32)	510 (3.69)	611 (2.42)	515 (2.79)
18	606 (2.70)	427 (3.44)	548 (3.97)	868 (3.44)	613 (3.32)
19	680 (3.04)	384 (3.09)	540 (3.91)	1114 (4.42)	680 (3.68)
20	868 (3.87)	387 (3.11)	601 (4.35)	1364 (5.41)	806 (4.36)
21	1157 (5.16)	501 (4.03)	686 (4.96)	1511 (5.99)	964 (5.22)
22	1285 (5.73)	679 (5.47)	792 (5.73)	1492 (5.91)	1062 (5.75)
23	1259 (5.62)	727 (5.85)	765 (5.53)	1397 (5.54)	1037 (5.61)
24	1221 (5.45)	707 (5.69)	742 (5.36)	1332 (5.28)	1000 (5.41)

Phoenix: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1082 (5.22)	620 (5.25)	666 (5.01)	1202 (5.10)	892 (5.14)
2	974 (4.70)	541 (4.58)	574 (4.32)	1060 (4.50)	787 (4.54)
3	859 (4.14)	488 (4.14)	511 (3.84)	959 (4.07)	704 (4.06)
4	735 (3.54)	435 (3.69)	457 (3.44)	865 (3.67)	623 (3.59)
5	658 (3.17)	403 (3.42)	416 (3.13)	788 (3.34)	566 (3.26)
6	632 (3.04)	412 (3.49)	413 (3.11)	746 (3.16)	551 (3.17)
7	719 (3.47)	527 (4.47)	496 (3.73)	828 (3.51)	642 (3.70)
8	1181 (5.69)	711 (6.02)	654 (4.92)	1265 (5.37)	952 (5.49)
9	1597 (7.70)	678 (5.75)	661 (4.98)	1614 (6.85)	1136 (6.55)
10	1428 (6.88)	560 (4.74)	581 (4.37)	1378 (5.84)	985 (5.68)
11	961 (4.63)	444 (3.77)	488 (3.67)	913 (3.87)	701 (4.04)
12	727 (3.51)	415 (3.52)	478 (3.60)	701 (2.97)	580 (3.34)
13	584 (2.81)	404 (3.43)	487 (3.66)	588 (2.50)	516 (2.97)
14	493 (2.38)	384 (3.25)	474 (3.57)	514 (2.18)	466 (2.69)
15	449 (2.16)	365 (3.10)	452 (3.40)	480 (2.04)	437 (2.52)
16	430 (2.07)	359 (3.04)	456 (3.43)	468 (1.99)	429 (2.47)
17	456 (2.20)	372 (3.15)	478 (3.60)	523 (2.22)	458 (2.64)
18	473 (2.28)	361 (3.06)	480 (3.61)	638 (2.71)	488 (2.82)
19	591 (2.85)	359 (3.05)	509 (3.83)	966 (4.10)	607 (3.50)
20	852 (4.10)	378 (3.20)	579 (4.36)	1350 (5.73)	791 (4.56)
21	1122 (5.41)	494 (4.18)	698 (5.25)	1488 (6.31)	951 (5.48)
22	1282 (6.18)	670 (5.68)	783 (5.89)	1507 (6.39)	1060 (6.11)
23	1268 (6.11)	732 (6.20)	780 (5.87)	1418 (6.02)	1049 (6.05)
24	1192 (5.75)	685 (5.80)	717 (5.40)	1314 (5.57)	977 (5.63)

Phoenix: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1088 (5.10)	613 (5.13)	645 (4.78)	1196 (4.98)	885 (5.00)
2	976 (4.58)	536 (4.49)	565 (4.19)	1052 (4.38)	782 (4.42)
3	859 (4.03)	483 (4.04)	505 (3.74)	950 (3.95)	699 (3.95)
4	729 (3.42)	423 (3.55)	446 (3.31)	847 (3.53)	611 (3.46)
5	656 (3.08)	392 (3.28)	406 (3.02)	775 (3.22)	557 (3.15)
6	640 (3.00)	408 (3.42)	409 (3.04)	743 (3.09)	550 (3.11)
7	765 (3.59)	548 (4.59)	517 (3.84)	861 (3.58)	673 (3.80)
8	1346 (6.31)	772 (6.47)	728 (5.40)	1405 (5.85)	1062 (6.00)
9	1704 (7.99)	715 (5.99)	717 (5.32)	1694 (7.05)	1206 (6.82)
10	1426 (6.69)	538 (4.51)	560 (4.15)	1356 (5.64)	969 (5.48)
11	973 (4.56)	443 (3.71)	491 (3.64)	912 (3.80)	704 (3.98)
12	727 (3.41)	407 (3.41)	484 (3.60)	694 (2.89)	578 (3.27)
13	604 (2.83)	408 (3.42)	497 (3.69)	609 (2.53)	529 (2.99)
14	515 (2.42)	391 (3.28)	480 (3.56)	540 (2.25)	482 (2.72)
15	458 (2.15)	374 (3.14)	475 (3.53)	494 (2.06)	451 (2.55)
16	429 (2.01)	360 (3.02)	468 (3.47)	467 (1.94)	431 (2.44)
17	451 (2.12)	371 (3.10)	482 (3.58)	520 (2.16)	456 (2.58)
18	537 (2.52)	397 (3.33)	533 (3.96)	756 (3.15)	556 (3.15)
19	638 (2.99)	376 (3.15)	539 (4.00)	1047 (4.36)	651 (3.68)
20	875 (4.10)	379 (3.18)	576 (4.27)	1380 (5.74)	803 (4.54)
21	1151 (5.40)	510 (4.27)	712 (5.28)	1506 (6.26)	970 (5.48)
22	1255 (5.88)	646 (5.42)	745 (5.53)	1460 (6.08)	1026 (5.80)
23	1301 (6.10)	756 (6.34)	800 (5.93)	1439 (5.99)	1073 (6.07)
24	1218 (5.71)	688 (5.76)	696 (5.17)	1327 (5.52)	982 (5.55)

Phoenix: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1051 (5.16)	597 (5.07)	637 (4.79)	1165 (5.03)	862 (5.03)
2	958 (4.70)	535 (4.55)	567 (4.26)	1041 (4.49)	775 (4.52)
3	853 (4.19)	489 (4.15)	512 (3.85)	951 (4.10)	701 (4.09)
4	730 (3.59)	436 (3.71)	459 (3.45)	859 (3.71)	621 (3.62)
5	655 (3.21)	404 (3.44)	418 (3.14)	783 (3.38)	565 (3.29)
6	631 (3.10)	414 (3.52)	414 (3.11)	742 (3.20)	550 (3.21)
7	720 (3.53)	530 (4.50)	498 (3.74)	825 (3.56)	643 (3.75)
8	1372 (6.74)	756 (6.42)	665 (5.00)	1470 (6.34)	1065 (6.21)
9	1374 (6.74)	628 (5.34)	651 (4.89)	1404 (6.06)	1013 (5.91)
10	1341 (6.58)	551 (4.68)	602 (4.52)	1293 (5.58)	946 (5.51)
11	1031 (5.06)	498 (4.23)	540 (4.06)	992 (4.28)	764 (4.46)
12	697 (3.42)	419 (3.56)	497 (3.74)	687 (2.97)	575 (3.35)
13	579 (2.84)	405 (3.44)	487 (3.66)	591 (2.55)	515 (3.00)
14	482 (2.36)	364 (3.10)	439 (3.30)	501 (2.16)	446 (2.60)
15	469 (2.30)	389 (3.31)	482 (3.62)	502 (2.17)	461 (2.69)
16	477 (2.34)	408 (3.47)	521 (3.92)	519 (2.24)	482 (2.81)
17	442 (2.17)	386 (3.28)	518 (3.89)	508 (2.19)	464 (2.70)
18	467 (2.29)	361 (3.07)	490 (3.69)	636 (2.74)	489 (2.85)
19	530 (2.60)	328 (2.78)	458 (3.44)	866 (3.74)	546 (3.18)
20	703 (3.45)	320 (2.72)	500 (3.76)	1166 (5.03)	673 (3.92)
21	1153 (5.66)	548 (4.66)	793 (5.96)	1513 (6.53)	1002 (5.84)
22	1264 (6.20)	641 (5.45)	741 (5.57)	1498 (6.47)	1036 (6.04)
23	1243 (6.10)	707 (6.01)	741 (5.57)	1393 (6.01)	1021 (5.95)
24	1150 (5.65)	653 (5.55)	677 (5.09)	1265 (5.46)	936 (5.46)

Phoenix: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1031 (4.55)	591 (4.75)	624 (4.57)	1133 (4.46)	845 (4.56)
2	945 (4.17)	526 (4.23)	554 (4.06)	1016 (4.00)	760 (4.10)
3	850 (3.75)	479 (3.85)	498 (3.65)	937 (3.68)	691 (3.72)
4	727 (3.21)	423 (3.40)	444 (3.25)	843 (3.31)	609 (3.28)
5	654 (2.88)	391 (3.14)	403 (2.96)	769 (3.02)	554 (2.99)
6	652 (2.88)	412 (3.31)	406 (2.98)	753 (2.96)	556 (3.00)
7	941 (4.15)	610 (4.90)	528 (3.87)	1036 (4.07)	778 (4.20)
8	1708 (7.53)	905 (7.28)	847 (6.20)	1759 (6.92)	1304 (7.03)
9	1927 (8.50)	800 (6.43)	800 (5.86)	1907 (7.50)	1357 (7.32)
10	1624 (7.16)	604 (4.86)	604 (4.43)	1534 (6.03)	1090 (5.88)
11	1128 (4.98)	495 (3.98)	508 (3.72)	1055 (4.15)	796 (4.29)
12	851 (3.75)	444 (3.57)	467 (3.42)	819 (3.22)	644 (3.48)
13	683 (3.01)	461 (3.71)	543 (3.98)	696 (2.74)	596 (3.21)
14	554 (2.44)	427 (3.43)	517 (3.79)	588 (2.31)	521 (2.81)
15	485 (2.14)	377 (3.03)	441 (3.23)	529 (2.08)	458 (2.47)
16	455 (2.01)	361 (2.90)	429 (3.15)	501 (1.97)	437 (2.35)
17	494 (2.18)	392 (3.15)	487 (3.57)	576 (2.27)	487 (2.63)
18	610 (2.69)	451 (3.62)	611 (4.48)	888 (3.49)	641 (3.46)
19	687 (3.03)	378 (3.04)	511 (3.74)	1130 (4.44)	677 (3.65)
20	880 (3.88)	381 (3.06)	574 (4.21)	1384 (5.44)	805 (4.34)
21	1164 (5.14)	527 (4.24)	737 (5.40)	1517 (5.97)	987 (5.32)
22	1214 (5.36)	637 (5.12)	736 (5.39)	1415 (5.56)	1000 (5.40)
23	1228 (5.42)	692 (5.56)	695 (5.09)	1361 (5.35)	994 (5.36)
24	1177 (5.19)	676 (5.43)	684 (5.01)	1285 (5.05)	955 (5.15)

Phoenix: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1040 (5.26)	596 (5.27)	634 (4.96)	1146 (5.12)	854 (5.15)
2	949 (4.80)	528 (4.66)	557 (4.36)	1025 (4.58)	764 (4.61)
3	840 (4.24)	479 (4.23)	501 (3.92)	930 (4.16)	687 (4.15)
4	721 (3.64)	427 (3.77)	449 (3.51)	841 (3.76)	609 (3.68)
5	648 (3.28)	402 (3.55)	420 (3.29)	768 (3.43)	560 (3.38)
6	626 (3.16)	412 (3.64)	416 (3.26)	730 (3.26)	546 (3.30)
7	720 (3.64)	528 (4.66)	496 (3.88)	816 (3.65)	640 (3.86)
8	1056 (5.34)	673 (5.94)	628 (4.92)	1128 (5.04)	871 (5.26)
9	1455 (7.35)	642 (5.67)	644 (5.04)	1467 (6.56)	1051 (6.34)
10	1340 (6.77)	511 (4.51)	527 (4.12)	1281 (5.72)	913 (5.51)
11	954 (4.82)	430 (3.80)	457 (3.58)	896 (4.00)	683 (4.13)
12	741 (3.75)	410 (3.62)	462 (3.62)	710 (3.17)	580 (3.50)
13	556 (2.81)	374 (3.30)	445 (3.48)	557 (2.49)	483 (2.92)
14	484 (2.44)	364 (3.21)	432 (3.38)	503 (2.25)	446 (2.69)
15	454 (2.29)	372 (3.28)	461 (3.60)	483 (2.16)	442 (2.67)
16	386 (1.95)	347 (3.06)	469 (3.67)	416 (1.86)	405 (2.44)
17	368 (1.86)	329 (2.90)	452 (3.54)	416 (1.86)	391 (2.36)
18	446 (2.25)	348 (3.07)	469 (3.67)	595 (2.66)	465 (2.81)
19	559 (2.83)	349 (3.08)	490 (3.84)	912 (4.07)	578 (3.49)
20	841 (4.25)	379 (3.34)	582 (4.56)	1351 (6.04)	789 (4.77)
21	1051 (5.31)	483 (4.26)	715 (5.59)	1402 (6.27)	913 (5.51)
22	1170 (5.92)	594 (5.24)	688 (5.38)	1377 (6.15)	957 (5.78)
23	1194 (6.04)	682 (6.02)	708 (5.54)	1333 (5.96)	979 (5.91)
24	1183 (5.98)	670 (5.91)	678 (5.31)	1295 (5.79)	956 (5.77)

Phoenix: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1075 (5.06)	622 (5.26)	658 (5.02)	1179 (4.93)	883 (5.04)
2	980 (4.61)	538 (4.56)	559 (4.26)	1053 (4.41)	782 (4.47)
3	871 (4.10)	488 (4.13)	503 (3.84)	959 (4.01)	705 (4.03)
4	721 (3.39)	420 (3.56)	443 (3.38)	835 (3.49)	605 (3.45)
5	643 (3.03)	386 (3.27)	401 (3.06)	756 (3.16)	546 (3.12)
6	639 (3.01)	404 (3.42)	403 (3.07)	736 (3.08)	545 (3.11)
7	841 (3.96)	570 (4.83)	513 (3.92)	931 (3.90)	714 (4.08)
8	1369 (6.45)	753 (6.37)	679 (5.18)	1422 (5.95)	1055 (6.02)
9	1632 (7.68)	677 (5.73)	668 (5.10)	1619 (6.77)	1148 (6.55)
10	1416 (6.67)	532 (4.51)	556 (4.24)	1342 (5.62)	960 (5.48)
11	988 (4.65)	439 (3.72)	478 (3.65)	923 (3.86)	706 (4.03)
12	742 (3.49)	395 (3.35)	448 (3.42)	707 (2.96)	573 (3.27)
13	636 (2.99)	413 (3.50)	481 (3.67)	641 (2.68)	543 (3.10)
14	531 (2.50)	405 (3.43)	496 (3.78)	557 (2.33)	497 (2.84)
15	472 (2.22)	372 (3.15)	450 (3.44)	510 (2.14)	451 (2.58)
16	426 (2.01)	358 (3.03)	459 (3.50)	468 (1.96)	428 (2.44)
17	405 (1.91)	346 (2.93)	459 (3.50)	465 (1.94)	419 (2.39)
18	489 (2.30)	355 (3.00)	448 (3.42)	683 (2.86)	494 (2.82)
19	634 (2.98)	365 (3.09)	496 (3.78)	1050 (4.39)	637 (3.64)
20	837 (3.94)	362 (3.07)	542 (4.13)	1353 (5.66)	774 (4.42)
21	1163 (5.48)	491 (4.15)	687 (5.24)	1533 (6.42)	969 (5.53)
22	1293 (6.09)	698 (5.91)	820 (6.26)	1502 (6.29)	1078 (6.16)
23	1254 (5.91)	732 (6.20)	756 (5.77)	1387 (5.80)	1032 (5.89)
24	1183 (5.57)	690 (5.84)	702 (5.35)	1288 (5.39)	965 (5.51)

Phoenix: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1078 (5.03)	614 (4.95)	651 (4.56)	1197 (4.95)	885 (4.90)
2	955 (4.46)	537 (4.33)	571 (4.00)	1038 (4.30)	775 (4.29)
3	850 (3.97)	488 (3.94)	513 (3.59)	945 (3.91)	699 (3.87)
4	726 (3.39)	433 (3.49)	457 (3.20)	852 (3.53)	617 (3.42)
5	652 (3.04)	399 (3.22)	415 (2.91)	776 (3.21)	561 (3.10)
6	630 (2.94)	409 (3.30)	413 (2.89)	737 (3.05)	547 (3.03)
7	770 (3.60)	560 (4.51)	529 (3.71)	872 (3.61)	683 (3.78)
8	1296 (6.05)	775 (6.24)	730 (5.12)	1369 (5.67)	1042 (5.77)
9	1786 (8.34)	741 (5.97)	714 (5.00)	1782 (7.38)	1254 (6.95)
10	1540 (7.19)	621 (5.01)	656 (4.60)	1461 (6.05)	1068 (5.92)
11	1016 (4.74)	513 (4.13)	601 (4.21)	954 (3.95)	770 (4.26)
12	743 (3.47)	455 (3.67)	557 (3.90)	717 (2.97)	618 (3.42)
13	573 (2.67)	409 (3.30)	513 (3.59)	579 (2.40)	518 (2.87)
14	513 (2.40)	424 (3.42)	554 (3.88)	539 (2.23)	508 (2.81)
15	502 (2.35)	457 (3.68)	634 (4.45)	539 (2.23)	533 (2.95)
16	486 (2.27)	443 (3.57)	617 (4.32)	532 (2.20)	520 (2.88)
17	499 (2.33)	417 (3.36)	551 (3.86)	587 (2.43)	514 (2.85)
18	459 (2.14)	365 (2.94)	505 (3.54)	617 (2.56)	487 (2.70)
19	560 (2.61)	342 (2.75)	466 (3.27)	923 (3.82)	573 (3.18)
20	1011 (4.72)	428 (3.45)	641 (4.49)	1537 (6.36)	905 (5.01)
21	988 (4.61)	488 (3.93)	738 (5.17)	1329 (5.50)	886 (4.91)
22	1174 (5.48)	635 (5.12)	762 (5.34)	1387 (5.74)	989 (5.48)
23	1324 (6.18)	744 (6.00)	767 (5.38)	1476 (6.11)	1077 (5.97)
24	1283 (5.99)	713 (5.75)	717 (5.02)	1409 (5.83)	1030 (5.70)

Phoenix: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1042 (5.23)	596 (5.16)	641 (4.80)	1150 (5.14)	857 (5.10)
2	948 (4.76)	531 (4.60)	567 (4.25)	1026 (4.58)	768 (4.57)
3	843 (4.23)	483 (4.19)	509 (3.82)	934 (4.17)	692 (4.12)
4	721 (3.62)	428 (3.71)	454 (3.41)	842 (3.76)	611 (3.64)
5	648 (3.25)	395 (3.42)	413 (3.09)	768 (3.43)	556 (3.31)
6	625 (3.14)	405 (3.51)	411 (3.08)	728 (3.25)	542 (3.23)
7	720 (3.62)	535 (4.63)	515 (3.86)	817 (3.65)	647 (3.85)
8	1061 (5.33)	697 (6.04)	682 (5.11)	1133 (5.06)	893 (5.32)
9	1465 (7.36)	647 (5.60)	646 (4.84)	1479 (6.60)	1058 (6.30)
10	1376 (6.91)	535 (4.64)	560 (4.20)	1307 (5.84)	943 (5.62)
11	1044 (5.24)	471 (4.08)	503 (3.77)	976 (4.36)	748 (4.45)
12	756 (3.80)	415 (3.60)	463 (3.47)	722 (3.23)	589 (3.51)
13	738 (3.71)	464 (4.02)	512 (3.84)	740 (3.31)	613 (3.65)
14	577 (2.90)	412 (3.57)	473 (3.55)	598 (2.67)	515 (3.07)
15	452 (2.27)	374 (3.24)	480 (3.60)	484 (2.16)	448 (2.67)
16	404 (2.03)	360 (3.12)	497 (3.73)	436 (1.95)	424 (2.53)
17	349 (1.75)	325 (2.81)	470 (3.53)	392 (1.75)	384 (2.29)
18	377 (1.89)	355 (3.08)	560 (4.20)	474 (2.12)	442 (2.63)
19	521 (2.62)	358 (3.10)	560 (4.20)	851 (3.80)	573 (3.41)
20	726 (3.65)	346 (2.99)	564 (4.23)	1203 (5.37)	711 (4.23)
21	1020 (5.12)	443 (3.84)	656 (4.92)	1377 (6.15)	874 (5.21)
22	1136 (5.71)	609 (5.28)	753 (5.65)	1340 (5.99)	960 (5.71)
23	1215 (6.10)	706 (6.12)	762 (5.72)	1357 (6.06)	1010 (6.01)
24	1145 (5.75)	654 (5.66)	680 (5.10)	1255 (5.61)	933 (5.56)

Phoenix: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1085 (4.42)	599 (4.29)	644 (3.95)	1201 (4.29)	882 (4.26)
2	976 (3.97)	533 (3.81)	572 (3.50)	1069 (3.82)	787 (3.80)
3	887 (3.61)	495 (3.54)	522 (3.20)	993 (3.55)	724 (3.49)
4	746 (3.04)	437 (3.13)	465 (2.85)	882 (3.15)	633 (3.05)
5	666 (2.71)	406 (2.90)	424 (2.60)	803 (2.87)	575 (2.77)
6	678 (2.76)	435 (3.11)	431 (2.64)	803 (2.87)	586 (2.83)
7	1122 (4.57)	693 (4.96)	575 (3.52)	1257 (4.49)	911 (4.40)
8	2039 (8.30)	1001 (7.16)	953 (5.84)	2124 (7.59)	1528 (7.38)
9	2177 (8.86)	882 (6.31)	911 (5.58)	2138 (7.64)	1525 (7.36)
10	1615 (6.57)	674 (4.82)	712 (4.36)	1542 (5.51)	1134 (5.48)
11	1132 (4.61)	586 (4.20)	676 (4.14)	1080 (3.86)	868 (4.19)
12	805 (3.28)	521 (3.73)	650 (3.98)	800 (2.86)	694 (3.35)
13	712 (2.90)	518 (3.71)	640 (3.92)	736 (2.63)	652 (3.15)
14	601 (2.45)	485 (3.47)	618 (3.78)	645 (2.30)	587 (2.84)
15	583 (2.37)	490 (3.50)	633 (3.88)	629 (2.25)	584 (2.82)
16	565 (2.30)	515 (3.68)	721 (4.41)	633 (2.26)	609 (2.94)
17	654 (2.66)	524 (3.75)	683 (4.18)	788 (2.82)	663 (3.20)
18	706 (2.87)	495 (3.54)	653 (4.00)	1083 (3.87)	735 (3.55)
19	866 (3.53)	456 (3.27)	693 (4.24)	1442 (5.15)	866 (4.18)
20	933 (3.80)	510 (3.65)	916 (5.61)	1445 (5.16)	953 (4.60)
21	1242 (5.05)	594 (4.25)	829 (5.08)	1615 (5.77)	1070 (5.17)
22	1290 (5.25)	715 (5.12)	878 (5.38)	1519 (5.43)	1101 (5.31)
23	1286 (5.23)	755 (5.40)	843 (5.16)	1440 (5.14)	1081 (5.22)
24	1206 (4.91)	661 (4.73)	686 (4.20)	1323 (4.73)	968 (4.67)

Phoenix: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1057 (4.80)	594 (4.84)	658 (4.66)	1160 (4.67)	867 (4.73)
2	956 (4.34)	523 (4.26)	571 (4.04)	1030 (4.15)	770 (4.20)
3	851 (3.87)	474 (3.86)	509 (3.60)	945 (3.80)	694 (3.79)
4	730 (3.32)	427 (3.47)	460 (3.26)	857 (3.45)	619 (3.38)
5	654 (2.97)	399 (3.25)	421 (2.98)	782 (3.15)	564 (3.08)
6	629 (2.86)	409 (3.33)	420 (2.98)	743 (2.99)	550 (3.01)
7	761 (3.46)	545 (4.44)	516 (3.65)	869 (3.50)	673 (3.67)
8	1508 (6.85)	813 (6.62)	733 (5.19)	1586 (6.39)	1159 (6.33)
9	1832 (8.32)	748 (6.09)	709 (5.02)	1840 (7.41)	1281 (6.99)
10	1481 (6.73)	574 (4.67)	601 (4.25)	1432 (5.76)	1021 (5.57)
11	1046 (4.75)	479 (3.90)	530 (3.75)	992 (3.99)	761 (4.16)
12	796 (3.62)	445 (3.62)	510 (3.61)	766 (3.09)	629 (3.43)
13	654 (2.97)	446 (3.63)	535 (3.79)	658 (2.65)	573 (3.13)
14	535 (2.43)	410 (3.34)	517 (3.66)	555 (2.24)	504 (2.76)
15	532 (2.42)	431 (3.51)	551 (3.90)	565 (2.27)	520 (2.84)
16	556 (2.53)	437 (3.56)	537 (3.80)	603 (2.43)	533 (2.91)
17	518 (2.35)	407 (3.31)	524 (3.71)	596 (2.40)	511 (2.79)
18	570 (2.59)	398 (3.24)	531 (3.76)	811 (3.27)	578 (3.16)
19	726 (3.30)	375 (3.06)	533 (3.77)	1169 (4.70)	701 (3.83)
20	946 (4.30)	430 (3.50)	691 (4.89)	1429 (5.75)	875 (4.78)
21	1042 (4.73)	495 (4.03)	748 (5.30)	1372 (5.52)	914 (4.99)
22	1219 (5.54)	658 (5.36)	815 (5.77)	1426 (5.74)	1030 (5.62)
23	1246 (5.66)	706 (5.75)	776 (5.50)	1387 (5.58)	1028 (5.62)
24	1163 (5.28)	660 (5.37)	722 (5.12)	1268 (5.10)	953 (5.20)

Phoenix: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1043 (5.14)	591 (5.12)	632 (4.83)	1151 (5.02)	854 (5.03)
2	951 (4.69)	528 (4.57)	562 (4.29)	1028 (4.48)	767 (4.52)
3	847 (4.17)	481 (4.17)	506 (3.87)	939 (4.09)	693 (4.08)
4	725 (3.57)	428 (3.71)	453 (3.46)	848 (3.70)	613 (3.62)
5	652 (3.21)	396 (3.43)	412 (3.15)	774 (3.38)	558 (3.29)
6	641 (3.16)	413 (3.58)	413 (3.15)	749 (3.27)	554 (3.26)
7	732 (3.61)	535 (4.64)	507 (3.87)	834 (3.64)	652 (3.84)
8	1309 (6.45)	754 (6.53)	690 (5.27)	1386 (6.04)	1034 (6.10)
9	1520 (7.49)	654 (5.66)	640 (4.89)	1533 (6.68)	1085 (6.40)
10	1378 (6.79)	525 (4.55)	544 (4.15)	1322 (5.76)	941 (5.55)
11	1007 (4.96)	479 (4.15)	541 (4.13)	949 (4.14)	743 (4.38)
12	731 (3.60)	424 (3.67)	502 (3.84)	701 (3.06)	589 (3.47)
13	647 (3.19)	428 (3.70)	495 (3.78)	649 (2.83)	554 (3.27)
14	479 (2.36)	376 (3.26)	472 (3.61)	499 (2.17)	457 (2.69)
15	457 (2.25)	376 (3.26)	474 (3.62)	487 (2.13)	449 (2.65)
16	412 (2.03)	350 (3.03)	456 (3.48)	446 (1.94)	416 (2.45)
17	402 (1.98)	336 (2.91)	438 (3.35)	460 (2.01)	409 (2.41)
18	441 (2.17)	346 (3.00)	471 (3.60)	594 (2.59)	464 (2.73)
19	588 (2.89)	347 (3.00)	478 (3.65)	959 (4.18)	594 (3.50)
20	841 (4.14)	375 (3.25)	584 (4.46)	1330 (5.80)	783 (4.62)
21	1015 (5.00)	460 (3.98)	684 (5.22)	1360 (5.93)	880 (5.19)
22	1150 (5.67)	597 (5.17)	715 (5.46)	1355 (5.91)	954 (5.62)
23	1188 (5.85)	693 (6.01)	748 (5.71)	1327 (5.79)	989 (5.83)
24	1143 (5.63)	652 (5.65)	678 (5.18)	1254 (5.47)	932 (5.49)

Phoenix: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1080 (5.05)	610 (5.07)	654 (4.81)	1191 (4.93)	883 (4.97)
2	978 (4.57)	538 (4.48)	572 (4.21)	1058 (4.38)	786 (4.42)
3	864 (4.04)	487 (4.05)	511 (3.76)	960 (3.97)	705 (3.97)
4	736 (3.44)	432 (3.59)	456 (3.36)	861 (3.56)	621 (3.49)
5	659 (3.08)	400 (3.32)	416 (3.06)	784 (3.24)	564 (3.17)
6	640 (2.99)	415 (3.45)	418 (3.08)	750 (3.10)	556 (3.12)
7	800 (3.74)	564 (4.68)	521 (3.84)	905 (3.74)	697 (3.92)
8	1366 (6.39)	772 (6.42)	710 (5.22)	1439 (5.95)	1071 (6.02)
9	1678 (7.85)	708 (5.88)	696 (5.12)	1682 (6.96)	1189 (6.69)
10	1445 (6.76)	559 (4.64)	580 (4.27)	1386 (5.74)	991 (5.57)
11	1008 (4.72)	465 (3.86)	509 (3.75)	953 (3.94)	733 (4.12)
12	759 (3.55)	427 (3.55)	492 (3.62)	731 (3.02)	602 (3.38)
13	624 (2.92)	420 (3.49)	499 (3.67)	628 (2.60)	543 (3.05)
14	519 (2.43)	396 (3.29)	486 (3.57)	541 (2.24)	485 (2.73)
15	478 (2.23)	388 (3.23)	487 (3.59)	510 (2.11)	466 (2.62)
16	455 (2.13)	379 (3.15)	487 (3.58)	493 (2.04)	454 (2.55)
17	460 (2.15)	378 (3.14)	494 (3.64)	528 (2.19)	466 (2.62)
18	523 (2.45)	387 (3.21)	517 (3.80)	729 (3.02)	539 (3.03)
19	636 (2.98)	369 (3.07)	523 (3.85)	1039 (4.30)	643 (3.61)
20	860 (4.02)	387 (3.22)	605 (4.45)	1357 (5.61)	803 (4.51)
21	1118 (5.23)	500 (4.16)	715 (5.26)	1474 (6.10)	952 (5.35)
22	1234 (5.77)	647 (5.38)	768 (5.65)	1447 (5.99)	1024 (5.76)
23	1259 (5.89)	719 (5.98)	763 (5.61)	1403 (5.81)	1036 (5.82)
24	1203 (5.63)	683 (5.67)	711 (5.24)	1318 (5.45)	978 (5.50)

San Francisco: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	738 (4.06)	405 (3.40)	450 (3.34)	1142 (4.61)	684 (4.00)
2	657 (3.61)	373 (3.13)	416 (3.08)	1027 (4.15)	619 (3.62)
3	573 (3.15)	353 (2.96)	390 (2.89)	900 (3.63)	554 (3.24)
4	496 (2.73)	329 (2.77)	369 (2.73)	778 (3.14)	494 (2.89)
5	433 (2.38)	300 (2.52)	346 (2.57)	678 (2.74)	440 (2.57)
6	417 (2.29)	303 (2.54)	346 (2.56)	621 (2.51)	422 (2.47)
7	536 (2.95)	371 (3.12)	407 (3.02)	737 (2.98)	513 (3.00)
8	976 (5.37)	621 (5.22)	612 (4.54)	1251 (5.05)	865 (5.06)
9	1218 (6.70)	681 (5.73)	697 (5.17)	1614 (6.52)	1052 (6.16)
10	1061 (5.84)	597 (5.02)	663 (4.91)	1470 (5.94)	948 (5.55)
11	800 (4.40)	551 (4.63)	643 (4.77)	1083 (4.37)	770 (4.50)
12	710 (3.90)	551 (4.63)	651 (4.83)	921 (3.72)	709 (4.15)
13	708 (3.89)	575 (4.84)	671 (4.97)	851 (3.44)	701 (4.10)
14	676 (3.72)	566 (4.76)	667 (4.94)	756 (3.05)	666 (3.90)
15	678 (3.73)	572 (4.81)	683 (5.06)	757 (3.05)	673 (3.94)
16	710 (3.91)	585 (4.91)	682 (5.06)	784 (3.17)	690 (4.04)
17	744 (4.09)	590 (4.96)	677 (5.02)	838 (3.38)	712 (4.17)
18	879 (4.83)	613 (5.15)	698 (5.17)	1075 (4.34)	816 (4.78)
19	932 (5.12)	592 (4.98)	671 (4.97)	1237 (5.00)	858 (5.02)
20	900 (4.95)	547 (4.59)	639 (4.74)	1267 (5.12)	839 (4.91)
21	857 (4.71)	490 (4.12)	589 (4.37)	1239 (5.00)	794 (4.65)
22	836 (4.60)	456 (3.84)	541 (4.01)	1239 (5.00)	769 (4.50)
23	835 (4.59)	447 (3.76)	508 (3.76)	1251 (5.05)	761 (4.45)
24	811 (4.46)	428 (3.60)	474 (3.52)	1249 (5.04)	741 (4.34)

San Francisco: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	659 (3.98)	372 (3.20)	391 (3.17)	1020 (4.67)	610 (3.92)
2	581 (3.51)	337 (2.90)	353 (2.87)	931 (4.26)	551 (3.53)
3	514 (3.10)	321 (2.76)	312 (2.54)	830 (3.80)	494 (3.17)
4	461 (2.78)	304 (2.61)	293 (2.38)	731 (3.35)	447 (2.87)
5	403 (2.43)	274 (2.36)	268 (2.17)	624 (2.86)	392 (2.52)
6	385 (2.33)	271 (2.34)	268 (2.18)	567 (2.59)	373 (2.39)
7	493 (2.98)	322 (2.78)	322 (2.62)	667 (3.05)	451 (2.90)
8	920 (5.55)	612 (5.27)	574 (4.67)	1218 (5.58)	831 (5.33)
9	1081 (6.53)	661 (5.69)	645 (5.24)	1448 (6.63)	959 (6.15)
10	964 (5.82)	577 (4.97)	589 (4.78)	1297 (5.94)	857 (5.50)
11	726 (4.39)	525 (4.52)	558 (4.53)	934 (4.28)	686 (4.40)
12	620 (3.74)	502 (4.32)	556 (4.52)	760 (3.48)	610 (3.91)
13	604 (3.65)	534 (4.60)	583 (4.74)	684 (3.13)	602 (3.86)
14	650 (3.92)	574 (4.94)	611 (4.97)	682 (3.12)	629 (4.04)
15	808 (4.88)	736 (6.34)	743 (6.04)	864 (3.95)	788 (5.05)
16	630 (3.80)	601 (5.17)	680 (5.53)	651 (2.98)	641 (4.11)
17	702 (4.24)	618 (5.32)	656 (5.33)	755 (3.46)	683 (4.38)
18	763 (4.61)	636 (5.48)	707 (5.74)	870 (3.98)	744 (4.77)
19	812 (4.91)	583 (5.02)	631 (5.12)	980 (4.49)	752 (4.82)
20	808 (4.88)	551 (4.74)	600 (4.88)	1034 (4.73)	749 (4.80)
21	768 (4.64)	476 (4.10)	542 (4.40)	1031 (4.72)	704 (4.52)
22	737 (4.45)	426 (3.67)	511 (4.15)	1061 (4.86)	684 (4.39)
23	755 (4.56)	422 (3.64)	494 (4.01)	1119 (5.12)	698 (4.48)
24	715 (4.32)	380 (3.28)	422 (3.43)	1088 (4.98)	652 (4.18)

San Francisco: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	798 (4.38)	429 (3.49)	450 (3.35)	1300 (4.99)	745 (4.26)
2	713 (3.91)	398 (3.24)	410 (3.05)	1165 (4.47)	672 (3.84)
3	634 (3.48)	381 (3.10)	392 (2.92)	1027 (3.94)	609 (3.48)
4	558 (3.06)	358 (2.91)	375 (2.80)	901 (3.46)	549 (3.13)
5	455 (2.50)	314 (2.55)	347 (2.58)	761 (2.92)	470 (2.68)
6	425 (2.33)	312 (2.54)	340 (2.53)	682 (2.62)	440 (2.51)
7	537 (2.95)	369 (3.01)	390 (2.90)	780 (2.99)	519 (2.97)
8	967 (5.31)	654 (5.33)	641 (4.78)	1344 (5.16)	902 (5.15)
9	1203 (6.60)	694 (5.65)	705 (5.25)	1656 (6.36)	1065 (6.08)
10	1065 (5.85)	603 (4.90)	637 (4.74)	1504 (5.77)	952 (5.44)
11	779 (4.28)	549 (4.47)	605 (4.50)	1086 (4.17)	755 (4.31)
12	654 (3.59)	519 (4.23)	586 (4.36)	871 (3.35)	658 (3.76)
13	629 (3.45)	542 (4.41)	610 (4.54)	785 (3.01)	642 (3.67)
14	658 (3.61)	564 (4.59)	624 (4.65)	760 (2.92)	652 (3.72)
15	784 (4.30)	694 (5.65)	756 (5.63)	925 (3.55)	790 (4.51)
16	644 (3.53)	600 (4.89)	716 (5.33)	742 (2.85)	676 (3.86)
17	732 (4.02)	634 (5.16)	699 (5.21)	871 (3.34)	734 (4.20)
18	790 (4.34)	647 (5.26)	745 (5.55)	1017 (3.91)	800 (4.57)
19	835 (4.58)	586 (4.77)	665 (4.95)	1154 (4.43)	811 (4.63)
20	859 (4.71)	534 (4.35)	607 (4.52)	1243 (4.77)	811 (4.63)
21	843 (4.63)	488 (3.98)	556 (4.14)	1274 (4.89)	791 (4.52)
22	886 (4.86)	481 (3.92)	552 (4.11)	1382 (5.30)	826 (4.72)
23	907 (4.98)	491 (3.99)	544 (4.05)	1432 (5.50)	844 (4.82)
24	867 (4.76)	445 (3.62)	476 (3.54)	1385 (5.32)	794 (4.53)

San Francisco: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	717 (4.13)	406 (3.47)	441 (3.49)	1085 (4.79)	663 (4.12)
2	639 (3.68)	369 (3.15)	395 (3.12)	982 (4.33)	597 (3.71)
3	566 (3.26)	351 (3.00)	365 (2.89)	876 (3.87)	540 (3.35)
4	504 (2.90)	328 (2.80)	339 (2.68)	769 (3.40)	486 (3.02)
5	438 (2.52)	299 (2.55)	314 (2.49)	664 (2.93)	429 (2.67)
6	418 (2.41)	296 (2.53)	310 (2.46)	604 (2.67)	407 (2.53)
7	524 (3.01)	356 (3.04)	367 (2.91)	708 (3.13)	489 (3.04)
8	771 (4.44)	509 (4.34)	476 (3.77)	986 (4.35)	686 (4.26)
9	1052 (6.06)	610 (5.21)	586 (4.64)	1365 (6.03)	903 (5.61)
10	984 (5.66)	597 (5.09)	634 (5.02)	1319 (5.82)	883 (5.49)
11	761 (4.38)	532 (4.54)	581 (4.60)	967 (4.27)	711 (4.41)
12	656 (3.78)	504 (4.30)	576 (4.56)	791 (3.49)	632 (3.93)
13	675 (3.89)	566 (4.83)	623 (4.93)	758 (3.35)	656 (4.07)
14	647 (3.73)	555 (4.74)	620 (4.91)	677 (2.99)	625 (3.88)
15	733 (4.22)	640 (5.46)	708 (5.61)	771 (3.40)	713 (4.43)
16	709 (4.08)	610 (5.21)	688 (5.45)	734 (3.24)	685 (4.26)
17	755 (4.35)	637 (5.44)	705 (5.58)	811 (3.58)	727 (4.52)
18	915 (5.27)	656 (5.60)	684 (5.42)	1053 (4.65)	827 (5.14)
19	872 (5.02)	599 (5.11)	657 (5.20)	1068 (4.72)	799 (4.96)
20	849 (4.89)	536 (4.58)	585 (4.63)	1104 (4.87)	768 (4.77)
21	827 (4.76)	484 (4.13)	537 (4.25)	1127 (4.98)	744 (4.62)
22	791 (4.55)	434 (3.71)	498 (3.94)	1125 (4.97)	712 (4.43)
23	787 (4.53)	424 (3.62)	487 (3.86)	1138 (5.03)	710 (4.41)
24	776 (4.47)	415 (3.54)	456 (3.61)	1168 (5.16)	704 (4.37)

San Francisco: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	767 (4.17)	426 (3.43)	451 (3.27)	1184 (4.81)	707 (4.09)
2	685 (3.73)	394 (3.18)	419 (3.04)	1069 (4.35)	642 (3.71)
3	599 (3.26)	368 (2.97)	383 (2.78)	937 (3.81)	572 (3.31)
4	512 (2.78)	335 (2.70)	358 (2.60)	789 (3.21)	499 (2.88)
5	443 (2.41)	304 (2.45)	334 (2.42)	684 (2.78)	442 (2.55)
6	425 (2.31)	306 (2.47)	333 (2.42)	626 (2.55)	423 (2.45)
7	545 (2.97)	376 (3.03)	405 (2.94)	742 (3.02)	517 (2.99)
8	898 (4.88)	605 (4.88)	615 (4.46)	1156 (4.70)	818 (4.73)
9	1137 (6.18)	676 (5.45)	700 (5.08)	1500 (6.10)	1003 (5.80)
10	1042 (5.66)	609 (4.91)	666 (4.84)	1408 (5.73)	932 (5.39)
11	819 (4.45)	584 (4.71)	653 (4.74)	1075 (4.37)	783 (4.53)
12	764 (4.15)	606 (4.88)	671 (4.87)	964 (3.92)	752 (4.35)
13	737 (4.01)	606 (4.89)	682 (4.95)	852 (3.47)	719 (4.16)
14	675 (3.67)	577 (4.65)	686 (4.98)	719 (2.93)	665 (3.84)
15	698 (3.80)	602 (4.85)	715 (5.19)	741 (3.01)	689 (3.98)
16	726 (3.95)	634 (5.11)	751 (5.45)	772 (3.14)	721 (4.17)
17	787 (4.28)	638 (5.14)	711 (5.16)	860 (3.50)	749 (4.33)
18	854 (4.64)	635 (5.12)	715 (5.20)	1001 (4.07)	802 (4.64)
19	926 (5.04)	613 (4.95)	690 (5.01)	1171 (4.76)	851 (4.92)
20	928 (5.04)	586 (4.73)	665 (4.83)	1267 (5.15)	862 (4.98)
21	863 (4.69)	520 (4.19)	609 (4.42)	1223 (4.98)	804 (4.65)
22	857 (4.66)	480 (3.87)	551 (4.00)	1261 (5.13)	788 (4.55)
23	867 (4.71)	473 (3.81)	528 (3.83)	1298 (5.28)	792 (4.58)
24	837 (4.55)	447 (3.61)	482 (3.50)	1284 (5.22)	763 (4.41)

San Francisco: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	753 (4.08)	410 (3.37)	444 (3.28)	1161 (4.65)	692 (4.01)
2	671 (3.64)	376 (3.10)	409 (3.02)	1045 (4.19)	626 (3.62)
3	588 (3.19)	357 (2.93)	383 (2.83)	921 (3.69)	563 (3.26)
4	517 (2.81)	335 (2.76)	365 (2.69)	806 (3.23)	506 (2.93)
5	446 (2.42)	303 (2.50)	341 (2.52)	698 (2.80)	447 (2.59)
6	429 (2.32)	306 (2.51)	340 (2.51)	638 (2.56)	428 (2.48)
7	545 (2.96)	371 (3.06)	393 (2.91)	752 (3.02)	516 (2.98)
8	968 (5.25)	625 (5.14)	611 (4.51)	1252 (5.02)	864 (5.00)
9	1191 (6.46)	682 (5.61)	693 (5.11)	1581 (6.33)	1037 (6.00)
10	1063 (5.76)	611 (5.03)	666 (4.92)	1458 (5.84)	950 (5.50)
11	804 (4.36)	562 (4.62)	647 (4.77)	1074 (4.31)	772 (4.47)
12	710 (3.85)	560 (4.60)	652 (4.81)	910 (3.65)	708 (4.10)
13	707 (3.84)	582 (4.79)	670 (4.95)	839 (3.36)	700 (4.05)
14	689 (3.74)	583 (4.80)	678 (5.00)	764 (3.06)	679 (3.93)
15	710 (3.85)	601 (4.95)	700 (5.17)	787 (3.16)	700 (4.05)
16	724 (3.93)	597 (4.91)	682 (5.03)	789 (3.16)	698 (4.04)
17	777 (4.21)	616 (5.07)	686 (5.07)	869 (3.48)	737 (4.27)
18	911 (4.94)	648 (5.33)	727 (5.37)	1102 (4.42)	847 (4.90)
19	953 (5.17)	625 (5.14)	703 (5.19)	1248 (5.00)	883 (5.11)
20	893 (4.84)	556 (4.57)	646 (4.77)	1234 (4.95)	832 (4.82)
21	859 (4.66)	497 (4.09)	586 (4.33)	1227 (4.92)	792 (4.59)
22	854 (4.63)	466 (3.83)	543 (4.01)	1259 (5.05)	781 (4.52)
23	855 (4.64)	456 (3.75)	510 (3.76)	1275 (5.11)	774 (4.48)
24	823 (4.47)	431 (3.55)	470 (3.47)	1259 (5.05)	746 (4.32)

San Francisco: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	748 (4.04)	409 (3.37)	450 (3.33)	1167 (4.59)	694 (3.99)
2	663 (3.58)	378 (3.11)	418 (3.09)	1044 (4.10)	626 (3.60)
3	581 (3.14)	359 (2.96)	395 (2.92)	917 (3.60)	564 (3.24)
4	503 (2.72)	331 (2.73)	369 (2.73)	791 (3.11)	499 (2.87)
5	435 (2.35)	301 (2.48)	346 (2.56)	689 (2.71)	443 (2.55)
6	416 (2.25)	304 (2.51)	346 (2.56)	628 (2.47)	424 (2.44)
7	512 (2.76)	356 (2.93)	397 (2.93)	707 (2.78)	493 (2.83)
8	996 (5.38)	622 (5.13)	597 (4.41)	1286 (5.05)	875 (5.03)
9	1274 (6.88)	699 (5.76)	693 (5.12)	1699 (6.68)	1091 (6.27)
10	1063 (5.74)	594 (4.90)	648 (4.79)	1479 (5.82)	946 (5.44)
11	816 (4.41)	567 (4.68)	656 (4.85)	1117 (4.39)	790 (4.54)
12	728 (3.93)	566 (4.67)	655 (4.84)	956 (3.76)	727 (4.17)
13	729 (3.94)	595 (4.91)	682 (5.04)	888 (3.49)	724 (4.16)
14	692 (3.74)	585 (4.82)	678 (5.01)	782 (3.08)	685 (3.93)
15	675 (3.65)	595 (4.90)	721 (5.33)	763 (3.00)	689 (3.96)
16	717 (3.87)	600 (4.95)	685 (5.07)	804 (3.16)	702 (4.03)
17	741 (4.00)	605 (4.99)	684 (5.06)	849 (3.34)	720 (4.13)
18	928 (5.01)	634 (5.23)	688 (5.09)	1146 (4.51)	849 (4.88)
19	976 (5.27)	616 (5.07)	673 (4.98)	1302 (5.12)	892 (5.12)
20	943 (5.09)	574 (4.73)	646 (4.77)	1348 (5.30)	878 (5.04)
21	884 (4.78)	507 (4.18)	596 (4.41)	1290 (5.07)	820 (4.71)
22	833 (4.50)	456 (3.76)	536 (3.96)	1240 (4.88)	767 (4.40)
23	829 (4.48)	442 (3.65)	495 (3.66)	1251 (4.92)	755 (4.33)
24	833 (4.50)	435 (3.59)	472 (3.49)	1289 (5.07)	758 (4.35)

San Francisco: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	735 (4.07)	411 (3.49)	454 (3.42)	1147 (4.64)	687 (4.05)
2	664 (3.68)	382 (3.25)	416 (3.13)	1049 (4.24)	628 (3.70)
3	578 (3.20)	360 (3.06)	392 (2.95)	914 (3.70)	562 (3.31)
4	506 (2.80)	339 (2.89)	373 (2.81)	801 (3.24)	505 (2.98)
5	441 (2.44)	310 (2.64)	351 (2.64)	700 (2.83)	451 (2.66)
6	422 (2.34)	310 (2.64)	348 (2.61)	638 (2.58)	430 (2.53)
7	516 (2.86)	366 (3.11)	400 (3.00)	724 (2.93)	502 (2.96)
8	1125 (6.23)	656 (5.58)	614 (4.62)	1424 (5.76)	955 (5.63)
9	1290 (7.14)	714 (6.08)	730 (5.49)	1712 (6.92)	1112 (6.55)
10	1053 (5.83)	580 (4.93)	647 (4.86)	1453 (5.87)	933 (5.50)
11	750 (4.15)	507 (4.31)	602 (4.53)	1008 (4.07)	717 (4.23)
12	640 (3.55)	498 (4.24)	604 (4.54)	829 (3.35)	643 (3.79)
13	690 (3.82)	573 (4.88)	684 (5.14)	823 (3.33)	693 (4.08)
14	634 (3.51)	525 (4.47)	619 (4.65)	701 (2.83)	620 (3.65)
15	669 (3.70)	571 (4.86)	649 (4.88)	768 (3.11)	664 (3.91)
16	648 (3.59)	541 (4.60)	650 (4.89)	710 (2.87)	638 (3.76)
17	675 (3.74)	531 (4.52)	637 (4.79)	738 (2.99)	645 (3.80)
18	926 (5.13)	634 (5.40)	710 (5.34)	1164 (4.71)	859 (5.06)
19	892 (4.94)	567 (4.82)	650 (4.89)	1201 (4.85)	828 (4.88)
20	940 (5.21)	573 (4.88)	662 (4.98)	1362 (5.51)	885 (5.21)
21	846 (4.68)	477 (4.05)	578 (4.34)	1211 (4.90)	778 (4.59)
22	814 (4.51)	453 (3.85)	543 (4.08)	1207 (4.88)	755 (4.45)
23	813 (4.50)	444 (3.78)	504 (3.79)	1225 (4.95)	747 (4.40)
24	792 (4.38)	431 (3.67)	483 (3.63)	1227 (4.96)	734 (4.32)

San Francisco: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	721 (4.02)	393 (3.30)	427 (3.23)	1144 (4.61)	672 (3.96)
2	642 (3.58)	361 (3.03)	391 (2.97)	1031 (4.15)	607 (3.57)
3	569 (3.17)	346 (2.90)	369 (2.80)	914 (3.68)	550 (3.24)
4	501 (2.79)	327 (2.74)	353 (2.67)	802 (3.23)	496 (2.92)
5	432 (2.41)	296 (2.48)	330 (2.50)	698 (2.81)	439 (2.59)
6	412 (2.30)	297 (2.49)	327 (2.48)	635 (2.56)	418 (2.46)
7	511 (2.85)	349 (2.93)	370 (2.80)	726 (2.92)	489 (2.88)
8	990 (5.51)	611 (5.13)	574 (4.35)	1295 (5.22)	867 (5.11)
9	1222 (6.81)	667 (5.60)	655 (4.96)	1632 (6.58)	1044 (6.15)
10	1052 (5.86)	580 (4.87)	626 (4.74)	1466 (5.91)	931 (5.49)
11	790 (4.40)	548 (4.60)	627 (4.75)	1081 (4.36)	762 (4.49)
12	706 (3.93)	560 (4.70)	641 (4.86)	931 (3.75)	710 (4.18)
13	694 (3.87)	584 (4.90)	664 (5.03)	847 (3.41)	698 (4.11)
14	654 (3.64)	567 (4.75)	659 (5.00)	740 (2.98)	655 (3.86)
15	697 (3.88)	603 (5.06)	689 (5.22)	788 (3.18)	694 (4.09)
16	750 (4.18)	628 (5.27)	702 (5.32)	834 (3.36)	729 (4.29)
17	752 (4.19)	624 (5.23)	703 (5.33)	858 (3.45)	734 (4.32)
18	859 (4.78)	631 (5.30)	713 (5.41)	1059 (4.27)	816 (4.80)
19	925 (5.15)	613 (5.14)	693 (5.25)	1236 (4.98)	867 (5.11)
20	870 (4.84)	560 (4.70)	658 (4.98)	1237 (4.98)	832 (4.90)
21	820 (4.57)	489 (4.11)	582 (4.41)	1208 (4.87)	775 (4.57)
22	793 (4.42)	438 (3.68)	509 (3.85)	1204 (4.85)	737 (4.34)
23	804 (4.48)	431 (3.62)	485 (3.68)	1228 (4.95)	738 (4.34)
24	784 (4.37)	411 (3.45)	449 (3.41)	1227 (4.95)	718 (4.23)

San Francisco: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	851 (4.41)	468 (3.68)	491 (3.63)	1298 (5.07)	777 (4.37)
2	758 (3.93)	431 (3.39)	442 (3.26)	1174 (4.59)	702 (3.94)
3	642 (3.33)	395 (3.11)	400 (2.96)	1000 (3.90)	610 (3.43)
4	547 (2.84)	357 (2.81)	366 (2.70)	844 (3.30)	529 (2.97)
5	447 (2.32)	311 (2.45)	334 (2.46)	691 (2.70)	446 (2.51)
6	420 (2.18)	305 (2.39)	327 (2.41)	618 (2.41)	418 (2.35)
7	549 (2.85)	363 (2.86)	370 (2.73)	739 (2.89)	506 (2.84)
8	823 (4.27)	551 (4.33)	530 (3.92)	1045 (4.08)	737 (4.14)
9	1055 (5.47)	673 (5.29)	747 (5.51)	1361 (5.32)	959 (5.39)
10	1079 (5.59)	652 (5.13)	706 (5.22)	1446 (5.65)	971 (5.46)
11	876 (4.54)	651 (5.12)	713 (5.26)	1153 (4.50)	848 (4.77)
12	764 (3.96)	595 (4.68)	651 (4.80)	953 (3.72)	741 (4.16)
13	779 (4.04)	631 (4.96)	681 (5.03)	881 (3.44)	743 (4.18)
14	733 (3.80)	597 (4.69)	636 (4.69)	781 (3.05)	687 (3.86)
15	727 (3.77)	589 (4.63)	635 (4.68)	774 (3.02)	681 (3.83)
16	846 (4.39)	652 (5.13)	674 (4.98)	889 (3.47)	765 (4.30)
17	934 (4.84)	701 (5.51)	710 (5.24)	1034 (4.04)	844 (4.75)
18	876 (4.54)	629 (4.95)	702 (5.18)	1015 (3.96)	806 (4.53)
19	923 (4.79)	578 (4.54)	628 (4.64)	1143 (4.46)	818 (4.60)
20	977 (5.07)	593 (4.66)	646 (4.77)	1324 (5.17)	885 (4.98)
21	887 (4.60)	508 (3.99)	572 (4.22)	1239 (4.84)	802 (4.51)
22	912 (4.73)	504 (3.96)	547 (4.04)	1347 (5.26)	828 (4.65)
23	938 (4.87)	497 (3.91)	529 (3.90)	1415 (5.53)	845 (4.75)
24	938 (4.86)	488 (3.84)	509 (3.76)	1436 (5.61)	843 (4.74)

San Francisco: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	761 (3.94)	417 (3.30)	464 (3.23)	1178 (4.49)	706 (3.89)
2	677 (3.50)	383 (3.03)	427 (2.97)	1057 (4.03)	636 (3.50)
3	587 (3.04)	355 (2.81)	388 (2.70)	923 (3.51)	564 (3.10)
4	514 (2.66)	333 (2.63)	369 (2.57)	804 (3.06)	505 (2.78)
5	446 (2.31)	303 (2.39)	346 (2.41)	701 (2.67)	449 (2.47)
6	432 (2.24)	310 (2.45)	350 (2.44)	646 (2.46)	435 (2.40)
7	608 (3.15)	418 (3.31)	450 (3.13)	834 (3.18)	578 (3.18)
8	1084 (5.61)	689 (5.45)	702 (4.89)	1406 (5.35)	970 (5.34)
9	1296 (6.71)	727 (5.75)	766 (5.33)	1736 (6.61)	1132 (6.23)
10	1113 (5.76)	633 (5.00)	720 (5.01)	1539 (5.86)	1002 (5.52)
11	852 (4.41)	582 (4.60)	683 (4.75)	1154 (4.39)	818 (4.51)
12	764 (3.95)	587 (4.64)	693 (4.82)	991 (3.77)	759 (4.18)
13	766 (3.96)	608 (4.81)	708 (4.93)	910 (3.47)	748 (4.12)
14	736 (3.81)	607 (4.80)	717 (4.99)	816 (3.11)	719 (3.96)
15	740 (3.83)	628 (4.97)	754 (5.24)	828 (3.15)	738 (4.06)
16	769 (3.98)	643 (5.09)	750 (5.22)	858 (3.27)	755 (4.16)
17	868 (4.49)	669 (5.29)	741 (5.16)	993 (3.78)	818 (4.50)
18	999 (5.17)	709 (5.60)	795 (5.53)	1242 (4.73)	937 (5.16)
19	966 (5.00)	625 (4.94)	703 (4.89)	1276 (4.86)	893 (4.92)
20	889 (4.60)	551 (4.35)	653 (4.54)	1234 (4.70)	832 (4.58)
21	881 (4.56)	502 (3.97)	601 (4.18)	1268 (4.83)	814 (4.48)
22	880 (4.56)	477 (3.77)	569 (3.96)	1302 (4.96)	808 (4.45)
23	852 (4.41)	453 (3.58)	524 (3.65)	1273 (4.85)	776 (4.27)
24	839 (4.35)	441 (3.49)	496 (3.45)	1288 (4.91)	767 (4.22)

San Francisco: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	736 (4.15)	409 (3.48)	446 (3.45)	1137 (4.76)	682 (4.11)
2	652 (3.67)	372 (3.17)	406 (3.14)	1016 (4.25)	612 (3.69)
3	573 (3.23)	350 (2.98)	375 (2.90)	897 (3.75)	549 (3.31)
4	506 (2.85)	329 (2.81)	355 (2.74)	786 (3.29)	495 (2.98)
5	438 (2.47)	300 (2.55)	331 (2.56)	683 (2.86)	438 (2.64)
6	418 (2.36)	299 (2.55)	327 (2.53)	622 (2.60)	417 (2.51)
7	487 (2.75)	332 (2.83)	359 (2.78)	673 (2.81)	463 (2.79)
8	825 (4.65)	539 (4.59)	511 (3.95)	1067 (4.46)	735 (4.44)
9	1122 (6.32)	647 (5.51)	637 (4.93)	1499 (6.28)	976 (5.89)
10	1045 (5.89)	595 (5.08)	627 (4.85)	1431 (5.99)	925 (5.58)
11	775 (4.37)	533 (4.55)	613 (4.74)	1023 (4.28)	736 (4.44)
12	701 (3.95)	541 (4.61)	613 (4.74)	887 (3.71)	686 (4.14)
13	681 (3.84)	553 (4.71)	619 (4.79)	797 (3.34)	663 (4.00)
14	675 (3.80)	563 (4.80)	642 (4.97)	734 (3.07)	654 (3.94)
15	674 (3.80)	594 (5.06)	719 (5.56)	733 (3.07)	680 (4.10)
16	696 (3.92)	593 (5.06)	688 (5.32)	756 (3.16)	683 (4.12)
17	776 (4.38)	606 (5.17)	650 (5.02)	859 (3.60)	723 (4.36)
18	819 (4.62)	589 (5.02)	639 (4.94)	974 (4.07)	755 (4.56)
19	891 (5.02)	588 (5.01)	651 (5.03)	1145 (4.79)	819 (4.94)
20	878 (4.95)	549 (4.68)	630 (4.87)	1202 (5.03)	815 (4.92)
21	860 (4.85)	500 (4.26)	581 (4.49)	1220 (5.11)	791 (4.77)
22	861 (4.85)	479 (4.08)	557 (4.30)	1273 (5.33)	793 (4.78)
23	841 (4.74)	447 (3.81)	498 (3.85)	1249 (5.23)	759 (4.58)
24	806 (4.55)	422 (3.59)	459 (3.55)	1231 (5.15)	730 (4.40)

San Francisco: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	751 (4.13)	414 (3.49)	457 (3.43)	1164 (4.71)	697 (4.09)
2	663 (3.64)	375 (3.17)	414 (3.11)	1037 (4.20)	623 (3.66)
3	579 (3.18)	356 (3.00)	389 (2.92)	909 (3.68)	559 (3.28)
4	504 (2.77)	328 (2.77)	361 (2.71)	787 (3.19)	495 (2.91)
5	438 (2.40)	298 (2.51)	337 (2.53)	685 (2.77)	440 (2.58)
6	423 (2.32)	300 (2.54)	336 (2.52)	630 (2.55)	423 (2.48)
7	520 (2.85)	357 (3.01)	395 (2.97)	713 (2.89)	496 (2.92)
8	963 (5.29)	614 (5.18)	614 (4.61)	1229 (4.98)	855 (5.02)
9	1219 (6.69)	673 (5.68)	671 (5.04)	1617 (6.55)	1045 (6.14)
10	1040 (5.71)	577 (4.87)	629 (4.72)	1438 (5.82)	921 (5.41)
11	771 (4.24)	520 (4.39)	598 (4.49)	1040 (4.21)	732 (4.30)
12	679 (3.73)	514 (4.34)	600 (4.51)	882 (3.57)	669 (3.93)
13	690 (3.79)	552 (4.66)	645 (4.85)	825 (3.34)	678 (3.99)
14	688 (3.78)	559 (4.72)	633 (4.75)	763 (3.09)	661 (3.88)
15	673 (3.69)	554 (4.68)	647 (4.86)	740 (3.00)	654 (3.84)
16	678 (3.72)	563 (4.76)	660 (4.96)	741 (3.00)	661 (3.88)
17	764 (4.20)	593 (5.01)	666 (5.00)	848 (3.44)	718 (4.22)
18	928 (5.10)	656 (5.54)	751 (5.64)	1121 (4.54)	864 (5.08)
19	940 (5.17)	610 (5.15)	687 (5.16)	1225 (4.96)	866 (5.09)
20	892 (4.90)	547 (4.62)	629 (4.72)	1235 (5.00)	826 (4.85)
21	874 (4.80)	506 (4.27)	603 (4.53)	1251 (5.07)	809 (4.75)
22	848 (4.66)	472 (3.98)	568 (4.26)	1255 (5.08)	786 (4.62)
23	858 (4.71)	467 (3.94)	533 (4.01)	1290 (5.23)	788 (4.63)
24	821 (4.51)	441 (3.72)	495 (3.72)	1266 (5.13)	756 (4.44)

San Francisco: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	722 (4.06)	420 (3.36)	468 (3.24)	1082 (4.65)	673 (3.96)
2	647 (3.64)	391 (3.13)	439 (3.04)	980 (4.21)	615 (3.61)
3	574 (3.23)	372 (2.98)	411 (2.84)	874 (3.75)	558 (3.28)
4	509 (2.87)	352 (2.82)	393 (2.72)	768 (3.30)	506 (2.98)
5	444 (2.50)	323 (2.58)	368 (2.55)	670 (2.88)	452 (2.66)
6	425 (2.39)	322 (2.57)	363 (2.51)	613 (2.63)	431 (2.53)
7	490 (2.76)	354 (2.83)	396 (2.74)	662 (2.85)	476 (2.80)
8	955 (5.37)	608 (4.86)	561 (3.88)	1245 (5.35)	842 (4.95)
9	1011 (5.69)	603 (4.82)	639 (4.43)	1293 (5.56)	887 (5.22)
10	1005 (5.66)	560 (4.48)	554 (3.83)	1333 (5.73)	863 (5.08)
11	876 (4.93)	623 (4.98)	683 (4.73)	1136 (4.88)	830 (4.88)
12	733 (4.12)	609 (4.87)	791 (5.48)	890 (3.83)	756 (4.45)
13	750 (4.22)	629 (5.03)	796 (5.51)	820 (3.53)	749 (4.41)
14	679 (3.82)	597 (4.78)	752 (5.21)	708 (3.04)	685 (4.03)
15	697 (3.92)	650 (5.20)	805 (5.57)	747 (3.21)	725 (4.26)
16	753 (4.24)	680 (5.44)	782 (5.41)	817 (3.51)	758 (4.46)
17	753 (4.24)	721 (5.77)	921 (6.38)	824 (3.54)	805 (4.73)
18	812 (4.57)	688 (5.50)	882 (6.11)	944 (4.06)	832 (4.89)
19	845 (4.76)	623 (4.98)	771 (5.34)	1048 (4.50)	822 (4.84)
20	798 (4.49)	514 (4.11)	595 (4.12)	1049 (4.51)	739 (4.35)
21	856 (4.82)	505 (4.04)	551 (3.82)	1196 (5.14)	777 (4.57)
22	840 (4.73)	471 (3.77)	523 (3.62)	1218 (5.23)	763 (4.49)
23	818 (4.60)	454 (3.63)	512 (3.54)	1195 (5.13)	745 (4.38)
24	776 (4.37)	432 (3.45)	486 (3.36)	1157 (4.97)	713 (4.19)

San Francisco: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	733 (3.77)	404 (3.19)	453 (3.19)	1124 (4.27)	679 (3.74)
2	654 (3.36)	374 (2.95)	417 (2.94)	1017 (3.86)	616 (3.39)
3	580 (2.98)	357 (2.82)	392 (2.76)	907 (3.44)	559 (3.08)
4	508 (2.61)	335 (2.65)	371 (2.61)	790 (3.00)	501 (2.76)
5	441 (2.27)	305 (2.41)	348 (2.45)	687 (2.61)	446 (2.45)
6	433 (2.22)	317 (2.50)	362 (2.55)	642 (2.44)	439 (2.42)
7	645 (3.32)	442 (3.49)	482 (3.40)	866 (3.29)	609 (3.35)
8	1195 (6.15)	749 (5.92)	743 (5.23)	1547 (5.88)	1059 (5.83)
9	1353 (6.96)	746 (5.89)	743 (5.23)	1817 (6.90)	1165 (6.41)
10	1161 (5.97)	653 (5.16)	709 (4.99)	1618 (6.15)	1036 (5.70)
11	877 (4.51)	600 (4.74)	685 (4.83)	1199 (4.56)	841 (4.63)
12	781 (4.02)	599 (4.73)	697 (4.91)	1025 (3.90)	776 (4.27)
13	773 (3.97)	622 (4.91)	711 (5.01)	931 (3.54)	759 (4.18)
14	739 (3.80)	594 (4.69)	669 (4.71)	827 (3.14)	708 (3.89)
15	705 (3.62)	582 (4.60)	684 (4.82)	788 (2.99)	690 (3.80)
16	707 (3.63)	586 (4.63)	688 (4.85)	783 (2.97)	691 (3.80)
17	820 (4.22)	654 (5.16)	762 (5.37)	922 (3.50)	790 (4.35)
18	1051 (5.41)	696 (5.50)	756 (5.32)	1277 (4.85)	945 (5.20)
19	984 (5.06)	620 (4.90)	688 (4.85)	1288 (4.89)	895 (4.93)
20	895 (4.60)	553 (4.37)	644 (4.54)	1243 (4.72)	834 (4.59)
21	893 (4.59)	522 (4.13)	631 (4.45)	1278 (4.85)	832 (4.58)
22	859 (4.42)	469 (3.70)	566 (3.99)	1250 (4.75)	786 (4.33)
23	842 (4.33)	451 (3.56)	519 (3.66)	1247 (4.74)	765 (4.21)
24	816 (4.20)	432 (3.41)	478 (3.36)	1248 (4.74)	744 (4.10)

San Francisco: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	718 (4.20)	408 (3.58)	447 (3.51)	1093 (4.81)	667 (4.17)
2	643 (3.76)	381 (3.34)	421 (3.30)	990 (4.36)	609 (3.81)
3	567 (3.31)	360 (3.15)	391 (3.06)	876 (3.86)	549 (3.43)
4	501 (2.93)	336 (2.95)	366 (2.87)	769 (3.39)	493 (3.08)
5	437 (2.55)	307 (2.70)	342 (2.68)	671 (2.96)	440 (2.75)
6	419 (2.45)	308 (2.70)	342 (2.68)	613 (2.70)	421 (2.63)
7	490 (2.86)	345 (3.02)	378 (2.97)	669 (2.95)	471 (2.94)
8	755 (4.41)	516 (4.52)	514 (4.03)	950 (4.19)	684 (4.28)
9	1045 (6.11)	605 (5.30)	607 (4.76)	1357 (5.98)	904 (5.65)
10	986 (5.76)	563 (4.94)	619 (4.86)	1332 (5.87)	875 (5.47)
11	772 (4.51)	528 (4.63)	597 (4.68)	1005 (4.43)	726 (4.54)
12	718 (4.19)	552 (4.84)	636 (4.99)	893 (3.93)	700 (4.37)
13	661 (3.86)	528 (4.63)	617 (4.83)	758 (3.34)	641 (4.01)
14	671 (3.92)	550 (4.83)	635 (4.98)	716 (3.15)	643 (4.02)
15	690 (4.03)	565 (4.96)	648 (5.08)	735 (3.24)	660 (4.12)
16	641 (3.74)	532 (4.66)	630 (4.94)	672 (2.96)	619 (3.87)
17	660 (3.86)	525 (4.61)	611 (4.79)	693 (3.05)	622 (3.89)
18	780 (4.56)	553 (4.85)	604 (4.73)	909 (4.01)	712 (4.45)
19	863 (5.04)	572 (5.02)	643 (5.04)	1096 (4.83)	794 (4.96)
20	885 (5.17)	555 (4.87)	626 (4.91)	1203 (5.30)	818 (5.11)
21	816 (4.77)	498 (4.36)	598 (4.69)	1148 (5.06)	766 (4.78)
22	800 (4.68)	455 (3.99)	540 (4.23)	1165 (5.13)	740 (4.63)
23	799 (4.67)	432 (3.79)	480 (3.76)	1175 (5.17)	722 (4.51)
24	796 (4.65)	431 (3.78)	464 (3.64)	1210 (5.33)	726 (4.53)

San Francisco: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	743 (4.12)	402 (3.38)	430 (3.20)	1145 (4.70)	681 (4.02)
2	664 (3.68)	374 (3.14)	404 (3.00)	1038 (4.26)	620 (3.66)
3	585 (3.25)	357 (3.00)	381 (2.83)	918 (3.77)	561 (3.31)
4	500 (2.78)	329 (2.76)	360 (2.68)	777 (3.19)	492 (2.90)
5	433 (2.40)	298 (2.50)	336 (2.50)	671 (2.75)	435 (2.57)
6	427 (2.37)	303 (2.54)	336 (2.49)	628 (2.58)	424 (2.50)
7	575 (3.19)	396 (3.33)	434 (3.22)	777 (3.19)	546 (3.22)
8	977 (5.42)	659 (5.53)	699 (5.19)	1243 (5.10)	895 (5.28)
9	1154 (6.40)	688 (5.78)	748 (5.56)	1526 (6.26)	1029 (6.07)
10	1023 (5.68)	594 (4.98)	682 (5.06)	1411 (5.79)	928 (5.47)
11	779 (4.32)	533 (4.48)	626 (4.65)	1041 (4.27)	745 (4.40)
12	678 (3.76)	525 (4.41)	626 (4.65)	882 (3.62)	678 (4.00)
13	715 (3.97)	582 (4.89)	682 (5.07)	853 (3.50)	708 (4.18)
14	704 (3.91)	584 (4.91)	676 (5.02)	775 (3.18)	685 (4.04)
15	684 (3.79)	570 (4.79)	665 (4.94)	752 (3.09)	668 (3.94)
16	673 (3.74)	579 (4.86)	705 (5.24)	736 (3.02)	674 (3.97)
17	701 (3.89)	577 (4.84)	696 (5.17)	756 (3.10)	683 (4.03)
18	844 (4.68)	589 (4.95)	651 (4.84)	1018 (4.18)	776 (4.58)
19	920 (5.10)	595 (4.99)	657 (4.88)	1210 (4.96)	846 (4.99)
20	872 (4.84)	543 (4.56)	617 (4.58)	1208 (4.96)	810 (4.78)
21	872 (4.84)	501 (4.20)	568 (4.22)	1254 (5.15)	799 (4.71)
22	873 (4.84)	465 (3.91)	525 (3.90)	1285 (5.27)	787 (4.64)
23	828 (4.60)	450 (3.78)	508 (3.77)	1237 (5.08)	756 (4.46)
24	801 (4.44)	418 (3.51)	453 (3.36)	1227 (5.04)	725 (4.28)

San Francisco: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	735 (3.98)	414 (3.31)	439 (3.20)	1094 (4.55)	671 (3.90)
2	645 (3.49)	378 (3.02)	408 (2.98)	967 (4.03)	600 (3.49)
3	571 (3.10)	360 (2.87)	383 (2.79)	861 (3.59)	544 (3.17)
4	506 (2.74)	341 (2.72)	366 (2.67)	756 (3.15)	492 (2.87)
5	443 (2.40)	314 (2.50)	344 (2.51)	660 (2.75)	441 (2.56)
6	432 (2.34)	312 (2.49)	339 (2.47)	608 (2.53)	423 (2.46)
7	538 (2.91)	362 (2.89)	379 (2.76)	705 (2.94)	496 (2.89)
8	873 (4.73)	598 (4.77)	557 (4.06)	1121 (4.67)	787 (4.58)
9	1238 (6.71)	735 (5.87)	734 (5.36)	1632 (6.80)	1085 (6.32)
10	1133 (6.14)	678 (5.41)	691 (5.04)	1510 (6.29)	1003 (5.84)
11	855 (4.63)	611 (4.88)	672 (4.90)	1080 (4.50)	805 (4.68)
12	760 (4.12)	609 (4.86)	718 (5.24)	906 (3.77)	748 (4.36)
13	690 (3.74)	578 (4.61)	691 (5.04)	774 (3.22)	683 (3.98)
14	743 (4.03)	618 (4.93)	733 (5.35)	767 (3.19)	715 (4.16)
15	783 (4.24)	662 (5.28)	771 (5.63)	813 (3.39)	757 (4.41)
16	793 (4.29)	657 (5.25)	717 (5.23)	834 (3.47)	750 (4.37)
17	873 (4.73)	657 (5.24)	691 (5.04)	951 (3.96)	793 (4.61)
18	799 (4.33)	593 (4.74)	652 (4.76)	924 (3.85)	742 (4.32)
19	863 (4.67)	582 (4.65)	646 (4.71)	1085 (4.52)	794 (4.62)
20	939 (5.09)	598 (4.77)	664 (4.84)	1274 (5.31)	869 (5.06)
21	765 (4.14)	472 (3.77)	556 (4.06)	1058 (4.41)	713 (4.15)
22	794 (4.30)	459 (3.67)	539 (3.93)	1131 (4.71)	731 (4.26)
23	855 (4.63)	486 (3.88)	547 (3.99)	1245 (5.18)	783 (4.56)
24	838 (4.54)	452 (3.61)	469 (3.42)	1254 (5.22)	754 (4.39)

San Francisco: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	717 (4.14)	405 (3.48)	433 (3.41)	1062 (4.74)	655 (4.08)
2	642 (3.71)	377 (3.24)	407 (3.20)	963 (4.29)	598 (3.73)
3	569 (3.29)	359 (3.08)	382 (3.00)	857 (3.82)	542 (3.38)
4	503 (2.91)	340 (2.92)	365 (2.87)	753 (3.36)	491 (3.06)
5	442 (2.56)	314 (2.69)	343 (2.69)	658 (2.94)	439 (2.74)
6	425 (2.46)	312 (2.68)	338 (2.66)	603 (2.69)	420 (2.62)
7	495 (2.86)	349 (3.00)	376 (2.95)	662 (2.95)	471 (2.94)
8	767 (4.43)	524 (4.50)	516 (4.06)	951 (4.24)	690 (4.30)
9	1056 (6.10)	617 (5.30)	615 (4.84)	1369 (6.11)	914 (5.71)
10	1005 (5.81)	596 (5.12)	633 (4.97)	1350 (6.02)	896 (5.59)
11	832 (4.81)	582 (4.99)	630 (4.95)	1075 (4.79)	780 (4.86)
12	736 (4.26)	560 (4.81)	614 (4.82)	896 (4.00)	702 (4.38)
13	842 (4.87)	652 (5.60)	674 (5.29)	965 (4.31)	783 (4.89)
14	771 (4.46)	637 (5.47)	711 (5.58)	817 (3.64)	734 (4.58)
15	691 (3.99)	586 (5.03)	684 (5.37)	721 (3.22)	671 (4.18)
16	670 (3.87)	558 (4.79)	637 (5.01)	691 (3.08)	639 (3.99)
17	619 (3.57)	512 (4.40)	590 (4.63)	643 (2.87)	591 (3.69)
18	696 (4.02)	526 (4.52)	596 (4.68)	773 (3.45)	648 (4.04)
19	850 (4.91)	546 (4.69)	593 (4.66)	1038 (4.63)	757 (4.72)
20	817 (4.72)	522 (4.48)	593 (4.66)	1074 (4.79)	752 (4.69)
21	804 (4.65)	476 (4.09)	551 (4.33)	1100 (4.91)	733 (4.57)
22	779 (4.50)	437 (3.75)	505 (3.97)	1098 (4.90)	705 (4.40)
23	809 (4.67)	443 (3.80)	494 (3.88)	1160 (5.18)	727 (4.53)
24	768 (4.44)	416 (3.57)	447 (3.51)	1138 (5.07)	692 (4.32)

San Francisco: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	733 (3.43)	392 (2.78)	422 (2.57)	1154 (3.95)	676 (3.33)
2	660 (3.09)	362 (2.57)	394 (2.40)	1046 (3.58)	616 (3.04)
3	582 (2.72)	352 (2.50)	377 (2.30)	929 (3.18)	560 (2.76)
4	506 (2.37)	328 (2.33)	358 (2.18)	803 (2.75)	499 (2.46)
5	434 (2.03)	296 (2.10)	334 (2.04)	698 (2.39)	441 (2.18)
6	433 (2.03)	309 (2.19)	337 (2.05)	664 (2.27)	436 (2.15)
7	767 (3.59)	458 (3.25)	424 (2.58)	1040 (3.56)	672 (3.31)
8	1403 (6.57)	905 (6.42)	985 (6.01)	1897 (6.50)	1298 (6.40)
9	1629 (7.63)	899 (6.38)	1066 (6.49)	2203 (7.55)	1450 (7.15)
10	1243 (5.82)	794 (5.63)	1030 (6.28)	1704 (5.84)	1193 (5.89)
11	986 (4.62)	740 (5.25)	966 (5.89)	1317 (4.51)	1003 (4.95)
12	849 (3.97)	742 (5.27)	1030 (6.28)	1069 (3.66)	923 (4.55)
13	891 (4.17)	710 (5.04)	883 (5.38)	1022 (3.50)	877 (4.32)
14	854 (4.00)	698 (4.95)	889 (5.42)	942 (3.23)	846 (4.17)
15	847 (3.96)	720 (5.11)	902 (5.50)	955 (3.27)	856 (4.22)
16	882 (4.13)	745 (5.29)	887 (5.41)	989 (3.39)	876 (4.32)
17	1077 (5.04)	791 (5.62)	849 (5.18)	1277 (4.37)	999 (4.93)
18	1077 (5.04)	792 (5.62)	876 (5.34)	1431 (4.90)	1044 (5.15)
19	1043 (4.88)	773 (5.49)	923 (5.63)	1468 (5.03)	1053 (5.19)
20	908 (4.25)	542 (3.85)	597 (3.64)	1299 (4.45)	837 (4.13)
21	922 (4.32)	469 (3.33)	498 (3.03)	1353 (4.63)	811 (4.00)
22	915 (4.28)	439 (3.11)	486 (2.96)	1347 (4.61)	797 (3.93)
23	886 (4.15)	429 (3.04)	460 (2.80)	1321 (4.52)	774 (3.82)
24	833 (3.90)	406 (2.88)	434 (2.65)	1271 (4.35)	736 (3.63)

San Francisco: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	721 (3.82)	392 (3.14)	423 (3.10)	1140 (4.39)	669 (3.77)
2	641 (3.39)	362 (2.90)	392 (2.87)	1023 (3.94)	605 (3.41)
3	568 (3.00)	346 (2.77)	370 (2.71)	907 (3.49)	548 (3.09)
4	500 (2.65)	327 (2.62)	354 (2.59)	796 (3.06)	495 (2.79)
5	429 (2.27)	296 (2.38)	331 (2.42)	692 (2.66)	437 (2.46)
6	409 (2.16)	297 (2.38)	328 (2.41)	629 (2.42)	416 (2.35)
7	515 (2.72)	350 (2.80)	370 (2.72)	724 (2.79)	490 (2.76)
8	1052 (5.57)	651 (5.22)	599 (4.39)	1398 (5.38)	925 (5.21)
9	1338 (7.08)	712 (5.71)	685 (5.03)	1791 (6.90)	1132 (6.38)
10	1084 (5.74)	594 (4.76)	633 (4.64)	1509 (5.81)	955 (5.38)
11	812 (4.30)	567 (4.54)	648 (4.75)	1110 (4.27)	785 (4.42)
12	737 (3.90)	584 (4.68)	666 (4.88)	966 (3.72)	738 (4.16)
13	729 (3.86)	623 (4.99)	701 (5.14)	888 (3.42)	736 (4.14)
14	709 (3.75)	602 (4.83)	692 (5.08)	797 (3.07)	700 (3.94)
15	774 (4.10)	658 (5.28)	736 (5.40)	871 (3.35)	760 (4.28)
16	889 (4.70)	719 (5.77)	768 (5.64)	982 (3.78)	840 (4.73)
17	879 (4.65)	695 (5.57)	764 (5.61)	1004 (3.86)	836 (4.71)
18	963 (5.10)	686 (5.50)	760 (5.57)	1197 (4.61)	902 (5.08)
19	995 (5.27)	640 (5.14)	716 (5.25)	1329 (5.12)	921 (5.19)
20	907 (4.80)	581 (4.66)	670 (4.91)	1304 (5.02)	866 (4.88)
21	813 (4.30)	484 (3.88)	576 (4.23)	1186 (4.57)	765 (4.31)
22	825 (4.37)	457 (3.67)	526 (3.86)	1253 (4.82)	766 (4.31)
23	821 (4.34)	440 (3.53)	487 (3.57)	1254 (4.83)	751 (4.23)
24	784 (4.15)	408 (3.27)	442 (3.24)	1221 (4.70)	714 (4.02)

San Francisco: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	718 (4.15)	398 (3.41)	431 (3.30)	1095 (4.71)	661 (4.05)
2	643 (3.72)	369 (3.16)	400 (3.07)	992 (4.27)	602 (3.69)
3	569 (3.29)	351 (3.01)	376 (2.89)	882 (3.80)	545 (3.34)
4	503 (2.90)	332 (2.85)	360 (2.76)	774 (3.33)	493 (3.02)
5	438 (2.53)	304 (2.60)	337 (2.59)	675 (2.90)	439 (2.69)
6	428 (2.47)	307 (2.63)	335 (2.57)	627 (2.70)	425 (2.60)
7	500 (2.89)	343 (2.94)	370 (2.83)	684 (2.94)	474 (2.91)
8	912 (5.27)	605 (5.18)	590 (4.53)	1185 (5.10)	823 (5.04)
9	1107 (6.40)	645 (5.53)	681 (5.22)	1439 (6.19)	968 (5.93)
10	1009 (5.83)	582 (4.99)	647 (4.96)	1378 (5.93)	904 (5.54)
11	781 (4.51)	560 (4.80)	637 (4.89)	1048 (4.51)	757 (4.64)
12	687 (3.97)	545 (4.68)	631 (4.84)	875 (3.77)	685 (4.20)
13	726 (4.19)	596 (5.11)	661 (5.07)	859 (3.70)	711 (4.36)
14	643 (3.71)	549 (4.71)	638 (4.89)	701 (3.02)	633 (3.88)
15	657 (3.80)	574 (4.92)	664 (5.09)	722 (3.11)	655 (4.01)
16	643 (3.71)	563 (4.83)	653 (5.00)	702 (3.02)	640 (3.92)
17	680 (3.93)	566 (4.85)	650 (4.99)	750 (3.23)	662 (4.05)
18	781 (4.51)	568 (4.87)	635 (4.87)	924 (3.98)	727 (4.46)
19	874 (5.05)	600 (5.15)	689 (5.28)	1129 (4.86)	823 (5.05)
20	862 (4.98)	541 (4.64)	618 (4.74)	1183 (5.09)	801 (4.91)
21	794 (4.59)	474 (4.06)	562 (4.31)	1121 (4.82)	738 (4.52)
22	786 (4.54)	441 (3.78)	520 (3.99)	1146 (4.93)	724 (4.44)
23	790 (4.57)	435 (3.73)	494 (3.79)	1167 (5.02)	722 (4.42)
24	777 (4.49)	416 (3.57)	460 (3.53)	1177 (5.06)	708 (4.34)

San Francisco: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	741 (4.03)	410 (3.37)	447 (3.31)	1144 (4.62)	686 (3.98)
2	659 (3.58)	377 (3.10)	411 (3.04)	1028 (4.15)	619 (3.60)
3	579 (3.15)	356 (2.93)	383 (2.83)	907 (3.66)	556 (3.23)
4	507 (2.76)	333 (2.74)	362 (2.68)	789 (3.19)	498 (2.89)
5	439 (2.39)	303 (2.49)	338 (2.50)	686 (2.77)	442 (2.57)
6	424 (2.30)	305 (2.51)	338 (2.50)	630 (2.54)	425 (2.47)
7	543 (2.95)	372 (3.06)	399 (2.95)	744 (3.00)	515 (2.99)
8	973 (5.29)	621 (5.11)	605 (4.48)	1251 (5.05)	863 (5.01)
9	1208 (6.57)	684 (5.63)	689 (5.10)	1598 (6.45)	1045 (6.07)
10	1066 (5.79)	607 (5.00)	659 (4.88)	1457 (5.88)	948 (5.50)
11	813 (4.42)	563 (4.63)	641 (4.74)	1080 (4.36)	775 (4.50)
12	727 (3.95)	565 (4.64)	650 (4.81)	926 (3.74)	717 (4.17)
13	728 (3.96)	588 (4.84)	671 (4.96)	853 (3.45)	710 (4.13)
14	706 (3.84)	585 (4.81)	672 (4.97)	770 (3.11)	684 (3.97)
15	708 (3.85)	599 (4.93)	697 (5.16)	774 (3.12)	694 (4.03)
16	727 (3.95)	609 (5.01)	697 (5.16)	791 (3.19)	706 (4.10)
17	785 (4.27)	623 (5.12)	696 (5.15)	870 (3.51)	743 (4.32)
18	902 (4.90)	643 (5.29)	717 (5.30)	1086 (4.38)	837 (4.86)
19	932 (5.06)	610 (5.02)	681 (5.04)	1211 (4.89)	859 (4.99)
20	884 (4.81)	556 (4.58)	643 (4.76)	1221 (4.93)	827 (4.80)
21	857 (4.66)	502 (4.13)	593 (4.39)	1224 (4.94)	794 (4.61)
22	841 (4.57)	465 (3.82)	544 (4.02)	1239 (5.00)	773 (4.49)
23	837 (4.55)	452 (3.71)	509 (3.77)	1248 (5.04)	762 (4.43)
24	812 (4.41)	431 (3.55)	473 (3.50)	1244 (5.02)	740 (4.30)

Spokane: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	949 (3.10)	817 (3.45)	1052 (3.93)	895 (2.93)	928 (3.33)
2	747 (2.45)	596 (2.51)	768 (2.87)	775 (2.54)	722 (2.59)
3	573 (1.88)	459 (1.94)	577 (2.16)	621 (2.03)	558 (2.00)
4	488 (1.60)	343 (1.45)	416 (1.55)	490 (1.61)	434 (1.56)
5	369 (1.21)	269 (1.14)	319 (1.19)	397 (1.30)	339 (1.21)
6	363 (1.19)	261 (1.10)	298 (1.11)	368 (1.20)	322 (1.15)
7	505 (1.65)	386 (1.63)	437 (1.63)	513 (1.68)	460 (1.65)
8	1023 (3.35)	765 (3.23)	886 (3.31)	1070 (3.50)	936 (3.36)
9	1354 (4.43)	1001 (4.22)	1119 (4.18)	1499 (4.91)	1243 (4.46)
10	1296 (4.24)	1024 (4.32)	1077 (4.03)	1441 (4.72)	1210 (4.34)
11	1183 (3.87)	1046 (4.42)	1054 (3.94)	1366 (4.47)	1162 (4.17)
12	1248 (4.08)	1165 (4.92)	1163 (4.34)	1456 (4.77)	1258 (4.51)
13	1409 (4.61)	1350 (5.70)	1326 (4.95)	1582 (5.18)	1417 (5.08)
14	1502 (4.92)	1400 (5.91)	1366 (5.10)	1628 (5.33)	1474 (5.29)
15	1583 (5.18)	1456 (6.15)	1365 (5.10)	1684 (5.51)	1522 (5.46)
16	1773 (5.80)	1503 (6.34)	1421 (5.31)	1860 (6.09)	1639 (5.88)
17	1868 (6.11)	1521 (6.42)	1533 (5.73)	2018 (6.61)	1735 (6.22)
18	2335 (7.64)	1595 (6.73)	1622 (6.06)	2368 (7.75)	1979 (7.10)
19	2305 (7.54)	1400 (5.91)	1483 (5.54)	2150 (7.04)	1833 (6.57)
20	1849 (6.05)	1085 (4.58)	1437 (5.37)	1616 (5.29)	1496 (5.37)
21	1672 (5.47)	1041 (4.40)	1569 (5.86)	1381 (4.52)	1416 (5.08)
22	1560 (5.10)	1081 (4.56)	1613 (6.03)	1222 (4.00)	1369 (4.91)
23	1457 (4.77)	1149 (4.85)	1568 (5.86)	1147 (3.75)	1330 (4.77)
24	1150 (3.76)	978 (4.13)	1295 (4.84)	1007 (3.29)	1108 (3.97)

Spokane: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1035 (3.29)	846 (3.44)	1100 (3.94)	957 (3.03)	985 (3.41)
2	795 (2.53)	614 (2.49)	793 (2.84)	808 (2.56)	753 (2.61)
3	612 (1.95)	478 (1.94)	601 (2.15)	654 (2.07)	587 (2.03)
4	521 (1.66)	356 (1.45)	433 (1.55)	518 (1.64)	457 (1.58)
5	393 (1.25)	279 (1.13)	329 (1.18)	410 (1.30)	353 (1.22)
6	384 (1.22)	268 (1.09)	310 (1.11)	377 (1.19)	335 (1.16)
7	567 (1.80)	393 (1.60)	426 (1.53)	561 (1.78)	486 (1.68)
8	989 (3.14)	885 (3.60)	959 (3.44)	1041 (3.30)	969 (3.35)
9	1396 (4.44)	1121 (4.55)	1220 (4.37)	1543 (4.89)	1320 (4.57)
10	1373 (4.36)	1076 (4.37)	1153 (4.13)	1537 (4.87)	1285 (4.45)
11	1225 (3.89)	1048 (4.26)	1076 (3.85)	1407 (4.46)	1189 (4.12)
12	1282 (4.07)	1089 (4.43)	1100 (3.94)	1492 (4.73)	1241 (4.30)
13	1291 (4.10)	1263 (5.13)	1257 (4.50)	1481 (4.69)	1324 (4.58)
14	1498 (4.76)	1433 (5.83)	1375 (4.92)	1646 (5.22)	1488 (5.15)
15	1684 (5.35)	1798 (7.31)	1595 (5.71)	1847 (5.85)	1731 (5.99)
16	1671 (5.31)	1527 (6.20)	1518 (5.44)	1743 (5.52)	1615 (5.59)
17	1884 (5.99)	1580 (6.42)	1662 (5.95)	2064 (6.54)	1798 (6.22)
18	2155 (6.85)	1646 (6.69)	1804 (6.46)	2280 (7.22)	1971 (6.82)
19	2356 (7.49)	1416 (5.76)	1561 (5.59)	2231 (7.07)	1890 (6.54)
20	1966 (6.25)	1095 (4.45)	1400 (5.01)	1723 (5.46)	1545 (5.35)
21	1809 (5.75)	1045 (4.25)	1546 (5.54)	1510 (4.79)	1477 (5.11)
22	1750 (5.56)	1120 (4.55)	1665 (5.96)	1381 (4.38)	1479 (5.12)
23	1578 (5.01)	1235 (5.02)	1690 (6.05)	1255 (3.98)	1439 (4.98)
24	1260 (4.00)	998 (4.05)	1353 (4.85)	1094 (3.47)	1176 (4.07)

Spokane: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	982 (3.34)	826 (3.54)	1054 (4.02)	925 (3.15)	947 (3.50)
2	765 (2.60)	599 (2.57)	762 (2.91)	791 (2.69)	729 (2.69)
3	594 (2.02)	465 (1.99)	576 (2.20)	639 (2.18)	569 (2.10)
4	510 (1.73)	351 (1.51)	418 (1.60)	510 (1.74)	447 (1.65)
5	386 (1.31)	272 (1.16)	319 (1.22)	408 (1.39)	346 (1.28)
6	376 (1.28)	258 (1.11)	299 (1.14)	377 (1.28)	327 (1.21)
7	539 (1.83)	376 (1.61)	413 (1.57)	538 (1.83)	467 (1.72)
8	903 (3.07)	785 (3.37)	870 (3.32)	947 (3.22)	876 (3.24)
9	1293 (4.40)	1019 (4.37)	1131 (4.31)	1431 (4.87)	1219 (4.50)
10	1294 (4.40)	1029 (4.41)	1083 (4.13)	1438 (4.90)	1211 (4.47)
11	1148 (3.90)	1018 (4.37)	1017 (3.88)	1323 (4.51)	1127 (4.16)
12	1205 (4.10)	1064 (4.56)	1043 (3.97)	1392 (4.74)	1176 (4.34)
13	1237 (4.21)	1219 (5.23)	1177 (4.49)	1395 (4.75)	1257 (4.64)
14	1393 (4.74)	1337 (5.74)	1271 (4.85)	1519 (5.17)	1380 (5.10)
15	1538 (5.23)	1635 (7.01)	1446 (5.51)	1675 (5.70)	1573 (5.81)
16	1515 (5.15)	1441 (6.18)	1405 (5.36)	1586 (5.40)	1487 (5.49)
17	1694 (5.76)	1493 (6.40)	1523 (5.80)	1859 (6.33)	1642 (6.07)
18	1958 (6.66)	1528 (6.55)	1624 (6.19)	2053 (6.99)	1791 (6.61)
19	2150 (7.31)	1310 (5.62)	1420 (5.41)	2016 (6.87)	1723 (6.36)
20	1878 (6.39)	1014 (4.35)	1309 (4.99)	1623 (5.53)	1455 (5.37)
21	1701 (5.78)	983 (4.22)	1491 (5.68)	1400 (4.77)	1393 (5.15)
22	1649 (5.61)	1109 (4.75)	1630 (6.21)	1288 (4.39)	1418 (5.24)
23	1503 (5.11)	1200 (5.15)	1635 (6.23)	1188 (4.05)	1381 (5.10)
24	1198 (4.07)	988 (4.24)	1312 (5.00)	1044 (3.55)	1135 (4.19)

Spokane: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	922 (3.23)	801 (3.64)	1036 (4.17)	867 (3.05)	907 (3.49)
2	728 (2.55)	582 (2.65)	752 (3.03)	754 (2.65)	704 (2.71)
3	563 (1.97)	453 (2.06)	575 (2.31)	610 (2.15)	550 (2.12)
4	484 (1.69)	339 (1.54)	412 (1.66)	485 (1.71)	430 (1.66)
5	368 (1.29)	266 (1.21)	316 (1.27)	393 (1.38)	336 (1.29)
6	359 (1.26)	255 (1.16)	290 (1.17)	363 (1.28)	316 (1.22)
7	485 (1.70)	376 (1.71)	419 (1.68)	492 (1.73)	443 (1.71)
8	802 (2.81)	623 (2.83)	730 (2.93)	822 (2.89)	744 (2.87)
9	1277 (4.47)	892 (4.06)	1002 (4.03)	1401 (4.92)	1143 (4.40)
10	1196 (4.19)	966 (4.39)	1026 (4.13)	1324 (4.65)	1128 (4.35)
11	1141 (4.00)	937 (4.26)	944 (3.80)	1300 (4.57)	1081 (4.16)
12	1198 (4.19)	981 (4.46)	981 (3.94)	1375 (4.83)	1134 (4.37)
13	1223 (4.28)	1201 (5.46)	1161 (4.67)	1378 (4.84)	1241 (4.78)
14	1332 (4.67)	1248 (5.67)	1212 (4.87)	1439 (5.06)	1308 (5.04)
15	1464 (5.13)	1443 (6.56)	1331 (5.35)	1568 (5.51)	1451 (5.59)
16	1652 (5.79)	1408 (6.40)	1325 (5.33)	1716 (6.03)	1525 (5.87)
17	1689 (5.91)	1468 (6.67)	1507 (6.06)	1831 (6.43)	1624 (6.25)
18	2185 (7.65)	1523 (6.92)	1557 (6.26)	2246 (7.89)	1877 (7.23)
19	2081 (7.29)	1301 (5.92)	1372 (5.52)	1960 (6.89)	1677 (6.46)
20	1738 (6.09)	966 (4.39)	1209 (4.86)	1522 (5.35)	1358 (5.23)
21	1585 (5.55)	944 (4.29)	1425 (5.73)	1317 (4.63)	1317 (5.07)
22	1540 (5.39)	990 (4.50)	1504 (6.05)	1202 (4.23)	1309 (5.04)
23	1435 (5.02)	1096 (4.98)	1517 (6.10)	1124 (3.95)	1293 (4.98)
24	1103 (3.86)	941 (4.28)	1261 (5.07)	963 (3.39)	1067 (4.11)

Spokane: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	930 (3.13)	822 (3.53)	1040 (3.96)	883 (2.97)	919 (3.37)
2	737 (2.48)	603 (2.59)	764 (2.91)	770 (2.59)	719 (2.64)
3	569 (1.91)	461 (1.98)	574 (2.18)	622 (2.09)	557 (2.04)
4	483 (1.62)	340 (1.46)	411 (1.56)	487 (1.64)	430 (1.58)
5	369 (1.24)	267 (1.15)	316 (1.20)	399 (1.34)	338 (1.24)
6	360 (1.21)	260 (1.12)	300 (1.14)	367 (1.24)	322 (1.18)
7	524 (1.76)	393 (1.69)	437 (1.66)	533 (1.79)	471 (1.73)
8	936 (3.15)	742 (3.19)	845 (3.21)	976 (3.28)	875 (3.21)
9	1282 (4.31)	970 (4.17)	1082 (4.12)	1425 (4.79)	1190 (4.36)
10	1291 (4.34)	997 (4.28)	1055 (4.01)	1428 (4.80)	1192 (4.37)
11	1167 (3.92)	1034 (4.44)	1056 (4.02)	1346 (4.53)	1151 (4.22)
12	1227 (4.13)	1175 (5.05)	1158 (4.41)	1437 (4.83)	1250 (4.58)
13	1396 (4.69)	1317 (5.66)	1269 (4.83)	1562 (5.25)	1386 (5.09)
14	1488 (5.00)	1332 (5.72)	1303 (4.96)	1596 (5.36)	1430 (5.25)
15	1564 (5.26)	1410 (6.06)	1338 (5.09)	1654 (5.56)	1491 (5.47)
16	1716 (5.77)	1487 (6.39)	1448 (5.51)	1788 (6.01)	1609 (5.90)
17	1878 (6.31)	1499 (6.44)	1508 (5.74)	2022 (6.80)	1727 (6.33)
18	2124 (7.14)	1503 (6.46)	1584 (6.03)	2171 (7.30)	1845 (6.77)
19	2238 (7.52)	1348 (5.79)	1434 (5.46)	2073 (6.97)	1772 (6.50)
20	1819 (6.12)	1077 (4.62)	1377 (5.24)	1591 (5.35)	1465 (5.38)
21	1585 (5.33)	1027 (4.41)	1538 (5.85)	1316 (4.43)	1366 (5.01)
22	1506 (5.06)	1077 (4.63)	1604 (6.11)	1183 (3.98)	1342 (4.92)
23	1432 (4.81)	1163 (5.00)	1560 (5.94)	1129 (3.80)	1321 (4.85)
24	1122 (3.77)	981 (4.22)	1276 (4.86)	986 (3.31)	1092 (4.00)

Spokane: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	957 (3.12)	815 (3.43)	1046 (3.89)	902 (2.94)	930 (3.32)
2	755 (2.47)	594 (2.50)	764 (2.84)	783 (2.56)	724 (2.59)
3	575 (1.88)	459 (1.93)	576 (2.14)	624 (2.04)	559 (2.00)
4	493 (1.61)	346 (1.45)	417 (1.55)	495 (1.62)	438 (1.56)
5	372 (1.21)	270 (1.14)	320 (1.19)	399 (1.30)	340 (1.22)
6	367 (1.20)	262 (1.10)	297 (1.11)	371 (1.21)	324 (1.16)
7	506 (1.65)	385 (1.62)	434 (1.61)	514 (1.68)	460 (1.64)
8	1014 (3.31)	773 (3.25)	904 (3.36)	1060 (3.46)	938 (3.35)
9	1345 (4.39)	1002 (4.22)	1131 (4.20)	1488 (4.86)	1242 (4.44)
10	1312 (4.28)	1039 (4.37)	1090 (4.05)	1459 (4.77)	1225 (4.38)
11	1193 (3.89)	1051 (4.42)	1066 (3.96)	1375 (4.49)	1171 (4.19)
12	1239 (4.05)	1162 (4.89)	1174 (4.36)	1443 (4.71)	1255 (4.48)
13	1374 (4.49)	1338 (5.63)	1334 (4.96)	1545 (5.05)	1398 (5.00)
14	1484 (4.84)	1409 (5.93)	1386 (5.15)	1611 (5.26)	1472 (5.26)
15	1580 (5.16)	1484 (6.24)	1379 (5.12)	1686 (5.51)	1532 (5.48)
16	1782 (5.82)	1490 (6.27)	1416 (5.26)	1867 (6.10)	1638 (5.86)
17	1892 (6.18)	1530 (6.44)	1546 (5.74)	2045 (6.68)	1753 (6.27)
18	2344 (7.65)	1619 (6.81)	1639 (6.09)	2384 (7.79)	1996 (7.13)
19	2289 (7.48)	1412 (5.94)	1502 (5.58)	2143 (7.00)	1835 (6.56)
20	1839 (6.00)	1076 (4.52)	1444 (5.37)	1607 (5.25)	1491 (5.33)
21	1686 (5.50)	1034 (4.35)	1569 (5.83)	1393 (4.55)	1420 (5.08)
22	1583 (5.17)	1090 (4.58)	1605 (5.96)	1241 (4.05)	1379 (4.93)
23	1482 (4.84)	1157 (4.87)	1581 (5.87)	1166 (3.81)	1346 (4.81)
24	1166 (3.81)	975 (4.10)	1292 (4.80)	1019 (3.33)	1113 (3.98)

Spokane: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	963 (3.11)	821 (3.40)	1061 (3.91)	908 (2.93)	938 (3.31)
2	751 (2.43)	598 (2.47)	775 (2.85)	778 (2.51)	726 (2.56)
3	578 (1.87)	462 (1.91)	580 (2.13)	624 (2.01)	561 (1.98)
4	491 (1.58)	344 (1.43)	416 (1.53)	492 (1.59)	436 (1.54)
5	370 (1.19)	269 (1.12)	320 (1.18)	396 (1.28)	339 (1.20)
6	363 (1.17)	260 (1.08)	304 (1.12)	368 (1.18)	324 (1.14)
7	505 (1.63)	372 (1.54)	436 (1.60)	510 (1.64)	456 (1.61)
8	1043 (3.37)	766 (3.17)	885 (3.26)	1097 (3.53)	948 (3.35)
9	1432 (4.63)	1039 (4.30)	1141 (4.20)	1588 (5.12)	1300 (4.59)
10	1282 (4.14)	1026 (4.25)	1069 (3.93)	1429 (4.61)	1202 (4.24)
11	1180 (3.81)	1085 (4.49)	1061 (3.90)	1372 (4.42)	1174 (4.15)
12	1273 (4.11)	1207 (5.00)	1180 (4.34)	1492 (4.81)	1289 (4.55)
13	1464 (4.73)	1411 (5.84)	1350 (4.97)	1650 (5.32)	1469 (5.18)
14	1547 (5.00)	1458 (6.03)	1397 (5.14)	1688 (5.44)	1523 (5.38)
15	1579 (5.10)	1524 (6.30)	1450 (5.34)	1690 (5.45)	1561 (5.51)
16	1733 (5.60)	1536 (6.35)	1451 (5.34)	1838 (5.92)	1639 (5.79)
17	1769 (5.72)	1537 (6.36)	1542 (5.68)	1941 (6.26)	1698 (5.99)
18	2459 (7.94)	1626 (6.73)	1634 (6.02)	2481 (8.00)	2049 (7.23)
19	2397 (7.74)	1428 (5.91)	1507 (5.55)	2234 (7.20)	1890 (6.67)
20	1880 (6.07)	1120 (4.63)	1481 (5.45)	1649 (5.31)	1532 (5.41)
21	1716 (5.54)	1070 (4.43)	1621 (5.97)	1415 (4.56)	1455 (5.14)
22	1569 (5.07)	1082 (4.47)	1640 (6.04)	1227 (3.95)	1379 (4.87)
23	1442 (4.66)	1138 (4.71)	1553 (5.72)	1137 (3.66)	1317 (4.65)
24	1170 (3.78)	989 (4.09)	1311 (4.82)	1025 (3.30)	1124 (3.97)

Spokane: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	994 (2.99)	878 (3.42)	1155 (4.02)	923 (2.75)	988 (3.26)
2	769 (2.31)	635 (2.47)	836 (2.91)	787 (2.35)	757 (2.50)
3	598 (1.80)	494 (1.92)	617 (2.14)	636 (1.89)	587 (1.93)
4	510 (1.53)	370 (1.44)	442 (1.54)	509 (1.52)	458 (1.51)
5	382 (1.15)	287 (1.12)	334 (1.16)	400 (1.19)	351 (1.16)
6	373 (1.12)	272 (1.06)	305 (1.06)	369 (1.10)	330 (1.09)
7	482 (1.45)	389 (1.52)	443 (1.54)	487 (1.45)	450 (1.49)
8	1353 (4.06)	882 (3.43)	938 (3.26)	1416 (4.22)	1147 (3.78)
9	1519 (4.57)	1157 (4.50)	1245 (4.33)	1681 (5.01)	1401 (4.62)
10	1402 (4.21)	1114 (4.34)	1186 (4.12)	1568 (4.67)	1317 (4.34)
11	1285 (3.86)	1098 (4.28)	1118 (3.88)	1485 (4.43)	1247 (4.11)
12	1313 (3.95)	1195 (4.65)	1236 (4.30)	1553 (4.63)	1325 (4.37)
13	1529 (4.59)	1536 (5.98)	1512 (5.26)	1768 (5.27)	1587 (5.23)
14	1648 (4.95)	1503 (5.85)	1465 (5.09)	1826 (5.44)	1611 (5.31)
15	1584 (4.76)	1631 (6.35)	1465 (5.09)	1752 (5.22)	1608 (5.30)
16	1912 (5.75)	1593 (6.20)	1486 (5.16)	2025 (6.03)	1753 (5.78)
17	2193 (6.59)	1583 (6.16)	1564 (5.43)	2371 (7.06)	1927 (6.36)
18	2678 (8.05)	1822 (7.10)	1796 (6.24)	2756 (8.21)	2262 (7.46)
19	2584 (7.77)	1500 (5.84)	1577 (5.48)	2428 (7.23)	2021 (6.66)
20	2027 (6.09)	1230 (4.79)	1578 (5.48)	1785 (5.32)	1654 (5.46)
21	1850 (5.56)	1101 (4.28)	1623 (5.64)	1533 (4.57)	1526 (5.03)
22	1620 (4.87)	1157 (4.50)	1759 (6.11)	1287 (3.83)	1456 (4.80)
23	1482 (4.45)	1221 (4.75)	1691 (5.88)	1186 (3.53)	1395 (4.60)
24	1185 (3.56)	1036 (4.03)	1399 (4.86)	1037 (3.09)	1165 (3.84)

Spokane: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	927 (3.06)	796 (3.38)	1032 (3.85)	874 (2.88)	907 (3.27)
2	730 (2.41)	581 (2.47)	754 (2.81)	758 (2.50)	706 (2.54)
3	567 (1.87)	453 (1.92)	571 (2.13)	615 (2.03)	552 (1.99)
4	487 (1.61)	342 (1.45)	415 (1.55)	489 (1.61)	433 (1.56)
5	368 (1.22)	269 (1.14)	319 (1.19)	396 (1.31)	338 (1.22)
6	361 (1.19)	258 (1.10)	297 (1.11)	366 (1.21)	321 (1.16)
7	487 (1.61)	365 (1.55)	414 (1.54)	494 (1.63)	440 (1.58)
8	1047 (3.45)	761 (3.23)	857 (3.20)	1098 (3.62)	941 (3.39)
9	1391 (4.59)	991 (4.20)	1088 (4.06)	1538 (5.07)	1252 (4.51)
10	1291 (4.26)	1000 (4.24)	1063 (3.96)	1429 (4.71)	1196 (4.31)
11	1177 (3.88)	1040 (4.41)	1063 (3.96)	1355 (4.47)	1159 (4.18)
12	1250 (4.12)	1176 (4.99)	1176 (4.38)	1458 (4.81)	1265 (4.56)
13	1383 (4.56)	1352 (5.74)	1329 (4.96)	1554 (5.12)	1405 (5.06)
14	1457 (4.80)	1380 (5.85)	1360 (5.07)	1579 (5.20)	1444 (5.20)
15	1603 (5.29)	1496 (6.34)	1405 (5.24)	1706 (5.62)	1552 (5.59)
16	1882 (6.21)	1573 (6.67)	1473 (5.49)	1982 (6.53)	1727 (6.22)
17	1893 (6.24)	1551 (6.58)	1570 (5.85)	2043 (6.73)	1764 (6.36)
18	2289 (7.55)	1585 (6.72)	1627 (6.07)	2314 (7.63)	1953 (7.04)
19	2314 (7.63)	1389 (5.89)	1497 (5.58)	2143 (7.07)	1835 (6.61)
20	1825 (6.02)	1093 (4.64)	1520 (5.67)	1591 (5.25)	1507 (5.43)
21	1605 (5.29)	1027 (4.36)	1591 (5.93)	1327 (4.37)	1387 (5.00)
22	1472 (4.86)	1033 (4.38)	1581 (5.90)	1154 (3.81)	1310 (4.72)
23	1401 (4.62)	1114 (4.72)	1541 (5.75)	1100 (3.63)	1289 (4.64)
24	1109 (3.66)	949 (4.02)	1278 (4.76)	968 (3.19)	1076 (3.88)

Spokane: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	1076 (3.35)	890 (3.70)	1138 (4.16)	1036 (3.24)	1035 (3.59)
2	826 (2.57)	647 (2.69)	801 (2.93)	865 (2.71)	785 (2.72)
3	616 (1.92)	483 (2.00)	596 (2.18)	664 (2.08)	590 (2.04)
4	502 (1.56)	354 (1.47)	424 (1.55)	508 (1.59)	447 (1.55)
5	368 (1.15)	270 (1.12)	322 (1.18)	395 (1.24)	339 (1.17)
6	359 (1.12)	256 (1.06)	300 (1.10)	363 (1.14)	319 (1.11)
7	538 (1.68)	379 (1.58)	446 (1.63)	541 (1.69)	476 (1.65)
8	903 (2.81)	676 (2.81)	924 (3.38)	924 (2.89)	857 (2.97)
9	1271 (3.96)	990 (4.11)	1268 (4.64)	1388 (4.34)	1230 (4.26)
10	1391 (4.33)	1085 (4.51)	1208 (4.42)	1539 (4.81)	1306 (4.52)
11	1206 (3.76)	1153 (4.79)	1201 (4.39)	1403 (4.39)	1241 (4.30)
12	1272 (3.96)	1174 (4.88)	1104 (4.04)	1481 (4.63)	1258 (4.36)
13	1494 (4.65)	1384 (5.75)	1438 (5.26)	1666 (5.21)	1496 (5.18)
14	1582 (4.93)	1378 (5.72)	1419 (5.19)	1696 (5.31)	1519 (5.26)
15	1620 (5.05)	1389 (5.77)	1322 (4.84)	1703 (5.33)	1508 (5.23)
16	2081 (6.48)	1552 (6.45)	1418 (5.19)	2173 (6.80)	1805 (6.25)
17	2216 (6.90)	1656 (6.88)	1673 (6.12)	2375 (7.43)	1979 (6.86)
18	2348 (7.31)	1521 (6.32)	1601 (5.86)	2347 (7.34)	1953 (6.77)
19	2415 (7.52)	1311 (5.45)	1362 (4.98)	2207 (6.91)	1822 (6.31)
20	1942 (6.05)	1096 (4.55)	1269 (4.64)	1691 (5.29)	1498 (5.19)
21	1690 (5.26)	1014 (4.21)	1466 (5.36)	1391 (4.35)	1390 (4.82)
22	1601 (4.99)	1141 (4.74)	1817 (6.65)	1265 (3.96)	1456 (5.05)
23	1514 (4.72)	1213 (5.04)	1541 (5.64)	1208 (3.78)	1369 (4.74)
24	1272 (3.96)	1062 (4.41)	1275 (4.66)	1132 (3.54)	1185 (4.11)

Spokane: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	962 (2.93)	833 (3.27)	1086 (3.81)	907 (2.75)	947 (3.16)
2	758 (2.31)	607 (2.38)	789 (2.77)	786 (2.38)	735 (2.46)
3	579 (1.76)	462 (1.81)	582 (2.04)	626 (1.90)	562 (1.88)
4	496 (1.51)	347 (1.36)	420 (1.48)	498 (1.51)	440 (1.47)
5	377 (1.15)	273 (1.07)	322 (1.13)	404 (1.23)	344 (1.15)
6	372 (1.13)	271 (1.06)	312 (1.10)	376 (1.14)	333 (1.11)
7	572 (1.74)	447 (1.75)	498 (1.75)	582 (1.77)	525 (1.75)
8	1188 (3.62)	897 (3.52)	1051 (3.69)	1252 (3.80)	1097 (3.66)
9	1532 (4.67)	1131 (4.44)	1263 (4.44)	1688 (5.12)	1404 (4.69)
10	1468 (4.47)	1133 (4.44)	1154 (4.05)	1637 (4.97)	1348 (4.50)
11	1356 (4.13)	1139 (4.47)	1119 (3.93)	1557 (4.72)	1293 (4.32)
12	1399 (4.27)	1272 (4.99)	1261 (4.43)	1632 (4.95)	1392 (4.65)
13	1613 (4.91)	1460 (5.73)	1416 (4.98)	1807 (5.48)	1574 (5.26)
14	1715 (5.23)	1527 (5.99)	1474 (5.18)	1840 (5.58)	1639 (5.48)
15	1703 (5.19)	1601 (6.28)	1475 (5.18)	1805 (5.47)	1646 (5.50)
16	1853 (5.65)	1648 (6.47)	1556 (5.47)	1948 (5.91)	1751 (5.85)
17	2149 (6.55)	1721 (6.75)	1689 (5.93)	2328 (7.06)	1971 (6.59)
18	2484 (7.57)	1802 (7.07)	1816 (6.38)	2550 (7.73)	2162 (7.22)
19	2344 (7.14)	1453 (5.70)	1539 (5.41)	2199 (6.67)	1882 (6.29)
20	1863 (5.68)	1086 (4.26)	1442 (5.07)	1628 (4.94)	1504 (5.02)
21	1706 (5.20)	1062 (4.17)	1557 (5.47)	1410 (4.28)	1433 (4.79)
22	1642 (5.00)	1139 (4.47)	1689 (5.93)	1286 (3.90)	1438 (4.81)
23	1493 (4.55)	1172 (4.60)	1603 (5.63)	1179 (3.58)	1362 (4.55)
24	1190 (3.63)	1006 (3.95)	1354 (4.75)	1043 (3.16)	1148 (3.84)

Spokane: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	942 (3.17)	811 (3.56)	1054 (4.09)	887 (2.99)	924 (3.42)
2	741 (2.49)	588 (2.58)	761 (2.95)	767 (2.59)	714 (2.65)
3	573 (1.93)	454 (1.99)	572 (2.22)	620 (2.09)	555 (2.06)
4	491 (1.65)	341 (1.50)	413 (1.60)	493 (1.66)	434 (1.61)
5	372 (1.25)	267 (1.17)	316 (1.23)	398 (1.34)	338 (1.25)
6	365 (1.23)	256 (1.12)	290 (1.13)	369 (1.24)	320 (1.19)
7	477 (1.61)	344 (1.51)	389 (1.51)	480 (1.62)	423 (1.57)
8	854 (2.87)	650 (2.85)	761 (2.95)	881 (2.97)	787 (2.92)
9	1221 (4.11)	937 (4.11)	1051 (4.08)	1358 (4.58)	1142 (4.23)
10	1282 (4.31)	998 (4.38)	1058 (4.11)	1427 (4.81)	1191 (4.42)
11	1197 (4.03)	990 (4.34)	1004 (3.90)	1370 (4.62)	1140 (4.23)
12	1251 (4.21)	1106 (4.85)	1104 (4.29)	1449 (4.88)	1228 (4.55)
13	1346 (4.53)	1250 (5.49)	1250 (4.86)	1507 (5.08)	1339 (4.96)
14	1493 (5.02)	1344 (5.89)	1320 (5.12)	1608 (5.42)	1441 (5.34)
15	1539 (5.18)	1445 (6.34)	1340 (5.20)	1631 (5.50)	1488 (5.52)
16	1682 (5.66)	1448 (6.35)	1355 (5.26)	1758 (5.93)	1560 (5.78)
17	1898 (6.38)	1478 (6.49)	1454 (5.65)	2046 (6.90)	1719 (6.37)
18	2083 (7.01)	1450 (6.36)	1480 (5.75)	2150 (7.25)	1790 (6.63)
19	2197 (7.39)	1358 (5.96)	1438 (5.58)	2061 (6.95)	1762 (6.53)
20	1827 (6.15)	1048 (4.60)	1361 (5.28)	1596 (5.38)	1457 (5.40)
21	1680 (5.65)	1021 (4.48)	1508 (5.86)	1390 (4.69)	1399 (5.19)
22	1583 (5.32)	1114 (4.89)	1639 (6.36)	1243 (4.19)	1394 (5.17)
23	1475 (4.96)	1138 (4.99)	1560 (6.06)	1161 (3.91)	1333 (4.94)
24	1161 (3.90)	959 (4.21)	1276 (4.95)	1014 (3.42)	1102 (4.09)

Spokane: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	959 (3.06)	826 (3.49)	1057 (3.94)	904 (2.89)	937 (3.31)
2	747 (2.38)	598 (2.53)	769 (2.86)	776 (2.48)	723 (2.55)
3	574 (1.83)	462 (1.95)	580 (2.16)	623 (1.99)	560 (1.98)
4	489 (1.56)	342 (1.45)	414 (1.54)	492 (1.57)	434 (1.53)
5	370 (1.18)	268 (1.13)	317 (1.18)	399 (1.27)	338 (1.20)
6	368 (1.17)	261 (1.10)	296 (1.10)	373 (1.19)	325 (1.15)
7	509 (1.62)	376 (1.59)	435 (1.62)	516 (1.65)	459 (1.62)
8	1068 (3.41)	775 (3.28)	919 (3.42)	1116 (3.56)	970 (3.43)
9	1424 (4.54)	1014 (4.29)	1146 (4.27)	1572 (5.02)	1289 (4.56)
10	1318 (4.20)	1003 (4.24)	1056 (3.93)	1470 (4.69)	1212 (4.28)
11	1201 (3.83)	997 (4.22)	1022 (3.81)	1374 (4.39)	1149 (4.06)
12	1265 (4.04)	1092 (4.62)	1132 (4.22)	1473 (4.70)	1241 (4.39)
13	1455 (4.64)	1314 (5.56)	1330 (4.95)	1635 (5.22)	1434 (5.07)
14	1572 (5.01)	1383 (5.85)	1356 (5.05)	1695 (5.41)	1502 (5.31)
15	1627 (5.19)	1414 (5.98)	1346 (5.01)	1717 (5.48)	1526 (5.39)
16	1747 (5.57)	1444 (6.11)	1385 (5.16)	1814 (5.79)	1597 (5.65)
17	2024 (6.45)	1529 (6.47)	1531 (5.70)	2170 (6.93)	1813 (6.41)
18	2530 (8.07)	1685 (7.13)	1722 (6.41)	2560 (8.17)	2123 (7.51)
19	2378 (7.58)	1436 (6.07)	1524 (5.68)	2221 (7.09)	1888 (6.67)
20	1855 (5.91)	1067 (4.51)	1366 (5.09)	1626 (5.19)	1477 (5.22)
21	1705 (5.44)	1062 (4.49)	1575 (5.87)	1411 (4.51)	1438 (5.08)
22	1569 (5.00)	1109 (4.69)	1626 (6.06)	1231 (3.93)	1384 (4.89)
23	1460 (4.66)	1190 (5.03)	1635 (6.09)	1154 (3.68)	1359 (4.81)
24	1145 (3.65)	998 (4.22)	1309 (4.88)	1003 (3.20)	1114 (3.94)

Spokane: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	916 (3.18)	809 (3.43)	1051 (3.91)	862 (2.97)	910 (3.36)
2	725 (2.51)	596 (2.53)	777 (2.89)	752 (2.59)	712 (2.63)
3	562 (1.95)	464 (1.97)	591 (2.20)	610 (2.10)	557 (2.06)
4	484 (1.68)	351 (1.49)	429 (1.60)	486 (1.68)	437 (1.62)
5	367 (1.27)	275 (1.17)	329 (1.22)	395 (1.36)	341 (1.26)
6	359 (1.24)	263 (1.12)	302 (1.12)	365 (1.26)	322 (1.19)
7	457 (1.59)	353 (1.50)	405 (1.51)	463 (1.60)	420 (1.55)
8	977 (3.39)	728 (3.09)	797 (2.96)	1032 (3.56)	883 (3.26)
9	1259 (4.36)	871 (3.70)	1041 (3.87)	1377 (4.75)	1137 (4.20)
10	1309 (4.54)	917 (3.90)	1012 (3.77)	1443 (4.98)	1170 (4.32)
11	1317 (4.57)	1125 (4.78)	1107 (4.12)	1521 (5.25)	1268 (4.68)
12	1372 (4.76)	1263 (5.36)	1307 (4.86)	1584 (5.46)	1382 (5.11)
13	1644 (5.70)	1441 (6.12)	1421 (5.29)	1799 (6.20)	1576 (5.82)
14	1505 (5.22)	1390 (5.90)	1332 (4.96)	1609 (5.55)	1459 (5.39)
15	1399 (4.85)	1499 (6.37)	1428 (5.31)	1502 (5.18)	1457 (5.38)
16	1523 (5.28)	1553 (6.59)	1517 (5.65)	1621 (5.59)	1554 (5.74)
17	1655 (5.74)	1683 (7.14)	1771 (6.59)	1809 (6.24)	1730 (6.39)
18	1889 (6.55)	1620 (6.88)	1724 (6.42)	1968 (6.79)	1800 (6.65)
19	2045 (7.09)	1345 (5.71)	1435 (5.34)	1916 (6.61)	1684 (6.22)
20	1645 (5.70)	937 (3.98)	1220 (4.54)	1438 (4.96)	1309 (4.84)
21	1508 (5.23)	973 (4.13)	1544 (5.75)	1260 (4.35)	1321 (4.88)
22	1441 (4.99)	1031 (4.38)	1527 (5.69)	1137 (3.92)	1284 (4.74)
23	1392 (4.83)	1115 (4.74)	1534 (5.71)	1093 (3.77)	1284 (4.74)
24	1097 (3.80)	949 (4.03)	1268 (4.72)	955 (3.29)	1067 (3.94)

Spokane: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	954 (2.88)	807 (3.20)	1041 (3.70)	900 (2.71)	926 (3.09)
2	741 (2.23)	590 (2.34)	765 (2.72)	770 (2.32)	717 (2.40)
3	575 (1.73)	461 (1.83)	580 (2.06)	624 (1.88)	560 (1.87)
4	494 (1.49)	347 (1.37)	419 (1.49)	497 (1.50)	439 (1.47)
5	373 (1.12)	271 (1.07)	320 (1.14)	403 (1.21)	342 (1.14)
6	370 (1.12)	272 (1.08)	307 (1.09)	377 (1.13)	331 (1.11)
7	629 (1.90)	473 (1.87)	506 (1.80)	640 (1.93)	562 (1.88)
8	1265 (3.82)	962 (3.81)	1130 (4.02)	1348 (4.06)	1177 (3.93)
9	1547 (4.66)	1138 (4.51)	1297 (4.61)	1713 (5.16)	1424 (4.76)
10	1433 (4.32)	1149 (4.55)	1189 (4.23)	1612 (4.85)	1346 (4.50)
11	1314 (3.96)	1165 (4.62)	1153 (4.10)	1521 (4.58)	1289 (4.31)
12	1373 (4.14)	1288 (5.11)	1233 (4.38)	1614 (4.86)	1377 (4.60)
13	1575 (4.75)	1484 (5.88)	1499 (5.33)	1776 (5.35)	1584 (5.29)
14	1717 (5.18)	1496 (5.93)	1482 (5.27)	1846 (5.56)	1635 (5.46)
15	1671 (5.04)	1496 (5.93)	1359 (4.83)	1769 (5.33)	1573 (5.26)
16	1769 (5.34)	1511 (5.99)	1380 (4.91)	1849 (5.57)	1627 (5.44)
17	2083 (6.28)	1684 (6.67)	1676 (5.96)	2245 (6.76)	1922 (6.42)
18	2877 (8.68)	1793 (7.11)	1846 (6.56)	2864 (8.62)	2344 (7.83)
19	2433 (7.34)	1429 (5.66)	1476 (5.25)	2266 (6.82)	1899 (6.35)
20	1835 (5.53)	1072 (4.25)	1392 (4.95)	1605 (4.83)	1475 (4.93)
21	1754 (5.29)	1098 (4.35)	1652 (5.87)	1446 (4.36)	1487 (4.97)
22	1700 (5.13)	1117 (4.43)	1623 (5.77)	1318 (3.97)	1439 (4.81)
23	1509 (4.55)	1153 (4.57)	1528 (5.43)	1184 (3.57)	1343 (4.49)
24	1167 (3.52)	975 (3.86)	1280 (4.55)	1021 (3.07)	1111 (3.71)

Spokane: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	920 (3.15)	801 (3.66)	1035 (4.16)	866 (2.97)	906 (3.45)
2	727 (2.49)	589 (2.69)	762 (3.06)	755 (2.59)	708 (2.69)
3	564 (1.93)	457 (2.09)	577 (2.32)	612 (2.10)	552 (2.10)
4	486 (1.66)	342 (1.56)	414 (1.67)	488 (1.68)	432 (1.65)
5	368 (1.26)	268 (1.22)	322 (1.29)	396 (1.36)	339 (1.29)
6	360 (1.23)	258 (1.18)	298 (1.20)	366 (1.26)	320 (1.22)
7	464 (1.59)	350 (1.60)	403 (1.62)	471 (1.62)	422 (1.61)
8	804 (2.75)	606 (2.77)	733 (2.95)	822 (2.82)	741 (2.82)
9	1212 (4.15)	860 (3.93)	1001 (4.02)	1340 (4.60)	1103 (4.20)
10	1258 (4.30)	945 (4.31)	991 (3.98)	1390 (4.77)	1146 (4.36)
11	1189 (4.07)	973 (4.44)	949 (3.82)	1364 (4.68)	1119 (4.26)
12	1317 (4.51)	1127 (5.14)	1090 (4.38)	1516 (5.20)	1263 (4.80)
13	1428 (4.88)	1208 (5.51)	1164 (4.68)	1572 (5.39)	1343 (5.11)
14	1527 (5.23)	1316 (6.01)	1236 (4.97)	1640 (5.63)	1430 (5.44)
15	1616 (5.53)	1381 (6.30)	1278 (5.14)	1701 (5.84)	1494 (5.68)
16	1661 (5.68)	1322 (6.04)	1307 (5.26)	1719 (5.90)	1502 (5.71)
17	1836 (6.28)	1320 (6.03)	1364 (5.48)	1947 (6.68)	1616 (6.15)
18	2006 (6.86)	1362 (6.22)	1414 (5.69)	2070 (7.11)	1712 (6.52)
19	2137 (7.31)	1316 (6.01)	1398 (5.62)	2008 (6.89)	1713 (6.52)
20	1772 (6.06)	1033 (4.72)	1348 (5.42)	1554 (5.33)	1426 (5.43)
21	1572 (5.38)	997 (4.55)	1556 (6.25)	1303 (4.47)	1357 (5.16)
22	1488 (5.09)	1033 (4.71)	1513 (6.08)	1162 (3.99)	1298 (4.94)
23	1414 (4.84)	1092 (4.99)	1476 (5.93)	1107 (3.80)	1272 (4.84)
24	1109 (3.79)	951 (4.34)	1246 (5.01)	969 (3.33)	1069 (4.07)

Spokane: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	940 (3.07)	805 (3.43)	1044 (3.98)	889 (2.90)	920 (3.31)
2	739 (2.41)	591 (2.52)	759 (2.89)	772 (2.52)	716 (2.58)
3	575 (1.88)	461 (1.97)	578 (2.20)	627 (2.04)	560 (2.02)
4	489 (1.60)	341 (1.45)	413 (1.57)	493 (1.61)	434 (1.56)
5	367 (1.20)	265 (1.13)	315 (1.20)	398 (1.30)	336 (1.21)
6	380 (1.24)	261 (1.11)	292 (1.11)	386 (1.26)	330 (1.19)
7	561 (1.83)	418 (1.78)	460 (1.75)	573 (1.87)	503 (1.81)
8	1081 (3.53)	829 (3.54)	931 (3.55)	1136 (3.70)	994 (3.58)
9	1339 (4.37)	1033 (4.41)	1149 (4.38)	1483 (4.84)	1251 (4.51)
10	1299 (4.24)	1026 (4.38)	1086 (4.14)	1447 (4.72)	1214 (4.38)
11	1236 (4.04)	1017 (4.34)	1019 (3.88)	1412 (4.60)	1171 (4.22)
12	1240 (4.05)	1098 (4.69)	1090 (4.15)	1446 (4.71)	1219 (4.39)
13	1468 (4.79)	1360 (5.81)	1320 (5.03)	1651 (5.38)	1450 (5.23)
14	1609 (5.25)	1435 (6.13)	1413 (5.38)	1733 (5.65)	1548 (5.58)
15	1602 (5.23)	1431 (6.11)	1315 (5.01)	1697 (5.53)	1511 (5.45)
16	1719 (5.61)	1471 (6.28)	1391 (5.30)	1793 (5.84)	1593 (5.74)
17	1969 (6.43)	1487 (6.35)	1503 (5.73)	2093 (6.82)	1763 (6.35)
18	2236 (7.30)	1493 (6.38)	1463 (5.57)	2287 (7.46)	1869 (6.74)
19	2229 (7.28)	1376 (5.87)	1442 (5.49)	2096 (6.83)	1784 (6.43)
20	1754 (5.73)	1036 (4.42)	1309 (4.99)	1541 (5.02)	1409 (5.08)
21	1617 (5.28)	1013 (4.33)	1493 (5.69)	1348 (4.39)	1367 (4.93)
22	1612 (5.26)	1081 (4.62)	1640 (6.25)	1260 (4.11)	1398 (5.04)
23	1438 (4.70)	1144 (4.88)	1563 (5.95)	1128 (3.68)	1318 (4.75)
24	1130 (3.69)	951 (4.06)	1270 (4.84)	988 (3.22)	1085 (3.91)

Spokane: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	927 (3.11)	793 (3.36)	1019 (3.75)	874 (2.90)	903 (3.26)
2	729 (2.45)	576 (2.44)	748 (2.75)	757 (2.51)	703 (2.54)
3	567 (1.90)	451 (1.91)	570 (2.10)	615 (2.04)	551 (1.99)
4	487 (1.64)	341 (1.44)	413 (1.52)	490 (1.62)	433 (1.56)
5	368 (1.23)	267 (1.13)	316 (1.16)	398 (1.32)	337 (1.22)
6	379 (1.27)	258 (1.09)	290 (1.07)	384 (1.27)	328 (1.18)
7	531 (1.78)	367 (1.55)	416 (1.53)	538 (1.78)	463 (1.67)
8	811 (2.72)	692 (2.93)	842 (3.10)	853 (2.83)	800 (2.89)
9	1331 (4.47)	1041 (4.40)	1156 (4.25)	1497 (4.96)	1256 (4.54)
10	1388 (4.66)	1108 (4.68)	1159 (4.26)	1564 (5.19)	1305 (4.71)
11	1295 (4.34)	1113 (4.71)	1173 (4.31)	1500 (4.97)	1270 (4.59)
12	1370 (4.60)	1251 (5.29)	1295 (4.76)	1581 (5.24)	1375 (4.96)
13	1370 (4.60)	1295 (5.48)	1319 (4.85)	1532 (5.08)	1379 (4.98)
14	1694 (5.69)	1470 (6.22)	1489 (5.47)	1818 (6.03)	1618 (5.84)
15	1758 (5.90)	1578 (6.67)	1609 (5.92)	1859 (6.16)	1701 (6.14)
16	1755 (5.89)	1547 (6.54)	1601 (5.89)	1870 (6.20)	1693 (6.11)
17	2053 (6.89)	1579 (6.68)	1594 (5.86)	2227 (7.38)	1863 (6.73)
18	1879 (6.31)	1416 (5.99)	1496 (5.50)	1980 (6.56)	1692 (6.11)
19	2009 (6.74)	1317 (5.57)	1367 (5.03)	1912 (6.34)	1650 (5.96)
20	1679 (5.64)	1082 (4.58)	1443 (5.31)	1491 (4.94)	1424 (5.14)
21	1441 (4.84)	935 (3.95)	1487 (5.47)	1200 (3.98)	1266 (4.57)
22	1448 (4.86)	1033 (4.37)	1558 (5.73)	1134 (3.76)	1293 (4.67)
23	1416 (4.75)	1168 (4.94)	1574 (5.79)	1118 (3.71)	1319 (4.76)
24	1113 (3.73)	966 (4.09)	1260 (4.63)	979 (3.24)	1080 (3.90)

Spokane: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	927 (3.21)	783 (3.56)	1012 (4.03)	871 (3.00)	898 (3.42)
2	730 (2.53)	576 (2.62)	749 (2.98)	758 (2.62)	704 (2.68)
3	568 (1.97)	452 (2.05)	571 (2.27)	617 (2.13)	552 (2.10)
4	489 (1.69)	341 (1.55)	414 (1.65)	492 (1.70)	434 (1.65)
5	368 (1.28)	267 (1.21)	317 (1.26)	399 (1.38)	338 (1.29)
6	362 (1.25)	256 (1.16)	291 (1.16)	368 (1.27)	319 (1.22)
7	459 (1.59)	348 (1.58)	407 (1.62)	470 (1.62)	421 (1.60)
8	835 (2.89)	617 (2.80)	776 (3.09)	860 (2.97)	772 (2.94)
9	1242 (4.30)	873 (3.97)	997 (3.97)	1385 (4.78)	1124 (4.28)
10	1229 (4.26)	968 (4.40)	1014 (4.04)	1373 (4.73)	1146 (4.37)
11	1177 (4.08)	1036 (4.71)	1008 (4.01)	1370 (4.72)	1148 (4.37)
12	1259 (4.36)	1117 (5.07)	1056 (4.20)	1472 (5.08)	1226 (4.67)
13	1535 (5.32)	1426 (6.47)	1293 (5.15)	1738 (5.99)	1498 (5.71)
14	1581 (5.48)	1474 (6.69)	1355 (5.39)	1731 (5.97)	1535 (5.85)
15	1545 (5.35)	1402 (6.36)	1319 (5.25)	1651 (5.69)	1479 (5.63)
16	1646 (5.70)	1349 (6.13)	1330 (5.29)	1714 (5.91)	1509 (5.75)
17	1620 (5.61)	1257 (5.71)	1347 (5.36)	1744 (6.02)	1492 (5.68)
18	1863 (6.45)	1299 (5.90)	1530 (6.09)	1944 (6.70)	1659 (6.32)
19	2189 (7.58)	1281 (5.82)	1421 (5.66)	2048 (7.06)	1734 (6.60)
20	1678 (5.81)	961 (4.37)	1270 (5.05)	1472 (5.08)	1344 (5.12)
21	1543 (5.35)	938 (4.26)	1407 (5.60)	1281 (4.42)	1292 (4.92)
22	1472 (5.10)	979 (4.44)	1505 (5.99)	1147 (3.96)	1275 (4.86)
23	1449 (5.02)	1104 (5.01)	1521 (6.05)	1133 (3.91)	1302 (4.96)
24	1101 (3.81)	916 (4.16)	1214 (4.83)	958 (3.30)	1047 (3.99)

Spokane: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	922 (2.43)	785 (2.67)	1013 (3.00)	871 (2.28)	898 (2.58)
2	758 (2.00)	581 (1.98)	745 (2.21)	788 (2.06)	718 (2.07)
3	563 (1.49)	452 (1.54)	571 (1.69)	614 (1.61)	550 (1.58)
4	483 (1.28)	338 (1.15)	412 (1.22)	486 (1.27)	430 (1.24)
5	366 (0.97)	265 (0.90)	316 (0.94)	395 (1.03)	336 (0.96)
6	363 (0.96)	265 (0.90)	298 (0.89)	371 (0.97)	324 (0.93)
7	790 (2.09)	499 (1.70)	481 (1.43)	794 (2.08)	641 (1.84)
8	1475 (3.90)	1252 (4.26)	1460 (4.33)	1591 (4.17)	1445 (4.15)
9	2119 (5.60)	1544 (5.25)	1708 (5.07)	2315 (6.06)	1921 (5.52)
10	1827 (4.83)	1523 (5.19)	1592 (4.72)	2031 (5.32)	1743 (5.01)
11	1796 (4.74)	1558 (5.30)	1641 (4.87)	2059 (5.39)	1764 (5.07)
12	1854 (4.90)	1771 (6.03)	1864 (5.53)	2111 (5.53)	1900 (5.46)
13	2170 (5.73)	1813 (6.17)	1882 (5.58)	2332 (6.11)	2049 (5.89)
14	2243 (5.92)	1864 (6.35)	1862 (5.52)	2353 (6.16)	2080 (5.98)
15	2094 (5.53)	1902 (6.47)	1892 (5.61)	2162 (5.66)	2012 (5.79)
16	2256 (5.96)	1974 (6.72)	2139 (6.35)	2381 (6.23)	2188 (6.29)
17	2685 (7.09)	2070 (7.05)	2133 (6.33)	2900 (7.59)	2447 (7.03)
18	2340 (6.18)	2026 (6.90)	2103 (6.24)	2479 (6.49)	2237 (6.43)
19	2250 (5.94)	1648 (5.61)	1864 (5.53)	2143 (5.61)	1976 (5.68)
20	1914 (5.05)	1080 (3.68)	1733 (5.14)	1670 (4.37)	1599 (4.60)
21	1810 (4.78)	1010 (3.44)	1576 (4.67)	1495 (3.91)	1472 (4.23)
22	1902 (5.02)	1093 (3.72)	1658 (4.92)	1469 (3.85)	1530 (4.40)
23	1645 (4.34)	1119 (3.81)	1547 (4.59)	1298 (3.40)	1402 (4.03)
24	1243 (3.28)	943 (3.21)	1222 (3.62)	1086 (2.84)	1123 (3.23)

Spokane: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	932 (2.88)	795 (3.21)	1036 (3.72)	880 (2.72)	911 (3.11)
2	737 (2.28)	581 (2.35)	756 (2.71)	764 (2.36)	710 (2.42)
3	573 (1.77)	452 (1.83)	570 (2.05)	619 (1.91)	554 (1.89)
4	490 (1.51)	342 (1.38)	414 (1.49)	492 (1.52)	434 (1.48)
5	368 (1.14)	268 (1.08)	319 (1.15)	395 (1.22)	338 (1.15)
6	360 (1.11)	258 (1.04)	297 (1.07)	365 (1.13)	320 (1.09)
7	505 (1.56)	367 (1.48)	417 (1.50)	510 (1.58)	450 (1.53)
8	1053 (3.25)	811 (3.27)	906 (3.25)	1115 (3.44)	971 (3.31)
9	1561 (4.82)	1075 (4.34)	1133 (4.07)	1720 (5.31)	1372 (4.68)
10	1340 (4.14)	1024 (4.14)	1081 (3.88)	1482 (4.58)	1232 (4.20)
11	1191 (3.68)	1070 (4.32)	1089 (3.91)	1372 (4.24)	1181 (4.03)
12	1307 (4.04)	1227 (4.96)	1211 (4.35)	1521 (4.70)	1317 (4.49)
13	1400 (4.32)	1432 (5.78)	1424 (5.11)	1582 (4.89)	1460 (4.98)
14	1628 (5.03)	1474 (5.96)	1438 (5.17)	1757 (5.43)	1575 (5.37)
15	1817 (5.61)	1631 (6.59)	1508 (5.42)	1921 (5.93)	1719 (5.86)
16	2253 (6.96)	1792 (7.24)	1611 (5.78)	2390 (7.38)	2011 (6.85)
17	2327 (7.19)	1737 (7.02)	1685 (6.05)	2481 (7.66)	2057 (7.01)
18	2563 (7.92)	1711 (6.91)	1708 (6.13)	2543 (7.85)	2130 (7.26)
19	2463 (7.61)	1413 (5.71)	1511 (5.43)	2251 (6.95)	1908 (6.50)
20	1822 (5.63)	1126 (4.55)	1592 (5.72)	1592 (4.92)	1533 (5.22)
21	1637 (5.05)	1019 (4.12)	1619 (5.81)	1345 (4.15)	1405 (4.79)
22	1511 (4.67)	1077 (4.35)	1673 (6.01)	1187 (3.67)	1362 (4.64)
23	1416 (4.37)	1127 (4.55)	1570 (5.64)	1113 (3.44)	1307 (4.45)
24	1122 (3.47)	943 (3.81)	1280 (4.60)	980 (3.03)	1081 (3.69)

Spokane: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	925 (3.27)	788 (3.52)	1017 (3.98)	869 (3.07)	900 (3.44)
2	730 (2.58)	578 (2.58)	749 (2.94)	756 (2.67)	704 (2.69)
3	566 (2.00)	451 (2.02)	570 (2.23)	614 (2.17)	551 (2.11)
4	487 (1.72)	341 (1.52)	413 (1.62)	489 (1.73)	432 (1.66)
5	368 (1.30)	267 (1.19)	317 (1.24)	396 (1.40)	337 (1.29)
6	371 (1.31)	260 (1.16)	293 (1.15)	376 (1.33)	325 (1.24)
7	479 (1.70)	352 (1.57)	403 (1.58)	486 (1.72)	430 (1.65)
8	917 (3.24)	735 (3.28)	854 (3.35)	963 (3.40)	867 (3.32)
9	1314 (4.65)	944 (4.21)	1058 (4.15)	1448 (5.11)	1191 (4.56)
10	1257 (4.45)	978 (4.36)	1027 (4.02)	1396 (4.92)	1164 (4.46)
11	1075 (3.81)	1018 (4.54)	1078 (4.22)	1249 (4.41)	1105 (4.23)
12	1178 (4.17)	1107 (4.94)	1135 (4.44)	1378 (4.86)	1200 (4.59)
13	1309 (4.63)	1327 (5.92)	1282 (5.02)	1491 (5.26)	1352 (5.18)
14	1403 (4.97)	1311 (5.85)	1306 (5.11)	1521 (5.37)	1385 (5.30)
15	1353 (4.79)	1376 (6.14)	1319 (5.17)	1463 (5.16)	1378 (5.27)
16	1434 (5.08)	1360 (6.07)	1317 (5.16)	1508 (5.32)	1404 (5.37)
17	1645 (5.82)	1392 (6.21)	1391 (5.45)	1790 (6.32)	1555 (5.95)
18	2063 (7.30)	1419 (6.33)	1458 (5.71)	2133 (7.53)	1768 (6.77)
19	2086 (7.38)	1363 (6.09)	1435 (5.62)	1977 (6.97)	1714 (6.56)
20	1744 (6.17)	1025 (4.57)	1352 (5.30)	1530 (5.40)	1412 (5.40)
21	1554 (5.50)	962 (4.29)	1474 (5.77)	1289 (4.55)	1319 (5.05)
22	1469 (5.20)	1006 (4.49)	1505 (5.89)	1150 (4.06)	1282 (4.91)
23	1403 (4.96)	1105 (4.93)	1529 (5.99)	1096 (3.87)	1283 (4.91)
24	1122 (3.97)	939 (4.19)	1245 (4.88)	978 (3.45)	1071 (4.10)

Spokane: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	948 (3.06)	814 (3.43)	1050 (3.93)	894 (2.88)	927 (3.29)
2	744 (2.40)	593 (2.50)	766 (2.86)	772 (2.49)	719 (2.56)
3	573 (1.85)	458 (1.93)	576 (2.16)	621 (2.00)	557 (1.98)
4	490 (1.58)	343 (1.45)	416 (1.55)	492 (1.59)	435 (1.55)
5	371 (1.20)	269 (1.13)	319 (1.19)	398 (1.28)	339 (1.21)
6	368 (1.18)	262 (1.10)	298 (1.12)	372 (1.20)	325 (1.15)
7	524 (1.69)	389 (1.64)	437 (1.63)	530 (1.71)	470 (1.67)
8	1044 (3.36)	772 (3.25)	887 (3.32)	1092 (3.52)	949 (3.37)
9	1385 (4.46)	1009 (4.25)	1121 (4.19)	1530 (4.93)	1261 (4.48)
10	1340 (4.32)	1033 (4.35)	1079 (4.03)	1488 (4.79)	1235 (4.39)
11	1233 (3.97)	1051 (4.42)	1051 (3.93)	1418 (4.57)	1188 (4.22)
12	1299 (4.19)	1168 (4.92)	1157 (4.33)	1508 (4.86)	1283 (4.56)
13	1481 (4.77)	1353 (5.70)	1317 (4.93)	1652 (5.32)	1451 (5.16)
14	1583 (5.10)	1415 (5.96)	1364 (5.10)	1706 (5.50)	1517 (5.39)
15	1619 (5.22)	1474 (6.20)	1372 (5.13)	1717 (5.53)	1545 (5.49)
16	1764 (5.69)	1504 (6.33)	1424 (5.33)	1849 (5.96)	1635 (5.81)
17	1974 (6.36)	1548 (6.51)	1543 (5.77)	2124 (6.85)	1797 (6.39)
18	2346 (7.56)	1602 (6.75)	1628 (6.09)	2385 (7.68)	1989 (7.07)
19	2294 (7.40)	1392 (5.86)	1476 (5.52)	2142 (6.90)	1825 (6.49)
20	1818 (5.86)	1067 (4.49)	1419 (5.30)	1591 (5.13)	1473 (5.23)
21	1655 (5.33)	1035 (4.36)	1564 (5.85)	1370 (4.42)	1406 (5.00)
22	1568 (5.05)	1083 (4.56)	1614 (6.04)	1228 (3.96)	1373 (4.88)
23	1456 (4.69)	1148 (4.83)	1568 (5.86)	1147 (3.70)	1329 (4.73)
24	1147 (3.70)	974 (4.10)	1292 (4.83)	1004 (3.24)	1104 (3.93)

St. Louis: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	409 (3.93)	426 (4.57)	422 (4.64)	465 (4.06)	431 (4.28)
2	357 (3.42)	385 (4.13)	369 (4.06)	437 (3.82)	387 (3.85)
3	333 (3.19)	337 (3.62)	321 (3.52)	382 (3.34)	343 (3.41)
4	298 (2.86)	317 (3.40)	285 (3.13)	344 (3.00)	311 (3.09)
5	279 (2.68)	289 (3.10)	264 (2.90)	323 (2.82)	289 (2.87)
6	272 (2.61)	290 (3.12)	260 (2.85)	318 (2.78)	285 (2.83)
7	350 (3.36)	327 (3.51)	295 (3.24)	374 (3.27)	336 (3.34)
8	562 (5.39)	461 (4.95)	421 (4.62)	563 (4.92)	501 (4.98)
9	645 (6.19)	487 (5.23)	466 (5.12)	652 (5.70)	562 (5.58)
10	570 (5.47)	429 (4.61)	431 (4.73)	587 (5.13)	504 (5.01)
11	453 (4.35)	384 (4.12)	387 (4.25)	470 (4.11)	424 (4.21)
12	406 (3.89)	378 (4.05)	365 (4.01)	416 (3.63)	391 (3.88)
13	411 (3.95)	389 (4.18)	370 (4.06)	407 (3.56)	394 (3.91)
14	383 (3.68)	375 (4.03)	351 (3.86)	381 (3.33)	372 (3.70)
15	387 (3.71)	370 (3.97)	342 (3.76)	389 (3.40)	372 (3.69)
16	413 (3.97)	384 (4.13)	345 (3.79)	415 (3.63)	389 (3.87)
17	439 (4.21)	396 (4.25)	359 (3.94)	438 (3.83)	408 (4.05)
18	526 (5.05)	415 (4.45)	378 (4.15)	560 (4.90)	470 (4.66)
19	556 (5.33)	387 (4.16)	370 (4.07)	627 (5.48)	485 (4.82)
20	527 (5.06)	378 (4.05)	409 (4.50)	632 (5.52)	487 (4.83)
21	486 (4.66)	390 (4.19)	463 (5.09)	611 (5.34)	488 (4.84)
22	459 (4.41)	424 (4.55)	490 (5.39)	579 (5.06)	489 (4.85)
23	459 (4.40)	449 (4.82)	483 (5.31)	552 (4.82)	486 (4.83)
24	440 (4.22)	448 (4.81)	458 (5.03)	521 (4.56)	467 (4.64)

St. Louis: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	419 (3.94)	503 (4.96)	504 (4.78)	645 (4.23)	518 (4.45)
2	373 (3.50)	461 (4.54)	440 (4.17)	616 (4.04)	473 (4.06)
3	351 (3.29)	416 (4.10)	396 (3.75)	555 (3.64)	430 (3.69)
4	319 (2.99)	380 (3.75)	354 (3.36)	523 (3.43)	394 (3.39)
5	293 (2.75)	335 (3.30)	330 (3.13)	472 (3.10)	358 (3.07)
6	291 (2.73)	316 (3.11)	323 (3.07)	455 (2.99)	347 (2.97)
7	381 (3.58)	340 (3.35)	336 (3.19)	528 (3.46)	396 (3.40)
8	612 (5.75)	507 (5.00)	476 (4.51)	763 (5.01)	590 (5.06)
9	699 (6.57)	538 (5.31)	534 (5.07)	838 (5.50)	652 (5.60)
10	608 (5.72)	481 (4.75)	504 (4.78)	750 (4.92)	586 (5.03)
11	470 (4.41)	408 (4.02)	443 (4.20)	609 (4.00)	483 (4.14)
12	417 (3.92)	361 (3.56)	393 (3.73)	537 (3.52)	427 (3.67)
13	384 (3.60)	360 (3.55)	387 (3.68)	505 (3.32)	409 (3.51)
14	382 (3.59)	376 (3.71)	379 (3.59)	529 (3.47)	417 (3.58)
15	452 (4.25)	454 (4.48)	433 (4.11)	654 (4.29)	499 (4.28)
16	381 (3.58)	383 (3.78)	401 (3.81)	526 (3.45)	423 (3.63)
17	415 (3.90)	413 (4.07)	422 (4.00)	576 (3.78)	457 (3.92)
18	444 (4.18)	422 (4.16)	448 (4.25)	640 (4.20)	489 (4.20)
19	500 (4.70)	390 (3.85)	417 (3.95)	710 (4.66)	505 (4.33)
20	516 (4.85)	386 (3.81)	431 (4.09)	789 (5.17)	531 (4.56)
21	506 (4.75)	413 (4.07)	508 (4.81)	780 (5.12)	552 (4.74)
22	495 (4.65)	462 (4.56)	556 (5.27)	772 (5.07)	572 (4.91)
23	487 (4.57)	524 (5.16)	588 (5.57)	758 (4.97)	590 (5.06)
24	450 (4.23)	511 (5.04)	540 (5.12)	710 (4.66)	553 (4.75)

St. Louis: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	422 (4.13)	444 (4.80)	430 (4.81)	502 (4.31)	450 (4.49)
2	367 (3.59)	401 (4.34)	372 (4.16)	471 (4.04)	403 (4.02)
3	348 (3.40)	354 (3.83)	326 (3.65)	416 (3.57)	361 (3.61)
4	313 (3.06)	333 (3.60)	292 (3.26)	380 (3.26)	329 (3.29)
5	286 (2.80)	295 (3.19)	266 (2.97)	346 (2.96)	298 (2.98)
6	278 (2.71)	293 (3.17)	263 (2.94)	335 (2.88)	292 (2.92)
7	364 (3.56)	321 (3.47)	282 (3.16)	396 (3.40)	341 (3.40)
8	549 (5.36)	458 (4.96)	409 (4.57)	579 (4.97)	499 (4.98)
9	632 (6.18)	486 (5.25)	465 (5.20)	662 (5.68)	561 (5.60)
10	568 (5.55)	433 (4.69)	430 (4.81)	603 (5.17)	508 (5.07)
11	440 (4.30)	374 (4.04)	372 (4.16)	472 (4.05)	414 (4.14)
12	381 (3.72)	342 (3.70)	327 (3.66)	399 (3.42)	362 (3.62)
13	365 (3.57)	343 (3.72)	325 (3.63)	375 (3.21)	352 (3.51)
14	364 (3.56)	354 (3.83)	318 (3.55)	377 (3.23)	353 (3.53)
15	415 (4.05)	408 (4.41)	351 (3.92)	452 (3.87)	406 (4.05)
16	363 (3.55)	359 (3.88)	334 (3.74)	381 (3.26)	359 (3.59)
17	418 (4.08)	390 (4.22)	355 (3.97)	430 (3.69)	398 (3.97)
18	458 (4.48)	395 (4.27)	375 (4.20)	500 (4.29)	432 (4.31)
19	501 (4.90)	358 (3.87)	351 (3.93)	570 (4.89)	445 (4.44)
20	508 (4.97)	350 (3.79)	369 (4.13)	628 (5.39)	464 (4.63)
21	478 (4.68)	376 (4.07)	446 (4.99)	622 (5.33)	481 (4.80)
22	479 (4.69)	435 (4.70)	496 (5.55)	617 (5.29)	507 (5.06)
23	479 (4.68)	477 (5.16)	515 (5.76)	593 (5.09)	516 (5.15)
24	452 (4.42)	464 (5.02)	470 (5.26)	553 (4.74)	485 (4.84)

St. Louis: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	401 (3.96)	470 (4.97)	462 (4.91)	575 (4.27)	477 (4.50)
2	354 (3.50)	432 (4.57)	406 (4.31)	545 (4.05)	435 (4.09)
3	338 (3.34)	387 (4.10)	363 (3.86)	488 (3.62)	394 (3.72)
4	304 (3.01)	357 (3.78)	321 (3.41)	455 (3.38)	360 (3.39)
5	282 (2.79)	316 (3.35)	296 (3.14)	417 (3.09)	328 (3.09)
6	277 (2.74)	302 (3.19)	284 (3.02)	404 (3.00)	317 (2.99)
7	355 (3.51)	333 (3.53)	313 (3.33)	467 (3.47)	367 (3.46)
8	497 (4.92)	415 (4.39)	389 (4.14)	582 (4.32)	471 (4.44)
9	633 (6.26)	467 (4.95)	449 (4.78)	721 (5.35)	568 (5.35)
10	561 (5.55)	440 (4.66)	446 (4.75)	661 (4.91)	527 (4.97)
11	454 (4.49)	381 (4.03)	393 (4.18)	545 (4.05)	443 (4.18)
12	399 (3.95)	344 (3.65)	349 (3.71)	480 (3.56)	393 (3.70)
13	386 (3.81)	363 (3.84)	362 (3.85)	473 (3.51)	396 (3.73)
14	364 (3.60)	352 (3.73)	344 (3.66)	442 (3.28)	376 (3.54)
15	401 (3.97)	388 (4.11)	374 (3.97)	500 (3.71)	416 (3.92)
16	405 (4.00)	378 (4.00)	361 (3.84)	497 (3.69)	410 (3.86)
17	420 (4.15)	405 (4.29)	389 (4.13)	519 (3.85)	433 (4.08)
18	506 (5.00)	428 (4.53)	403 (4.29)	661 (4.91)	500 (4.71)
19	491 (4.85)	369 (3.91)	368 (3.91)	658 (4.88)	472 (4.44)
20	486 (4.80)	354 (3.75)	376 (3.99)	703 (5.21)	480 (4.52)
21	468 (4.62)	395 (4.19)	466 (4.96)	710 (5.27)	511 (4.81)
22	454 (4.48)	431 (4.56)	501 (5.33)	685 (5.08)	518 (4.88)
23	454 (4.49)	461 (4.88)	505 (5.37)	656 (4.87)	520 (4.89)
24	425 (4.20)	475 (5.03)	487 (5.17)	631 (4.68)	505 (4.76)

St. Louis: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	417 (3.96)	453 (4.75)	439 (4.67)	520 (4.18)	457 (4.37)
2	364 (3.47)	413 (4.34)	388 (4.12)	492 (3.96)	415 (3.96)
3	342 (3.25)	361 (3.79)	337 (3.58)	432 (3.48)	368 (3.52)
4	300 (2.85)	330 (3.46)	297 (3.16)	384 (3.09)	328 (3.13)
5	281 (2.67)	298 (3.12)	275 (2.92)	357 (2.87)	303 (2.89)
6	274 (2.61)	296 (3.11)	273 (2.90)	350 (2.82)	299 (2.85)
7	365 (3.47)	332 (3.49)	303 (3.22)	417 (3.36)	354 (3.38)
8	546 (5.20)	447 (4.69)	411 (4.36)	578 (4.65)	495 (4.73)
9	639 (6.08)	481 (5.05)	465 (4.93)	675 (5.43)	565 (5.39)
10	580 (5.52)	437 (4.59)	445 (4.73)	625 (5.03)	522 (4.98)
11	466 (4.43)	399 (4.19)	412 (4.38)	514 (4.14)	448 (4.28)
12	428 (4.07)	396 (4.16)	388 (4.12)	475 (3.82)	422 (4.03)
13	425 (4.05)	389 (4.08)	376 (3.99)	451 (3.63)	410 (3.92)
14	386 (3.67)	365 (3.83)	354 (3.76)	407 (3.28)	378 (3.61)
15	394 (3.75)	371 (3.90)	359 (3.82)	426 (3.43)	388 (3.70)
16	414 (3.94)	391 (4.11)	375 (3.99)	449 (3.61)	407 (3.89)
17	453 (4.31)	405 (4.25)	376 (4.00)	486 (3.91)	430 (4.10)
18	492 (4.68)	410 (4.31)	394 (4.19)	561 (4.52)	464 (4.43)
19	548 (5.21)	382 (4.01)	376 (3.99)	651 (5.24)	489 (4.67)
20	536 (5.10)	382 (4.01)	408 (4.33)	687 (5.53)	504 (4.81)
21	481 (4.57)	398 (4.18)	474 (5.04)	655 (5.27)	503 (4.80)
22	463 (4.41)	445 (4.67)	512 (5.44)	639 (5.14)	515 (4.92)
23	473 (4.49)	473 (4.97)	502 (5.33)	616 (4.96)	516 (4.93)
24	445 (4.23)	471 (4.94)	474 (5.03)	579 (4.66)	492 (4.70)

St. Louis: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	413 (3.94)	433 (4.58)	430 (4.58)	480 (4.06)	439 (4.27)
2	362 (3.44)	391 (4.13)	376 (4.01)	453 (3.83)	396 (3.84)
3	335 (3.19)	344 (3.64)	329 (3.50)	398 (3.37)	352 (3.42)
4	303 (2.89)	325 (3.43)	294 (3.13)	362 (3.06)	321 (3.12)
5	282 (2.68)	294 (3.11)	273 (2.91)	337 (2.85)	297 (2.88)
6	276 (2.63)	293 (3.10)	267 (2.84)	331 (2.80)	292 (2.83)
7	353 (3.36)	330 (3.49)	302 (3.22)	387 (3.28)	343 (3.33)
8	565 (5.38)	469 (4.96)	437 (4.65)	574 (4.85)	511 (4.96)
9	646 (6.16)	493 (5.21)	481 (5.12)	660 (5.58)	570 (5.53)
10	578 (5.50)	440 (4.65)	448 (4.77)	606 (5.12)	518 (5.03)
11	456 (4.34)	389 (4.11)	403 (4.29)	483 (4.08)	432 (4.20)
12	406 (3.86)	380 (4.01)	380 (4.05)	425 (3.59)	398 (3.86)
13	405 (3.86)	390 (4.12)	383 (4.07)	416 (3.51)	398 (3.87)
14	382 (3.64)	380 (4.02)	365 (3.89)	397 (3.35)	381 (3.70)
15	394 (3.75)	380 (4.02)	355 (3.78)	415 (3.51)	386 (3.75)
16	414 (3.95)	386 (4.08)	355 (3.78)	431 (3.65)	397 (3.85)
17	444 (4.23)	404 (4.28)	372 (3.96)	465 (3.93)	421 (4.09)
18	530 (5.05)	421 (4.45)	390 (4.15)	583 (4.93)	481 (4.67)
19	556 (5.29)	395 (4.18)	385 (4.10)	645 (5.46)	495 (4.81)
20	525 (5.00)	379 (4.01)	422 (4.50)	638 (5.40)	491 (4.77)
21	493 (4.69)	394 (4.16)	477 (5.07)	624 (5.28)	497 (4.83)
22	470 (4.48)	431 (4.56)	498 (5.30)	603 (5.10)	501 (4.87)
23	468 (4.46)	463 (4.90)	501 (5.33)	576 (4.87)	502 (4.88)
24	444 (4.23)	455 (4.81)	468 (4.99)	538 (4.55)	477 (4.63)

St. Louis: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	413 (3.92)	431 (4.54)	431 (4.62)	467 (4.02)	436 (4.25)
2	357 (3.40)	387 (4.08)	377 (4.04)	439 (3.77)	390 (3.81)
3	333 (3.16)	341 (3.60)	329 (3.52)	385 (3.31)	347 (3.39)
4	298 (2.84)	318 (3.36)	291 (3.11)	345 (2.97)	313 (3.06)
5	279 (2.65)	290 (3.06)	269 (2.89)	323 (2.78)	290 (2.83)
6	272 (2.58)	292 (3.08)	269 (2.88)	317 (2.73)	287 (2.81)
7	338 (3.21)	319 (3.36)	297 (3.18)	361 (3.10)	329 (3.21)
8	566 (5.38)	465 (4.91)	423 (4.53)	569 (4.89)	505 (4.94)
9	676 (6.42)	505 (5.33)	479 (5.14)	681 (5.86)	585 (5.71)
10	566 (5.38)	430 (4.53)	431 (4.62)	587 (5.05)	503 (4.92)
11	458 (4.35)	389 (4.11)	390 (4.18)	481 (4.14)	429 (4.19)
12	416 (3.95)	387 (4.08)	372 (3.99)	431 (3.71)	401 (3.92)
13	424 (4.03)	401 (4.22)	380 (4.08)	425 (3.65)	407 (3.98)
14	390 (3.71)	386 (4.07)	364 (3.90)	395 (3.40)	384 (3.75)
15	383 (3.64)	383 (4.04)	369 (3.96)	392 (3.37)	382 (3.73)
16	409 (3.89)	394 (4.15)	356 (3.82)	421 (3.62)	395 (3.86)
17	424 (4.03)	399 (4.21)	365 (3.91)	435 (3.74)	406 (3.96)
18	547 (5.20)	430 (4.53)	391 (4.19)	593 (5.10)	490 (4.78)
19	574 (5.46)	406 (4.28)	389 (4.17)	656 (5.65)	506 (4.94)
20	544 (5.17)	398 (4.20)	430 (4.60)	657 (5.65)	507 (4.95)
21	500 (4.75)	405 (4.27)	482 (5.16)	625 (5.38)	503 (4.91)
22	459 (4.36)	427 (4.50)	502 (5.37)	572 (4.92)	490 (4.79)
23	451 (4.29)	444 (4.68)	478 (5.12)	542 (4.66)	479 (4.68)
24	446 (4.24)	457 (4.82)	468 (5.01)	529 (4.55)	475 (4.64)

St. Louis: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	400 (3.92)	421 (4.59)	431 (4.87)	445 (4.11)	424 (4.35)
2	357 (3.50)	390 (4.25)	380 (4.30)	428 (3.96)	389 (3.98)
3	333 (3.26)	342 (3.72)	329 (3.71)	371 (3.43)	344 (3.52)
4	307 (3.01)	324 (3.54)	293 (3.31)	337 (3.11)	315 (3.23)
5	290 (2.84)	299 (3.26)	273 (3.08)	315 (2.91)	294 (3.01)
6	282 (2.76)	297 (3.24)	265 (3.00)	308 (2.84)	288 (2.95)
7	332 (3.25)	323 (3.52)	293 (3.32)	343 (3.17)	323 (3.31)
8	629 (6.16)	482 (5.25)	416 (4.70)	608 (5.62)	533 (5.46)
9	657 (6.45)	495 (5.40)	467 (5.28)	651 (6.02)	567 (5.81)
10	559 (5.48)	423 (4.61)	424 (4.80)	555 (5.13)	490 (5.02)
11	438 (4.29)	365 (3.98)	364 (4.12)	426 (3.94)	398 (4.08)
12	374 (3.66)	357 (3.89)	341 (3.86)	358 (3.31)	358 (3.66)
13	388 (3.80)	390 (4.25)	360 (4.07)	375 (3.46)	378 (3.87)
14	353 (3.46)	357 (3.89)	326 (3.68)	337 (3.12)	343 (3.52)
15	356 (3.49)	363 (3.96)	311 (3.51)	354 (3.27)	346 (3.54)
16	369 (3.61)	353 (3.84)	306 (3.46)	358 (3.31)	346 (3.55)
17	406 (3.98)	356 (3.88)	311 (3.51)	383 (3.54)	364 (3.73)
18	526 (5.16)	419 (4.57)	360 (4.07)	571 (5.28)	469 (4.81)
19	537 (5.26)	371 (4.05)	343 (3.88)	575 (5.31)	456 (4.68)
20	534 (5.23)	387 (4.22)	398 (4.50)	618 (5.71)	484 (4.96)
21	480 (4.71)	374 (4.08)	431 (4.87)	575 (5.31)	465 (4.77)
22	442 (4.33)	416 (4.54)	489 (5.53)	533 (4.92)	470 (4.82)
23	432 (4.24)	436 (4.75)	477 (5.40)	509 (4.70)	464 (4.75)
24	421 (4.12)	433 (4.72)	458 (5.17)	488 (4.51)	450 (4.61)

St. Louis: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	398 (3.83)	432 (4.55)	432 (4.55)	493 (4.01)	439 (4.21)
2	349 (3.35)	394 (4.15)	380 (3.99)	467 (3.80)	398 (3.81)
3	331 (3.18)	350 (3.69)	334 (3.52)	416 (3.38)	358 (3.43)
4	300 (2.88)	330 (3.47)	300 (3.16)	383 (3.11)	328 (3.15)
5	280 (2.69)	298 (3.14)	279 (2.93)	356 (2.89)	303 (2.91)
6	273 (2.62)	294 (3.10)	273 (2.87)	348 (2.83)	297 (2.85)
7	341 (3.28)	319 (3.36)	296 (3.12)	395 (3.21)	338 (3.24)
8	581 (5.59)	464 (4.89)	421 (4.43)	613 (4.99)	520 (4.99)
9	668 (6.42)	493 (5.19)	467 (4.91)	702 (5.71)	582 (5.58)
10	575 (5.53)	437 (4.61)	446 (4.69)	622 (5.06)	520 (4.99)
11	459 (4.41)	394 (4.15)	410 (4.32)	508 (4.13)	443 (4.25)
12	417 (4.01)	387 (4.08)	389 (4.09)	461 (3.75)	414 (3.97)
13	413 (3.97)	394 (4.15)	387 (4.07)	445 (3.62)	410 (3.93)
14	378 (3.63)	376 (3.95)	367 (3.86)	411 (3.34)	383 (3.67)
15	403 (3.87)	392 (4.13)	375 (3.95)	445 (3.62)	404 (3.87)
16	445 (4.28)	411 (4.33)	376 (3.95)	486 (3.95)	429 (4.12)
17	445 (4.27)	411 (4.33)	387 (4.07)	490 (3.98)	433 (4.15)
18	512 (4.92)	418 (4.40)	397 (4.18)	591 (4.80)	479 (4.60)
19	555 (5.33)	397 (4.18)	395 (4.15)	669 (5.44)	504 (4.83)
20	514 (4.94)	392 (4.13)	453 (4.76)	658 (5.35)	504 (4.84)
21	468 (4.49)	396 (4.17)	485 (5.11)	628 (5.11)	495 (4.74)
22	436 (4.19)	420 (4.42)	496 (5.22)	593 (4.82)	487 (4.67)
23	440 (4.23)	447 (4.70)	489 (5.14)	573 (4.66)	488 (4.68)
24	421 (4.05)	450 (4.73)	470 (4.94)	545 (4.43)	472 (4.52)

St. Louis: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	476 (4.29)	518 (5.10)	505 (5.04)	611 (4.52)	528 (4.71)
2	421 (3.79)	457 (4.50)	418 (4.17)	569 (4.21)	467 (4.16)
3	373 (3.36)	400 (3.93)	366 (3.66)	486 (3.59)	407 (3.63)
4	324 (2.92)	360 (3.55)	321 (3.20)	432 (3.19)	359 (3.21)
5	284 (2.55)	310 (3.05)	289 (2.88)	376 (2.78)	315 (2.81)
6	275 (2.47)	299 (2.94)	279 (2.79)	361 (2.67)	304 (2.71)
7	368 (3.31)	344 (3.38)	320 (3.19)	434 (3.21)	366 (3.27)
8	515 (4.63)	462 (4.55)	472 (4.71)	554 (4.10)	501 (4.47)
9	609 (5.48)	506 (4.98)	559 (5.58)	647 (4.79)	580 (5.18)
10	611 (5.50)	485 (4.77)	520 (5.19)	670 (4.96)	572 (5.10)
11	491 (4.42)	445 (4.38)	465 (4.64)	565 (4.18)	492 (4.39)
12	436 (3.92)	386 (3.80)	367 (3.66)	493 (3.65)	421 (3.76)
13	443 (3.99)	429 (4.22)	427 (4.27)	495 (3.66)	449 (4.00)
14	411 (3.70)	404 (3.98)	400 (4.00)	458 (3.39)	419 (3.74)
15	408 (3.67)	385 (3.79)	362 (3.62)	458 (3.39)	403 (3.60)
16	487 (4.38)	421 (4.15)	371 (3.70)	541 (4.00)	455 (4.06)
17	524 (4.71)	469 (4.62)	424 (4.24)	602 (4.46)	505 (4.51)
18	516 (4.64)	412 (4.06)	398 (3.97)	599 (4.43)	481 (4.29)
19	561 (5.05)	370 (3.64)	360 (3.59)	675 (4.99)	491 (4.39)
20	564 (5.08)	376 (3.70)	367 (3.66)	745 (5.51)	513 (4.58)
21	499 (4.49)	397 (3.91)	452 (4.51)	696 (5.15)	511 (4.56)
22	499 (4.49)	510 (5.02)	603 (6.02)	695 (5.14)	577 (5.15)
23	510 (4.58)	502 (4.95)	501 (5.00)	684 (5.06)	550 (4.90)
24	511 (4.60)	510 (5.02)	471 (4.70)	670 (4.96)	541 (4.83)

St. Louis: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	420 (3.72)	448 (4.47)	446 (4.60)	493 (3.91)	452 (4.14)
2	366 (3.24)	404 (4.03)	390 (4.03)	464 (3.68)	406 (3.73)
3	339 (3.00)	349 (3.48)	332 (3.42)	403 (3.20)	356 (3.26)
4	306 (2.71)	328 (3.27)	296 (3.05)	367 (2.91)	324 (2.97)
5	287 (2.54)	298 (2.97)	274 (2.82)	344 (2.73)	301 (2.76)
6	283 (2.50)	303 (3.02)	277 (2.85)	340 (2.70)	301 (2.76)
7	397 (3.51)	365 (3.64)	329 (3.39)	432 (3.43)	381 (3.49)
8	648 (5.73)	526 (5.24)	491 (5.06)	650 (5.16)	578 (5.30)
9	734 (6.50)	546 (5.45)	526 (5.43)	737 (5.85)	636 (5.83)
10	645 (5.70)	468 (4.67)	456 (4.70)	652 (5.18)	555 (5.09)
11	511 (4.52)	414 (4.13)	403 (4.15)	523 (4.15)	463 (4.24)
12	458 (4.06)	412 (4.11)	386 (3.98)	468 (3.71)	431 (3.95)
13	465 (4.11)	421 (4.20)	385 (3.98)	463 (3.67)	433 (3.97)
14	433 (3.84)	408 (4.07)	371 (3.83)	437 (3.47)	412 (3.78)
15	425 (3.76)	407 (4.06)	362 (3.73)	446 (3.54)	410 (3.76)
16	448 (3.97)	425 (4.24)	371 (3.83)	467 (3.71)	428 (3.92)
17	514 (4.55)	452 (4.51)	390 (4.02)	530 (4.21)	471 (4.32)
18	585 (5.18)	468 (4.67)	421 (4.34)	652 (5.17)	531 (4.87)
19	575 (5.09)	407 (4.06)	391 (4.03)	666 (5.28)	510 (4.67)
20	531 (4.70)	379 (3.78)	417 (4.30)	647 (5.13)	494 (4.53)
21	504 (4.46)	400 (3.99)	464 (4.79)	649 (5.15)	505 (4.63)
22	490 (4.34)	455 (4.54)	523 (5.40)	631 (5.01)	525 (4.82)
23	476 (4.22)	467 (4.66)	503 (5.19)	582 (4.62)	507 (4.65)
24	459 (4.06)	476 (4.75)	492 (5.08)	556 (4.41)	496 (4.55)

St. Louis: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	407 (3.99)	446 (4.82)	446 (4.86)	506 (4.18)	451 (4.43)
2	356 (3.48)	401 (4.33)	385 (4.20)	475 (3.93)	405 (3.97)
3	335 (3.28)	352 (3.80)	335 (3.65)	420 (3.47)	361 (3.54)
4	303 (2.97)	330 (3.57)	299 (3.26)	386 (3.19)	330 (3.24)
5	282 (2.76)	298 (3.22)	277 (3.02)	357 (2.95)	304 (2.98)
6	276 (2.70)	292 (3.16)	269 (2.93)	349 (2.88)	297 (2.91)
7	333 (3.26)	308 (3.32)	287 (3.13)	382 (3.16)	327 (3.21)
8	499 (4.89)	417 (4.50)	387 (4.22)	531 (4.39)	458 (4.50)
9	611 (5.98)	469 (5.06)	451 (4.92)	655 (5.41)	546 (5.36)
10	573 (5.61)	440 (4.75)	442 (4.82)	626 (5.17)	520 (5.10)
11	452 (4.42)	376 (4.06)	387 (4.21)	494 (4.08)	427 (4.19)
12	409 (4.00)	371 (4.01)	365 (3.98)	447 (3.69)	398 (3.91)
13	397 (3.89)	374 (4.03)	367 (4.00)	423 (3.50)	390 (3.83)
14	383 (3.75)	369 (3.98)	353 (3.85)	411 (3.40)	379 (3.72)
15	383 (3.75)	362 (3.90)	345 (3.76)	415 (3.43)	376 (3.69)
16	400 (3.92)	370 (4.00)	342 (3.73)	434 (3.59)	387 (3.80)
17	445 (4.35)	395 (4.26)	356 (3.89)	488 (4.03)	421 (4.13)
18	473 (4.63)	389 (4.20)	360 (3.93)	542 (4.48)	441 (4.33)
19	518 (5.07)	375 (4.05)	367 (4.01)	627 (5.18)	472 (4.63)
20	513 (5.02)	369 (3.98)	400 (4.36)	659 (5.45)	485 (4.76)
21	488 (4.78)	391 (4.22)	463 (5.05)	660 (5.45)	501 (4.92)
22	474 (4.64)	446 (4.81)	515 (5.62)	644 (5.32)	520 (5.11)
23	466 (4.56)	464 (5.01)	502 (5.47)	605 (5.00)	510 (5.00)
24	440 (4.31)	459 (4.95)	472 (5.15)	566 (4.68)	485 (4.76)

St. Louis: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	422 (3.92)	448 (4.67)	441 (4.68)	499 (4.10)	453 (4.32)
2	364 (3.38)	401 (4.18)	384 (4.08)	466 (3.84)	404 (3.85)
3	338 (3.14)	352 (3.67)	336 (3.57)	409 (3.36)	359 (3.42)
4	303 (2.81)	327 (3.41)	295 (3.13)	370 (3.04)	324 (3.09)
5	283 (2.63)	297 (3.09)	273 (2.90)	345 (2.84)	300 (2.86)
6	280 (2.60)	297 (3.09)	268 (2.85)	341 (2.81)	297 (2.83)
7	354 (3.28)	329 (3.42)	304 (3.23)	390 (3.21)	344 (3.28)
8	588 (5.45)	479 (4.99)	446 (4.73)	597 (4.91)	527 (5.02)
9	689 (6.39)	516 (5.37)	494 (5.25)	702 (5.77)	600 (5.72)
10	597 (5.54)	439 (4.57)	435 (4.62)	613 (5.04)	521 (4.96)
11	463 (4.30)	382 (3.98)	388 (4.12)	480 (3.95)	428 (4.08)
12	414 (3.84)	374 (3.90)	366 (3.89)	422 (3.48)	394 (3.76)
13	425 (3.94)	392 (4.09)	377 (4.00)	423 (3.48)	404 (3.85)
14	404 (3.75)	385 (4.01)	355 (3.77)	413 (3.39)	389 (3.71)
15	397 (3.69)	374 (3.90)	346 (3.67)	412 (3.39)	382 (3.64)
16	406 (3.76)	380 (3.96)	346 (3.68)	424 (3.49)	389 (3.71)
17	465 (4.32)	407 (4.24)	365 (3.87)	475 (3.91)	428 (4.08)
18	568 (5.27)	443 (4.61)	410 (4.35)	620 (5.10)	510 (4.86)
19	575 (5.33)	402 (4.18)	393 (4.17)	662 (5.44)	508 (4.84)
20	536 (4.97)	376 (3.92)	401 (4.26)	660 (5.43)	493 (4.70)
21	507 (4.71)	406 (4.23)	482 (5.11)	658 (5.41)	514 (4.90)
22	475 (4.41)	440 (4.58)	508 (5.39)	623 (5.12)	512 (4.88)
23	476 (4.42)	485 (5.05)	528 (5.61)	597 (4.91)	522 (4.98)
24	449 (4.16)	468 (4.88)	478 (5.08)	557 (4.58)	488 (4.65)

St. Louis: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	393 (3.92)	438 (4.67)	441 (4.63)	504 (4.14)	444 (4.32)
2	347 (3.46)	404 (4.31)	395 (4.15)	480 (3.94)	407 (3.96)
3	328 (3.27)	361 (3.85)	350 (3.67)	427 (3.51)	367 (3.57)
4	298 (2.97)	338 (3.61)	313 (3.29)	394 (3.24)	336 (3.27)
5	278 (2.77)	305 (3.25)	290 (3.05)	364 (2.99)	309 (3.01)
6	272 (2.72)	296 (3.16)	281 (2.95)	355 (2.92)	301 (2.93)
7	322 (3.21)	311 (3.31)	298 (3.13)	384 (3.16)	329 (3.20)
8	571 (5.69)	449 (4.79)	403 (4.23)	602 (4.95)	506 (4.92)
9	586 (5.84)	441 (4.71)	453 (4.76)	610 (5.02)	523 (5.09)
10	565 (5.64)	430 (4.58)	445 (4.67)	617 (5.07)	514 (5.00)
11	516 (5.15)	422 (4.50)	427 (4.48)	558 (4.59)	481 (4.68)
12	445 (4.44)	393 (4.19)	411 (4.32)	471 (3.88)	430 (4.18)
13	447 (4.45)	397 (4.24)	397 (4.17)	475 (3.91)	429 (4.17)
14	374 (3.73)	360 (3.84)	354 (3.72)	422 (3.47)	378 (3.67)
15	365 (3.64)	382 (4.07)	376 (3.95)	427 (3.51)	388 (3.77)
16	392 (3.91)	410 (4.37)	392 (4.12)	465 (3.82)	415 (4.04)
17	408 (4.07)	419 (4.46)	425 (4.46)	462 (3.80)	429 (4.17)
18	434 (4.32)	404 (4.31)	406 (4.27)	535 (4.40)	445 (4.33)
19	474 (4.72)	358 (3.82)	369 (3.88)	590 (4.85)	448 (4.36)
20	456 (4.55)	330 (3.52)	361 (3.79)	593 (4.88)	435 (4.24)
21	457 (4.56)	407 (4.34)	499 (5.24)	651 (5.35)	504 (4.90)
22	445 (4.43)	426 (4.54)	484 (5.08)	629 (5.17)	496 (4.83)
23	444 (4.42)	453 (4.83)	487 (5.11)	594 (4.89)	495 (4.82)
24	415 (4.13)	445 (4.74)	463 (4.86)	554 (4.55)	469 (4.57)

St. Louis: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	407 (3.62)	424 (4.27)	424 (4.42)	471 (3.76)	432 (3.99)
2	353 (3.14)	388 (3.90)	376 (3.92)	445 (3.56)	391 (3.61)
3	332 (2.95)	345 (3.47)	331 (3.45)	396 (3.16)	351 (3.24)
4	301 (2.68)	324 (3.26)	294 (3.07)	359 (2.87)	320 (2.96)
5	282 (2.50)	294 (2.96)	273 (2.84)	335 (2.68)	296 (2.73)
6	280 (2.49)	298 (2.99)	271 (2.83)	334 (2.67)	296 (2.73)
7	414 (3.68)	368 (3.70)	325 (3.39)	448 (3.58)	389 (3.59)
8	683 (6.07)	564 (5.67)	524 (5.47)	695 (5.55)	616 (5.69)
9	746 (6.63)	572 (5.75)	550 (5.74)	756 (6.04)	656 (6.06)
10	650 (5.78)	490 (4.93)	474 (4.94)	672 (5.37)	571 (5.28)
11	512 (4.55)	431 (4.34)	411 (4.29)	532 (4.25)	472 (4.36)
12	462 (4.10)	415 (4.17)	372 (3.88)	472 (3.77)	430 (3.97)
13	462 (4.11)	439 (4.41)	407 (4.25)	459 (3.66)	442 (4.08)
14	436 (3.87)	415 (4.17)	376 (3.92)	434 (3.47)	415 (3.83)
15	410 (3.64)	380 (3.82)	331 (3.46)	422 (3.37)	386 (3.56)
16	414 (3.68)	382 (3.84)	327 (3.42)	429 (3.43)	388 (3.58)
17	478 (4.25)	430 (4.32)	380 (3.96)	502 (4.01)	447 (4.13)
18	626 (5.56)	481 (4.84)	443 (4.62)	690 (5.51)	560 (5.17)
19	579 (5.15)	400 (4.02)	376 (3.92)	671 (5.36)	506 (4.68)
20	520 (4.62)	372 (3.74)	403 (4.20)	635 (5.07)	483 (4.46)
21	508 (4.51)	411 (4.13)	496 (5.18)	646 (5.16)	515 (4.76)
22	485 (4.31)	429 (4.31)	495 (5.17)	610 (4.88)	505 (4.67)
23	469 (4.16)	442 (4.44)	468 (4.88)	569 (4.54)	487 (4.50)
24	444 (3.94)	449 (4.52)	459 (4.79)	534 (4.27)	472 (4.36)

St. Louis: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	392 (4.02)	429 (4.82)	431 (4.86)	487 (4.22)	435 (4.45)
2	346 (3.55)	394 (4.43)	384 (4.32)	464 (4.02)	397 (4.07)
3	326 (3.34)	350 (3.94)	338 (3.80)	410 (3.56)	356 (3.65)
4	297 (3.04)	328 (3.69)	300 (3.38)	377 (3.27)	325 (3.33)
5	277 (2.84)	300 (3.38)	283 (3.19)	350 (3.03)	303 (3.10)
6	271 (2.78)	293 (3.29)	274 (3.09)	341 (2.96)	295 (3.02)
7	323 (3.31)	308 (3.46)	291 (3.28)	373 (3.23)	324 (3.31)
8	456 (4.68)	390 (4.38)	371 (4.18)	482 (4.18)	425 (4.35)
9	573 (5.88)	438 (4.92)	434 (4.89)	603 (5.23)	512 (5.24)
10	542 (5.56)	406 (4.57)	410 (4.62)	584 (5.07)	486 (4.97)
11	444 (4.55)	366 (4.11)	367 (4.13)	488 (4.23)	416 (4.26)
12	417 (4.27)	369 (4.15)	362 (4.08)	453 (3.93)	400 (4.10)
13	391 (4.01)	350 (3.93)	345 (3.89)	411 (3.56)	374 (3.83)
14	375 (3.85)	351 (3.95)	330 (3.72)	407 (3.52)	366 (3.75)
15	383 (3.93)	361 (4.05)	336 (3.79)	425 (3.68)	376 (3.85)
16	366 (3.75)	352 (3.96)	337 (3.79)	403 (3.49)	365 (3.73)
17	393 (4.03)	349 (3.92)	333 (3.75)	412 (3.57)	371 (3.80)
18	440 (4.51)	371 (4.17)	347 (3.90)	512 (4.44)	417 (4.27)
19	490 (5.02)	362 (4.07)	357 (4.02)	595 (5.16)	451 (4.62)
20	498 (5.10)	369 (4.15)	398 (4.49)	646 (5.60)	478 (4.89)
21	456 (4.67)	384 (4.32)	470 (5.29)	611 (5.29)	481 (4.92)
22	437 (4.48)	402 (4.52)	464 (5.22)	589 (5.10)	473 (4.85)
23	439 (4.50)	429 (4.82)	460 (5.19)	567 (4.91)	474 (4.85)
24	422 (4.33)	445 (5.00)	455 (5.13)	549 (4.76)	468 (4.79)

St. Louis: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	412 (3.92)	444 (4.71)	438 (4.74)	490 (4.12)	446 (4.35)
2	360 (3.42)	399 (4.24)	380 (4.11)	465 (3.91)	401 (3.91)
3	337 (3.21)	354 (3.76)	335 (3.63)	411 (3.46)	360 (3.50)
4	300 (2.85)	326 (3.46)	296 (3.20)	366 (3.07)	322 (3.14)
5	278 (2.65)	293 (3.11)	273 (2.96)	337 (2.84)	295 (2.88)
6	283 (2.69)	294 (3.12)	267 (2.89)	339 (2.86)	296 (2.88)
7	379 (3.60)	343 (3.64)	311 (3.37)	414 (3.48)	362 (3.52)
8	585 (5.56)	471 (5.00)	439 (4.75)	590 (4.97)	521 (5.08)
9	646 (6.15)	492 (5.23)	483 (5.23)	656 (5.52)	569 (5.54)
10	583 (5.55)	436 (4.63)	444 (4.81)	599 (5.03)	515 (5.02)
11	467 (4.44)	382 (4.05)	389 (4.22)	484 (4.07)	431 (4.19)
12	408 (3.88)	365 (3.88)	353 (3.83)	419 (3.52)	386 (3.76)
13	428 (4.07)	396 (4.21)	376 (4.07)	435 (3.66)	409 (3.98)
14	407 (3.87)	396 (4.20)	371 (4.02)	420 (3.53)	398 (3.88)
15	391 (3.72)	369 (3.92)	337 (3.65)	415 (3.49)	378 (3.68)
16	397 (3.78)	377 (4.00)	349 (3.78)	417 (3.50)	385 (3.75)
17	430 (4.09)	380 (4.03)	356 (3.85)	434 (3.65)	400 (3.90)
18	503 (4.78)	392 (4.16)	349 (3.78)	550 (4.63)	448 (4.37)
19	542 (5.16)	385 (4.09)	366 (3.97)	629 (5.29)	481 (4.68)
20	509 (4.85)	364 (3.86)	383 (4.15)	630 (5.30)	472 (4.60)
21	489 (4.65)	391 (4.16)	455 (4.93)	643 (5.40)	495 (4.82)
22	483 (4.60)	452 (4.81)	522 (5.66)	633 (5.32)	523 (5.10)
23	458 (4.36)	460 (4.88)	496 (5.37)	574 (4.82)	497 (4.85)
24	435 (4.14)	455 (4.83)	465 (5.03)	541 (4.55)	474 (4.62)

St. Louis: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	400 (3.90)	436 (4.53)	428 (4.46)	499 (4.08)	441 (4.23)
2	349 (3.39)	395 (4.11)	378 (3.94)	465 (3.81)	397 (3.81)
3	328 (3.19)	350 (3.64)	333 (3.48)	411 (3.37)	356 (3.42)
4	297 (2.89)	329 (3.42)	298 (3.11)	376 (3.08)	325 (3.12)
5	278 (2.70)	298 (3.10)	276 (2.88)	349 (2.86)	300 (2.88)
6	280 (2.73)	292 (3.03)	267 (2.78)	346 (2.84)	296 (2.84)
7	356 (3.46)	325 (3.38)	300 (3.12)	401 (3.29)	345 (3.31)
8	499 (4.86)	449 (4.67)	427 (4.46)	547 (4.49)	481 (4.61)
9	663 (6.46)	514 (5.35)	492 (5.13)	723 (5.93)	598 (5.74)
10	617 (6.01)	484 (5.03)	485 (5.06)	679 (5.56)	566 (5.43)
11	482 (4.70)	427 (4.44)	439 (4.58)	530 (4.34)	470 (4.51)
12	434 (4.23)	406 (4.22)	413 (4.31)	464 (3.80)	429 (4.12)
13	392 (3.81)	376 (3.91)	380 (3.96)	409 (3.35)	389 (3.73)
14	413 (4.02)	401 (4.17)	395 (4.12)	437 (3.58)	411 (3.95)
15	420 (4.09)	429 (4.46)	429 (4.48)	466 (3.82)	436 (4.19)
16	418 (4.07)	429 (4.47)	413 (4.31)	470 (3.85)	433 (4.15)
17	477 (4.64)	430 (4.47)	387 (4.03)	529 (4.33)	455 (4.37)
18	433 (4.22)	381 (3.97)	363 (3.78)	508 (4.16)	421 (4.04)
19	479 (4.66)	352 (3.66)	338 (3.52)	583 (4.78)	438 (4.20)
20	500 (4.87)	391 (4.06)	427 (4.45)	679 (5.56)	499 (4.79)
21	429 (4.18)	367 (3.82)	464 (4.84)	566 (4.64)	457 (4.38)
22	434 (4.22)	415 (4.32)	489 (5.09)	582 (4.77)	480 (4.61)
23	457 (4.45)	471 (4.90)	502 (5.24)	606 (4.96)	510 (4.89)
24	435 (4.24)	469 (4.88)	466 (4.86)	579 (4.75)	488 (4.68)

St. Louis: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	395 (4.01)	430 (4.76)	425 (4.73)	495 (4.25)	437 (4.42)
2	349 (3.55)	397 (4.39)	380 (4.23)	469 (4.03)	399 (4.04)
3	329 (3.34)	353 (3.90)	335 (3.73)	415 (3.57)	358 (3.63)
4	297 (3.02)	331 (3.65)	300 (3.33)	381 (3.27)	327 (3.31)
5	278 (2.83)	299 (3.31)	278 (3.09)	352 (3.03)	302 (3.06)
6	273 (2.78)	291 (3.22)	268 (2.99)	343 (2.95)	294 (2.98)
7	326 (3.31)	313 (3.46)	295 (3.29)	376 (3.23)	328 (3.32)
8	476 (4.84)	408 (4.51)	397 (4.42)	500 (4.29)	445 (4.51)
9	597 (6.07)	444 (4.91)	433 (4.81)	627 (5.38)	525 (5.32)
10	556 (5.65)	421 (4.66)	424 (4.72)	602 (5.17)	501 (5.07)
11	468 (4.76)	393 (4.34)	388 (4.32)	517 (4.44)	442 (4.47)
12	415 (4.22)	370 (4.09)	348 (3.87)	453 (3.89)	396 (4.01)
13	459 (4.67)	420 (4.65)	379 (4.22)	499 (4.29)	439 (4.45)
14	410 (4.17)	393 (4.34)	355 (3.95)	452 (3.89)	403 (4.07)
15	375 (3.81)	359 (3.97)	344 (3.82)	413 (3.55)	373 (3.77)
16	369 (3.75)	359 (3.97)	344 (3.83)	411 (3.53)	371 (3.75)
17	358 (3.64)	335 (3.70)	329 (3.67)	373 (3.20)	349 (3.53)
18	401 (4.07)	371 (4.10)	382 (4.25)	450 (3.86)	401 (4.06)
19	493 (5.01)	365 (4.04)	372 (4.14)	594 (5.10)	456 (4.61)
20	467 (4.75)	341 (3.77)	376 (4.18)	599 (5.15)	446 (4.51)
21	451 (4.58)	359 (3.97)	426 (4.74)	607 (5.22)	461 (4.67)
22	429 (4.37)	405 (4.47)	476 (5.30)	585 (5.02)	474 (4.80)
23	451 (4.59)	448 (4.96)	485 (5.40)	585 (5.03)	493 (4.99)
24	414 (4.21)	437 (4.84)	446 (4.97)	542 (4.66)	460 (4.66)

St. Louis: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	405 (3.15)	431 (3.77)	422 (3.74)	488 (3.40)	437 (3.50)
2	366 (2.85)	391 (3.42)	373 (3.31)	466 (3.25)	400 (3.20)
3	333 (2.59)	349 (3.05)	331 (2.93)	412 (2.87)	356 (2.85)
4	299 (2.32)	325 (2.85)	294 (2.60)	372 (2.59)	323 (2.58)
5	279 (2.17)	294 (2.57)	272 (2.41)	347 (2.42)	298 (2.39)
6	279 (2.17)	300 (2.63)	270 (2.39)	353 (2.46)	301 (2.41)
7	503 (3.91)	406 (3.55)	328 (2.91)	544 (3.79)	445 (3.57)
8	821 (6.38)	669 (5.85)	640 (5.67)	825 (5.74)	738 (5.91)
9	971 (7.56)	696 (6.08)	689 (6.10)	957 (6.67)	828 (6.63)
10	757 (5.89)	580 (5.07)	595 (5.28)	760 (5.30)	673 (5.39)
11	624 (4.85)	536 (4.69)	540 (4.79)	629 (4.38)	582 (4.66)
12	562 (4.37)	510 (4.46)	528 (4.68)	543 (3.79)	536 (4.29)
13	565 (4.39)	518 (4.53)	486 (4.30)	558 (3.89)	532 (4.26)
14	539 (4.19)	492 (4.30)	460 (4.07)	536 (3.73)	507 (4.06)
15	507 (3.94)	507 (4.44)	463 (4.10)	543 (3.78)	505 (4.05)
16	542 (4.22)	539 (4.71)	511 (4.53)	555 (3.87)	537 (4.30)
17	650 (5.06)	577 (5.05)	507 (4.49)	706 (4.92)	610 (4.88)
18	621 (4.83)	530 (4.63)	494 (4.38)	730 (5.09)	594 (4.76)
19	605 (4.71)	482 (4.22)	516 (4.57)	748 (5.21)	588 (4.71)
20	558 (4.34)	447 (3.91)	554 (4.91)	686 (4.78)	562 (4.50)
21	537 (4.18)	437 (3.82)	505 (4.47)	706 (4.92)	547 (4.38)
22	545 (4.24)	476 (4.16)	537 (4.76)	684 (4.77)	561 (4.49)
23	519 (4.04)	488 (4.27)	520 (4.61)	630 (4.39)	539 (4.32)
24	469 (3.65)	454 (3.97)	448 (3.97)	574 (4.00)	487 (3.90)

St. Louis: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	399 (3.65)	435 (4.41)	437 (4.45)	493 (3.82)	441 (4.05)
2	350 (3.20)	394 (3.99)	382 (3.89)	466 (3.62)	398 (3.66)
3	332 (3.03)	349 (3.54)	334 (3.40)	416 (3.22)	358 (3.29)
4	301 (2.75)	329 (3.33)	301 (3.06)	382 (2.96)	328 (3.02)
5	279 (2.55)	297 (3.01)	279 (2.84)	353 (2.74)	302 (2.78)
6	272 (2.48)	292 (2.96)	272 (2.77)	345 (2.67)	295 (2.71)
7	346 (3.16)	320 (3.24)	298 (3.03)	397 (3.08)	340 (3.12)
8	601 (5.50)	488 (4.94)	441 (4.49)	639 (4.96)	542 (4.98)
9	738 (6.75)	524 (5.31)	485 (4.94)	769 (5.96)	629 (5.78)
10	595 (5.44)	448 (4.54)	455 (4.63)	640 (4.96)	534 (4.91)
11	467 (4.27)	403 (4.08)	417 (4.25)	521 (4.04)	452 (4.15)
12	433 (3.96)	399 (4.05)	397 (4.04)	481 (3.73)	428 (3.93)
13	426 (3.89)	418 (4.23)	412 (4.19)	465 (3.60)	430 (3.95)
14	414 (3.79)	400 (4.05)	389 (3.96)	446 (3.46)	412 (3.79)
15	449 (4.10)	430 (4.35)	405 (4.13)	498 (3.86)	445 (4.09)
16	530 (4.85)	464 (4.70)	407 (4.15)	572 (4.43)	493 (4.53)
17	525 (4.80)	457 (4.63)	414 (4.22)	579 (4.49)	494 (4.54)
18	569 (5.21)	446 (4.52)	416 (4.23)	666 (5.16)	524 (4.82)
19	599 (5.48)	413 (4.18)	402 (4.10)	727 (5.63)	535 (4.92)
20	524 (4.80)	412 (4.17)	476 (4.85)	680 (5.27)	523 (4.81)
21	468 (4.28)	399 (4.04)	498 (5.07)	624 (4.84)	497 (4.57)
22	450 (4.11)	443 (4.49)	527 (5.36)	613 (4.75)	509 (4.67)
23	446 (4.08)	459 (4.65)	503 (5.12)	583 (4.52)	498 (4.58)
24	423 (3.87)	452 (4.58)	473 (4.82)	544 (4.22)	473 (4.35)

St. Louis: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	397 (4.01)	426 (4.70)	423 (4.67)	485 (4.20)	433 (4.38)
2	349 (3.53)	392 (4.32)	376 (4.16)	461 (3.99)	395 (3.99)
3	329 (3.33)	348 (3.83)	332 (3.67)	409 (3.54)	355 (3.59)
4	299 (3.02)	327 (3.61)	297 (3.28)	375 (3.25)	325 (3.28)
5	279 (2.82)	296 (3.26)	275 (3.04)	348 (3.02)	300 (3.03)
6	279 (2.83)	295 (3.25)	269 (2.97)	347 (3.01)	297 (3.01)
7	334 (3.39)	313 (3.45)	292 (3.23)	378 (3.28)	329 (3.33)
8	536 (5.43)	450 (4.96)	417 (4.61)	563 (4.88)	491 (4.97)
9	620 (6.28)	459 (5.06)	445 (4.93)	642 (5.56)	542 (5.48)
10	557 (5.64)	417 (4.60)	422 (4.67)	593 (5.14)	497 (5.03)
11	439 (4.44)	395 (4.36)	415 (4.59)	482 (4.18)	433 (4.38)
12	394 (3.99)	374 (4.13)	378 (4.18)	426 (3.69)	393 (3.98)
13	404 (4.09)	392 (4.32)	375 (4.15)	439 (3.80)	403 (4.07)
14	361 (3.66)	360 (3.96)	349 (3.86)	382 (3.31)	363 (3.67)
15	352 (3.56)	360 (3.97)	344 (3.80)	394 (3.41)	362 (3.67)
16	350 (3.55)	354 (3.90)	334 (3.70)	393 (3.40)	358 (3.62)
17	392 (3.97)	358 (3.94)	332 (3.67)	412 (3.57)	373 (3.78)
18	462 (4.68)	377 (4.15)	353 (3.91)	508 (4.40)	425 (4.30)
19	498 (5.04)	367 (4.05)	360 (3.99)	602 (5.21)	457 (4.62)
20	498 (5.04)	365 (4.02)	398 (4.40)	632 (5.47)	473 (4.79)
21	453 (4.59)	369 (4.07)	450 (4.97)	597 (5.17)	468 (4.73)
22	434 (4.40)	402 (4.43)	471 (5.20)	581 (5.03)	472 (4.78)
23	438 (4.44)	440 (4.84)	484 (5.35)	559 (4.84)	480 (4.86)
24	424 (4.29)	439 (4.84)	453 (5.01)	537 (4.65)	463 (4.69)

St. Louis: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	410 (3.87)	442 (4.63)	439 (4.65)	499 (4.05)	448 (4.27)
2	358 (3.38)	400 (4.19)	384 (4.07)	471 (3.82)	404 (3.85)
3	335 (3.16)	353 (3.70)	336 (3.56)	415 (3.37)	360 (3.44)
4	302 (2.85)	330 (3.46)	299 (3.17)	378 (3.07)	327 (3.12)
5	282 (2.66)	298 (3.12)	277 (2.93)	351 (2.85)	302 (2.88)
6	278 (2.62)	296 (3.10)	272 (2.88)	346 (2.81)	298 (2.84)
7	360 (3.40)	332 (3.48)	305 (3.23)	407 (3.30)	351 (3.35)
8	578 (5.46)	468 (4.90)	432 (4.58)	603 (4.89)	520 (4.96)
9	665 (6.28)	497 (5.21)	479 (5.08)	695 (5.64)	584 (5.57)
10	589 (5.56)	444 (4.65)	447 (4.74)	629 (5.10)	527 (5.03)
11	470 (4.44)	394 (4.13)	401 (4.25)	510 (4.14)	444 (4.24)
12	424 (4.00)	385 (4.03)	379 (4.01)	457 (3.71)	411 (3.92)
13	428 (4.04)	395 (4.14)	381 (4.04)	449 (3.64)	413 (3.94)
14	401 (3.79)	384 (4.02)	364 (3.86)	427 (3.46)	394 (3.76)
15	399 (3.77)	381 (4.00)	359 (3.80)	434 (3.52)	393 (3.75)
16	416 (3.93)	392 (4.10)	360 (3.82)	452 (3.66)	405 (3.86)
17	457 (4.31)	409 (4.28)	374 (3.97)	490 (3.97)	433 (4.13)
18	527 (4.98)	423 (4.43)	393 (4.16)	599 (4.86)	486 (4.63)
19	548 (5.17)	391 (4.09)	382 (4.05)	652 (5.29)	493 (4.71)
20	516 (4.87)	378 (3.96)	418 (4.43)	653 (5.30)	492 (4.69)
21	486 (4.58)	398 (4.17)	476 (5.05)	645 (5.23)	502 (4.79)
22	465 (4.39)	435 (4.56)	505 (5.35)	620 (5.03)	507 (4.84)
23	462 (4.36)	461 (4.83)	498 (5.28)	590 (4.78)	503 (4.80)
24	439 (4.15)	461 (4.82)	473 (5.02)	558 (4.52)	483 (4.61)

Washington DC: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	556 (4.12)	458 (4.37)	446 (4.38)	536 (3.87)	499 (4.15)
2	530 (3.92)	419 (3.99)	390 (3.83)	485 (3.50)	456 (3.80)
3	466 (3.45)	367 (3.50)	340 (3.34)	429 (3.09)	400 (3.33)
4	418 (3.09)	321 (3.06)	299 (2.94)	385 (2.78)	356 (2.96)
5	387 (2.86)	293 (2.79)	265 (2.60)	344 (2.48)	322 (2.68)
6	363 (2.69)	279 (2.66)	250 (2.46)	336 (2.43)	307 (2.56)
7	417 (3.08)	325 (3.10)	284 (2.79)	400 (2.89)	356 (2.97)
8	675 (4.99)	499 (4.76)	445 (4.37)	683 (4.93)	575 (4.79)
9	784 (5.80)	558 (5.32)	538 (5.29)	830 (5.99)	677 (5.64)
10	716 (5.29)	529 (5.05)	538 (5.29)	753 (5.44)	634 (5.28)
11	613 (4.53)	499 (4.76)	494 (4.85)	617 (4.45)	555 (4.63)
12	555 (4.11)	460 (4.39)	450 (4.42)	521 (3.76)	496 (4.13)
13	517 (3.83)	442 (4.21)	438 (4.30)	475 (3.42)	468 (3.89)
14	468 (3.46)	417 (3.97)	410 (4.03)	431 (3.11)	431 (3.59)
15	460 (3.41)	422 (4.02)	398 (3.92)	431 (3.11)	428 (3.56)
16	482 (3.57)	437 (4.16)	405 (3.98)	466 (3.36)	447 (3.73)
17	505 (3.74)	444 (4.24)	413 (4.05)	523 (3.77)	471 (3.92)
18	610 (4.51)	473 (4.51)	446 (4.38)	695 (5.01)	556 (4.63)
19	680 (5.03)	467 (4.45)	455 (4.47)	819 (5.91)	605 (5.04)
20	713 (5.28)	457 (4.36)	479 (4.71)	845 (6.09)	624 (5.19)
21	716 (5.30)	454 (4.33)	498 (4.90)	815 (5.88)	621 (5.17)
22	660 (4.88)	473 (4.51)	503 (4.94)	734 (5.29)	592 (4.93)
23	631 (4.67)	505 (4.82)	507 (4.98)	691 (4.99)	584 (4.86)
24	593 (4.39)	489 (4.66)	486 (4.77)	616 (4.45)	546 (4.55)

Washington DC: City-wide, Demographic Group=African americans

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	629 (4.19)	529 (4.39)	494 (4.30)	588 (3.93)	560 (4.18)
2	603 (4.02)	485 (4.03)	422 (3.67)	525 (3.51)	508 (3.80)
3	549 (3.66)	436 (3.62)	370 (3.22)	468 (3.13)	455 (3.40)
4	503 (3.36)	380 (3.15)	327 (2.84)	416 (2.78)	406 (3.04)
5	478 (3.19)	342 (2.84)	279 (2.42)	360 (2.40)	364 (2.72)
6	436 (2.91)	317 (2.63)	263 (2.28)	344 (2.30)	340 (2.54)
7	477 (3.18)	343 (2.85)	276 (2.40)	410 (2.74)	376 (2.81)
8	660 (4.40)	535 (4.44)	446 (3.88)	719 (4.80)	590 (4.41)
9	755 (5.03)	592 (4.92)	587 (5.11)	861 (5.75)	699 (5.22)
10	723 (4.82)	578 (4.80)	632 (5.49)	806 (5.39)	685 (5.12)
11	658 (4.39)	565 (4.69)	584 (5.08)	690 (4.61)	624 (4.67)
12	633 (4.22)	520 (4.32)	507 (4.41)	573 (3.83)	558 (4.17)
13	574 (3.83)	490 (4.07)	483 (4.20)	502 (3.36)	512 (3.83)
14	562 (3.75)	494 (4.10)	473 (4.11)	509 (3.40)	509 (3.81)
15	626 (4.17)	601 (4.99)	512 (4.45)	619 (4.13)	589 (4.41)
16	525 (3.50)	497 (4.13)	483 (4.20)	496 (3.32)	500 (3.74)
17	570 (3.80)	521 (4.33)	513 (4.46)	579 (3.87)	546 (4.08)
18	598 (3.98)	553 (4.59)	572 (4.97)	688 (4.60)	603 (4.51)
19	684 (4.56)	538 (4.46)	550 (4.78)	813 (5.43)	647 (4.83)
20	770 (5.14)	532 (4.42)	519 (4.51)	906 (6.06)	682 (5.10)
21	799 (5.33)	528 (4.38)	542 (4.71)	885 (5.91)	688 (5.15)
22	772 (5.15)	539 (4.47)	547 (4.75)	796 (5.32)	663 (4.96)
23	733 (4.89)	583 (4.84)	581 (5.05)	752 (5.03)	662 (4.95)
24	683 (4.55)	548 (4.55)	542 (4.71)	663 (4.43)	609 (4.55)

Washington DC: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	603 (4.33)	497 (4.48)	468 (4.42)	575 (4.04)	536 (4.30)
2	572 (4.10)	453 (4.08)	404 (3.82)	521 (3.66)	487 (3.91)
3	514 (3.69)	402 (3.62)	354 (3.35)	466 (3.27)	434 (3.48)
4	467 (3.35)	353 (3.18)	314 (2.97)	419 (2.94)	388 (3.11)
5	429 (3.08)	312 (2.80)	270 (2.55)	358 (2.52)	342 (2.74)
6	394 (2.83)	293 (2.63)	257 (2.43)	343 (2.41)	321 (2.58)
7	441 (3.16)	326 (2.93)	274 (2.59)	405 (2.85)	361 (2.90)
8	635 (4.55)	508 (4.57)	428 (4.04)	675 (4.74)	561 (4.50)
9	748 (5.37)	573 (5.16)	556 (5.25)	823 (5.78)	675 (5.42)
10	718 (5.15)	563 (5.07)	581 (5.49)	780 (5.48)	660 (5.30)
11	624 (4.47)	528 (4.75)	521 (4.93)	643 (4.52)	579 (4.64)
12	567 (4.07)	465 (4.19)	447 (4.23)	524 (3.68)	501 (4.02)
13	508 (3.64)	438 (3.94)	424 (4.01)	463 (3.25)	458 (3.67)
14	487 (3.49)	436 (3.93)	413 (3.91)	455 (3.19)	448 (3.59)
15	533 (3.82)	521 (4.69)	447 (4.23)	537 (3.77)	510 (4.09)
16	462 (3.31)	452 (4.06)	429 (4.05)	451 (3.17)	448 (3.60)
17	517 (3.71)	480 (4.32)	452 (4.27)	543 (3.81)	498 (4.00)
18	561 (4.03)	499 (4.49)	495 (4.68)	649 (4.56)	551 (4.42)
19	642 (4.60)	478 (4.30)	481 (4.54)	769 (5.40)	592 (4.75)
20	727 (5.21)	468 (4.21)	471 (4.45)	849 (5.96)	628 (5.04)
21	741 (5.32)	473 (4.26)	506 (4.78)	834 (5.86)	638 (5.12)
22	721 (5.17)	513 (4.61)	522 (4.93)	777 (5.45)	633 (5.08)
23	686 (4.92)	558 (5.02)	552 (5.22)	733 (5.14)	632 (5.07)
24	643 (4.61)	526 (4.73)	516 (4.88)	647 (4.55)	583 (4.68)

Washington DC: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	602 (4.18)	523 (4.51)	487 (4.41)	578 (3.97)	547 (4.24)
2	582 (4.04)	480 (4.14)	422 (3.83)	518 (3.56)	500 (3.88)
3	528 (3.67)	432 (3.72)	373 (3.38)	464 (3.18)	449 (3.48)
4	484 (3.36)	375 (3.23)	327 (2.96)	413 (2.84)	399 (3.10)
5	458 (3.18)	336 (2.89)	278 (2.52)	359 (2.46)	357 (2.77)
6	418 (2.91)	310 (2.67)	254 (2.30)	343 (2.36)	331 (2.57)
7	442 (3.07)	343 (2.96)	282 (2.55)	403 (2.77)	367 (2.85)
8	546 (3.79)	433 (3.73)	385 (3.49)	565 (3.88)	482 (3.74)
9	700 (4.87)	517 (4.46)	516 (4.68)	779 (5.35)	628 (4.87)
10	679 (4.72)	558 (4.81)	594 (5.39)	767 (5.27)	650 (5.04)
11	655 (4.55)	549 (4.73)	561 (5.08)	674 (4.63)	610 (4.73)
12	629 (4.37)	507 (4.37)	489 (4.44)	567 (3.89)	548 (4.25)
13	582 (4.04)	504 (4.34)	484 (4.39)	523 (3.59)	523 (4.06)
14	534 (3.71)	468 (4.03)	458 (4.15)	472 (3.24)	483 (3.74)
15	559 (3.89)	524 (4.52)	478 (4.33)	523 (3.59)	521 (4.04)
16	556 (3.87)	503 (4.33)	468 (4.24)	522 (3.58)	512 (3.97)
17	564 (3.92)	525 (4.52)	502 (4.55)	581 (3.99)	543 (4.21)
18	666 (4.63)	569 (4.90)	550 (4.98)	785 (5.39)	643 (4.98)
19	660 (4.59)	529 (4.56)	517 (4.68)	823 (5.65)	632 (4.90)
20	728 (5.06)	507 (4.37)	489 (4.43)	880 (6.04)	651 (5.05)
21	757 (5.26)	520 (4.48)	534 (4.84)	880 (6.04)	673 (5.22)
22	723 (5.03)	518 (4.46)	528 (4.79)	776 (5.33)	636 (4.93)
23	688 (4.78)	538 (4.64)	534 (4.84)	715 (4.91)	619 (4.80)
24	644 (4.48)	539 (4.64)	522 (4.73)	652 (4.48)	589 (4.57)

Washington DC: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	606 (4.13)	521 (4.43)	478 (4.27)	592 (3.97)	549 (4.18)
2	585 (3.99)	482 (4.09)	419 (3.75)	533 (3.57)	504 (3.84)
3	526 (3.58)	425 (3.60)	364 (3.26)	471 (3.15)	446 (3.39)
4	467 (3.18)	361 (3.06)	318 (2.84)	407 (2.73)	388 (2.95)
5	441 (3.00)	325 (2.76)	274 (2.45)	356 (2.38)	349 (2.65)
6	405 (2.76)	306 (2.60)	259 (2.31)	344 (2.30)	328 (2.50)
7	453 (3.09)	344 (2.92)	284 (2.54)	411 (2.75)	373 (2.84)
8	625 (4.26)	483 (4.10)	418 (3.74)	643 (4.31)	542 (4.13)
9	737 (5.02)	554 (4.70)	543 (4.85)	811 (5.43)	661 (5.03)
10	725 (4.93)	565 (4.80)	599 (5.36)	788 (5.28)	669 (5.09)
11	674 (4.59)	579 (4.92)	586 (5.24)	695 (4.66)	634 (4.82)
12	658 (4.48)	566 (4.81)	537 (4.80)	622 (4.16)	596 (4.53)
13	619 (4.22)	519 (4.41)	501 (4.48)	548 (3.67)	547 (4.16)
14	549 (3.74)	469 (3.98)	465 (4.15)	478 (3.20)	490 (3.73)
15	538 (3.67)	486 (4.13)	465 (4.16)	489 (3.27)	494 (3.76)
16	552 (3.76)	508 (4.31)	488 (4.36)	523 (3.50)	518 (3.94)
17	584 (3.98)	514 (4.36)	485 (4.34)	597 (4.00)	545 (4.15)
18	621 (4.23)	533 (4.53)	533 (4.76)	715 (4.79)	601 (4.57)
19	721 (4.91)	531 (4.51)	523 (4.68)	864 (5.79)	660 (5.02)
20	776 (5.29)	535 (4.54)	520 (4.65)	929 (6.22)	690 (5.25)
21	754 (5.14)	525 (4.45)	536 (4.79)	881 (5.90)	674 (5.13)
22	717 (4.88)	539 (4.58)	539 (4.82)	803 (5.38)	649 (4.94)
23	697 (4.75)	563 (4.78)	533 (4.77)	753 (5.04)	636 (4.84)
24	652 (4.44)	547 (4.64)	516 (4.61)	674 (4.52)	597 (4.54)

Washington DC: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	576 (4.12)	478 (4.33)	456 (4.28)	554 (3.87)	516 (4.13)
2	552 (3.95)	438 (3.97)	398 (3.73)	499 (3.49)	471 (3.77)
3	489 (3.49)	388 (3.51)	348 (3.26)	442 (3.09)	416 (3.33)
4	444 (3.17)	340 (3.09)	309 (2.89)	398 (2.78)	372 (2.98)
5	412 (2.94)	309 (2.80)	270 (2.53)	350 (2.45)	335 (2.68)
6	384 (2.74)	291 (2.64)	252 (2.36)	341 (2.38)	317 (2.53)
7	430 (3.07)	333 (3.01)	286 (2.68)	403 (2.82)	363 (2.90)
8	665 (4.75)	505 (4.58)	458 (4.29)	679 (4.74)	577 (4.61)
9	768 (5.49)	564 (5.11)	559 (5.24)	828 (5.78)	680 (5.44)
10	723 (5.17)	554 (5.02)	571 (5.35)	777 (5.43)	656 (5.25)
11	632 (4.51)	528 (4.78)	531 (4.98)	642 (4.49)	583 (4.66)
12	580 (4.14)	492 (4.46)	488 (4.57)	542 (3.79)	525 (4.20)
13	540 (3.86)	470 (4.26)	473 (4.44)	494 (3.45)	494 (3.96)
14	497 (3.55)	448 (4.06)	445 (4.16)	457 (3.19)	462 (3.69)
15	496 (3.54)	458 (4.15)	428 (4.01)	468 (3.27)	462 (3.70)
16	511 (3.65)	461 (4.17)	433 (4.05)	492 (3.44)	474 (3.79)
17	535 (3.83)	476 (4.31)	446 (4.18)	563 (3.93)	505 (4.04)
18	636 (4.55)	509 (4.61)	482 (4.52)	737 (5.15)	591 (4.73)
19	697 (4.98)	505 (4.58)	491 (4.60)	854 (5.97)	637 (5.10)
20	721 (5.15)	483 (4.38)	505 (4.73)	856 (5.98)	641 (5.13)
21	736 (5.26)	478 (4.33)	517 (4.84)	832 (5.81)	641 (5.13)
22	690 (4.93)	495 (4.49)	508 (4.76)	760 (5.31)	613 (4.91)
23	660 (4.72)	526 (4.76)	523 (4.90)	713 (4.98)	605 (4.84)
24	618 (4.42)	506 (4.58)	498 (4.66)	633 (4.42)	563 (4.51)

Washington DC: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	566 (4.10)	466 (4.33)	456 (4.36)	538 (3.81)	506 (4.12)
2	535 (3.88)	425 (3.95)	397 (3.80)	484 (3.43)	460 (3.75)
3	474 (3.44)	375 (3.48)	345 (3.30)	428 (3.03)	405 (3.30)
4	424 (3.07)	325 (3.02)	302 (2.89)	382 (2.70)	358 (2.91)
5	394 (2.85)	296 (2.75)	266 (2.54)	339 (2.40)	323 (2.63)
6	368 (2.67)	283 (2.63)	255 (2.44)	330 (2.34)	309 (2.52)
7	411 (2.98)	316 (2.93)	283 (2.71)	379 (2.68)	347 (2.82)
8	684 (4.96)	502 (4.67)	450 (4.30)	694 (4.91)	582 (4.74)
9	821 (5.95)	578 (5.37)	559 (5.34)	873 (6.18)	707 (5.76)
10	707 (5.13)	529 (4.92)	538 (5.15)	757 (5.36)	633 (5.15)
11	620 (4.49)	513 (4.76)	496 (4.74)	635 (4.49)	566 (4.61)
12	574 (4.16)	478 (4.44)	461 (4.40)	542 (3.83)	513 (4.18)
13	544 (3.95)	463 (4.30)	453 (4.33)	497 (3.52)	489 (3.98)
14	489 (3.55)	436 (4.05)	428 (4.09)	449 (3.17)	450 (3.66)
15	467 (3.38)	442 (4.11)	431 (4.12)	435 (3.08)	444 (3.61)
16	487 (3.53)	452 (4.20)	421 (4.03)	476 (3.37)	459 (3.74)
17	497 (3.61)	455 (4.22)	423 (4.04)	522 (3.70)	474 (3.86)
18	646 (4.68)	496 (4.61)	471 (4.51)	746 (5.28)	590 (4.80)
19	714 (5.18)	493 (4.58)	483 (4.62)	867 (6.14)	640 (5.21)
20	738 (5.35)	486 (4.52)	505 (4.83)	888 (6.28)	654 (5.33)
21	736 (5.34)	476 (4.42)	519 (4.96)	837 (5.93)	642 (5.23)
22	662 (4.80)	479 (4.45)	517 (4.94)	726 (5.14)	596 (4.85)
23	628 (4.55)	499 (4.64)	501 (4.79)	679 (4.81)	577 (4.70)
24	608 (4.41)	500 (4.64)	497 (4.76)	626 (4.43)	558 (4.54)

Washington DC: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	545 (4.03)	467 (4.49)	463 (4.58)	533 (3.84)	502 (4.19)
2	525 (3.89)	429 (4.13)	402 (3.97)	493 (3.55)	462 (3.86)
3	464 (3.43)	372 (3.58)	341 (3.37)	433 (3.12)	402 (3.36)
4	420 (3.11)	327 (3.15)	301 (2.98)	392 (2.83)	360 (3.01)
5	390 (2.89)	299 (2.87)	267 (2.64)	351 (2.53)	326 (2.73)
6	365 (2.71)	283 (2.72)	250 (2.47)	342 (2.47)	310 (2.59)
7	398 (2.94)	319 (3.07)	278 (2.75)	387 (2.79)	345 (2.88)
8	791 (5.86)	529 (5.09)	448 (4.43)	787 (5.67)	638 (5.33)
9	823 (6.10)	578 (5.55)	547 (5.41)	875 (6.31)	705 (5.89)
10	709 (5.25)	518 (4.98)	538 (5.32)	744 (5.36)	627 (5.24)
11	595 (4.41)	466 (4.48)	473 (4.68)	585 (4.21)	529 (4.42)
12	523 (3.87)	425 (4.08)	434 (4.29)	477 (3.44)	464 (3.88)
13	504 (3.73)	439 (4.22)	441 (4.36)	469 (3.38)	463 (3.87)
14	449 (3.32)	394 (3.79)	397 (3.92)	411 (2.97)	413 (3.45)
15	436 (3.23)	417 (4.01)	373 (3.69)	429 (3.09)	414 (3.46)
16	449 (3.33)	402 (3.86)	371 (3.67)	435 (3.14)	414 (3.46)
17	492 (3.64)	400 (3.85)	373 (3.69)	486 (3.50)	438 (3.66)
18	637 (4.72)	486 (4.68)	441 (4.36)	761 (5.49)	581 (4.86)
19	685 (5.07)	447 (4.30)	436 (4.31)	786 (5.67)	588 (4.92)
20	751 (5.56)	477 (4.58)	483 (4.78)	884 (6.37)	649 (5.42)
21	726 (5.38)	445 (4.28)	490 (4.84)	810 (5.84)	618 (5.16)
22	645 (4.77)	480 (4.62)	535 (5.29)	717 (5.17)	594 (4.97)
23	608 (4.50)	510 (4.91)	530 (5.24)	681 (4.91)	582 (4.87)
24	573 (4.24)	492 (4.73)	501 (4.95)	604 (4.35)	542 (4.53)

Washington DC: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	551 (4.02)	461 (4.27)	447 (4.26)	529 (3.78)	497 (4.06)
2	527 (3.84)	423 (3.92)	391 (3.72)	478 (3.42)	454 (3.71)
3	473 (3.45)	377 (3.49)	343 (3.26)	427 (3.05)	404 (3.30)
4	430 (3.14)	332 (3.08)	304 (2.89)	385 (2.75)	362 (2.96)
5	401 (2.93)	303 (2.81)	267 (2.54)	342 (2.45)	328 (2.68)
6	374 (2.73)	286 (2.65)	251 (2.39)	333 (2.38)	311 (2.54)
7	413 (3.02)	318 (2.95)	275 (2.62)	384 (2.74)	347 (2.84)
8	689 (5.03)	501 (4.64)	436 (4.15)	696 (4.98)	580 (4.74)
9	798 (5.83)	558 (5.17)	533 (5.07)	847 (6.06)	684 (5.59)
10	712 (5.20)	531 (4.92)	555 (5.28)	758 (5.42)	639 (5.22)
11	620 (4.53)	516 (4.79)	523 (4.98)	632 (4.52)	573 (4.68)
12	578 (4.22)	486 (4.51)	478 (4.55)	544 (3.89)	521 (4.26)
13	534 (3.90)	462 (4.29)	459 (4.37)	489 (3.50)	486 (3.97)
14	478 (3.49)	430 (3.99)	428 (4.07)	438 (3.13)	443 (3.62)
15	493 (3.60)	457 (4.24)	436 (4.15)	464 (3.32)	462 (3.78)
16	535 (3.91)	476 (4.42)	438 (4.17)	516 (3.69)	491 (4.01)
17	527 (3.85)	471 (4.37)	442 (4.21)	551 (3.94)	498 (4.07)
18	612 (4.47)	490 (4.55)	473 (4.50)	704 (5.04)	570 (4.66)
19	705 (5.14)	492 (4.56)	485 (4.62)	842 (6.02)	631 (5.16)
20	713 (5.21)	484 (4.49)	524 (4.98)	840 (6.01)	640 (5.23)
21	699 (5.10)	468 (4.34)	516 (4.91)	799 (5.71)	620 (5.07)
22	637 (4.65)	472 (4.38)	505 (4.81)	709 (5.07)	581 (4.75)
23	618 (4.51)	501 (4.65)	505 (4.81)	673 (4.82)	574 (4.69)
24	582 (4.25)	488 (4.52)	491 (4.67)	602 (4.30)	540 (4.42)

Washington DC: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	707 (4.57)	576 (4.72)	539 (4.56)	653 (4.20)	618 (4.49)
2	661 (4.27)	516 (4.23)	439 (3.72)	586 (3.77)	550 (4.00)
3	567 (3.66)	447 (3.66)	384 (3.25)	501 (3.22)	474 (3.45)
4	497 (3.21)	381 (3.12)	332 (2.81)	432 (2.78)	410 (2.98)
5	439 (2.84)	328 (2.68)	280 (2.37)	358 (2.30)	351 (2.55)
6	400 (2.58)	302 (2.47)	259 (2.20)	340 (2.18)	325 (2.36)
7	453 (2.93)	346 (2.83)	302 (2.56)	415 (2.66)	379 (2.75)
8	588 (3.80)	480 (3.93)	509 (4.31)	593 (3.81)	543 (3.94)
9	698 (4.51)	570 (4.66)	672 (5.69)	749 (4.82)	672 (4.89)
10	770 (4.97)	621 (5.08)	700 (5.93)	824 (5.30)	729 (5.30)
11	707 (4.56)	634 (5.19)	644 (5.46)	735 (4.72)	680 (4.94)
12	658 (4.25)	542 (4.44)	495 (4.19)	611 (3.93)	576 (4.19)
13	638 (4.12)	549 (4.50)	568 (4.81)	573 (3.68)	582 (4.23)
14	576 (3.72)	506 (4.14)	520 (4.41)	513 (3.30)	529 (3.84)
15	550 (3.55)	488 (3.99)	468 (3.96)	502 (3.23)	502 (3.65)
16	644 (4.16)	530 (4.34)	477 (4.04)	610 (3.92)	565 (4.11)
17	672 (4.34)	578 (4.73)	544 (4.61)	716 (4.60)	627 (4.56)
18	656 (4.24)	527 (4.32)	533 (4.51)	733 (4.71)	612 (4.45)
19	746 (4.82)	501 (4.10)	491 (4.16)	859 (5.52)	649 (4.72)
20	823 (5.32)	523 (4.28)	464 (3.93)	974 (6.26)	696 (5.06)
21	782 (5.05)	511 (4.18)	511 (4.33)	901 (5.79)	676 (4.91)
22	761 (4.92)	593 (4.86)	648 (5.49)	840 (5.40)	711 (5.16)
23	747 (4.82)	586 (4.80)	529 (4.48)	801 (5.15)	666 (4.84)
24	743 (4.80)	581 (4.76)	499 (4.23)	741 (4.76)	640 (4.65)

Washington DC: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	577 (3.93)	485 (4.23)	469 (4.30)	556 (3.71)	521 (4.01)
2	551 (3.75)	443 (3.87)	410 (3.76)	500 (3.34)	476 (3.66)
3	485 (3.30)	385 (3.36)	349 (3.20)	439 (2.93)	414 (3.19)
4	440 (3.00)	337 (2.94)	308 (2.83)	395 (2.64)	370 (2.84)
5	412 (2.80)	307 (2.68)	269 (2.47)	351 (2.34)	334 (2.57)
6	386 (2.63)	296 (2.58)	261 (2.40)	345 (2.30)	322 (2.47)
7	472 (3.21)	367 (3.20)	310 (2.85)	450 (3.00)	399 (3.07)
8	747 (5.09)	560 (4.89)	515 (4.73)	760 (5.08)	645 (4.96)
9	851 (5.79)	614 (5.36)	607 (5.57)	902 (6.02)	743 (5.72)
10	788 (5.36)	576 (5.03)	567 (5.21)	820 (5.47)	688 (5.29)
11	691 (4.70)	546 (4.77)	521 (4.78)	683 (4.56)	610 (4.69)
12	631 (4.30)	515 (4.50)	488 (4.48)	586 (3.91)	555 (4.27)
13	602 (4.10)	491 (4.29)	470 (4.32)	539 (3.60)	525 (4.04)
14	546 (3.72)	467 (4.08)	445 (4.08)	493 (3.29)	487 (3.75)
15	520 (3.54)	477 (4.16)	426 (3.92)	495 (3.30)	479 (3.69)
16	536 (3.65)	494 (4.31)	444 (4.08)	529 (3.53)	501 (3.85)
17	603 (4.11)	518 (4.53)	461 (4.23)	632 (4.22)	553 (4.26)
18	686 (4.67)	556 (4.86)	515 (4.73)	813 (5.42)	642 (4.94)
19	707 (4.81)	508 (4.43)	494 (4.53)	863 (5.76)	643 (4.95)
20	719 (4.89)	474 (4.14)	492 (4.52)	851 (5.68)	634 (4.88)
21	743 (5.06)	479 (4.18)	499 (4.58)	851 (5.68)	643 (4.95)
22	707 (4.81)	512 (4.48)	531 (4.88)	780 (5.21)	633 (4.87)
23	661 (4.50)	523 (4.57)	521 (4.79)	707 (4.72)	603 (4.64)
24	628 (4.27)	519 (4.53)	519 (4.77)	641 (4.28)	577 (4.44)

Washington DC: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	582 (4.17)	494 (4.49)	474 (4.49)	557 (3.94)	527 (4.24)
2	556 (3.98)	448 (4.07)	406 (3.84)	499 (3.53)	477 (3.84)
3	498 (3.57)	394 (3.59)	352 (3.33)	444 (3.14)	422 (3.40)
4	454 (3.25)	345 (3.14)	311 (2.94)	399 (2.82)	377 (3.04)
5	423 (3.03)	313 (2.84)	270 (2.56)	351 (2.48)	339 (2.73)
6	392 (2.81)	292 (2.66)	250 (2.37)	339 (2.40)	318 (2.56)
7	409 (2.93)	310 (2.82)	267 (2.52)	370 (2.62)	338 (2.73)
8	579 (4.15)	444 (4.04)	396 (3.75)	590 (4.17)	502 (4.04)
9	714 (5.11)	536 (4.87)	522 (4.93)	789 (5.58)	640 (5.16)
10	717 (5.14)	553 (5.03)	578 (5.47)	780 (5.52)	657 (5.29)
11	637 (4.57)	520 (4.73)	525 (4.97)	641 (4.53)	581 (4.68)
12	604 (4.33)	498 (4.53)	486 (4.60)	556 (3.93)	536 (4.32)
13	552 (3.96)	468 (4.26)	470 (4.45)	492 (3.48)	495 (3.99)
14	517 (3.70)	450 (4.09)	445 (4.21)	463 (3.27)	468 (3.77)
15	499 (3.58)	455 (4.14)	421 (3.98)	457 (3.23)	458 (3.69)
16	511 (3.66)	461 (4.19)	425 (4.02)	485 (3.43)	470 (3.79)
17	557 (3.99)	480 (4.36)	441 (4.17)	579 (4.09)	514 (4.14)
18	584 (4.18)	480 (4.37)	459 (4.34)	666 (4.71)	547 (4.41)
19	664 (4.76)	495 (4.51)	490 (4.64)	812 (5.74)	615 (4.96)
20	731 (5.23)	489 (4.45)	495 (4.68)	867 (6.13)	645 (5.20)
21	755 (5.41)	493 (4.48)	514 (4.86)	863 (6.10)	656 (5.29)
22	717 (5.13)	525 (4.78)	534 (5.05)	789 (5.57)	641 (5.16)
23	675 (4.84)	535 (4.87)	533 (5.04)	722 (5.10)	616 (4.96)
24	631 (4.52)	514 (4.68)	507 (4.80)	638 (4.51)	572 (4.61)

Washington DC: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	578 (4.12)	482 (4.42)	458 (4.33)	556 (3.90)	518 (4.17)
2	547 (3.90)	439 (4.02)	399 (3.78)	496 (3.48)	470 (3.78)
3	485 (3.46)	387 (3.55)	348 (3.30)	439 (3.08)	415 (3.33)
4	436 (3.11)	335 (3.07)	305 (2.88)	392 (2.75)	367 (2.95)
5	408 (2.91)	304 (2.79)	267 (2.52)	347 (2.43)	331 (2.66)
6	383 (2.73)	289 (2.65)	251 (2.37)	340 (2.39)	315 (2.53)
7	422 (3.00)	324 (2.97)	284 (2.69)	390 (2.74)	355 (2.85)
8	674 (4.80)	503 (4.61)	463 (4.38)	682 (4.78)	580 (4.66)
9	794 (5.66)	571 (5.24)	572 (5.42)	850 (5.96)	697 (5.60)
10	718 (5.11)	532 (4.88)	547 (5.18)	761 (5.33)	639 (5.14)
11	623 (4.43)	503 (4.61)	508 (4.81)	623 (4.37)	564 (4.54)
12	579 (4.13)	471 (4.31)	471 (4.46)	530 (3.72)	512 (4.12)
13	554 (3.94)	459 (4.20)	464 (4.40)	491 (3.44)	492 (3.95)
14	511 (3.64)	439 (4.03)	431 (4.08)	463 (3.25)	461 (3.71)
15	489 (3.48)	434 (3.98)	413 (3.91)	450 (3.16)	446 (3.59)
16	489 (3.48)	440 (4.03)	415 (3.93)	468 (3.28)	453 (3.64)
17	552 (3.93)	466 (4.27)	432 (4.09)	557 (3.90)	501 (4.03)
18	669 (4.77)	522 (4.78)	500 (4.73)	755 (5.29)	611 (4.92)
19	706 (5.03)	500 (4.59)	496 (4.70)	843 (5.91)	636 (5.12)
20	721 (5.13)	472 (4.33)	477 (4.52)	860 (6.03)	632 (5.08)
21	746 (5.31)	486 (4.45)	514 (4.86)	854 (5.99)	650 (5.22)
22	686 (4.88)	498 (4.57)	507 (4.80)	763 (5.35)	613 (4.93)
23	660 (4.70)	541 (4.96)	543 (5.14)	719 (5.04)	615 (4.95)
24	613 (4.36)	512 (4.69)	496 (4.69)	635 (4.45)	564 (4.53)

Washington DC: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	574 (4.08)	493 (4.33)	467 (4.25)	549 (3.89)	520 (4.12)
2	554 (3.94)	458 (4.02)	412 (3.74)	497 (3.52)	480 (3.80)
3	501 (3.56)	409 (3.59)	361 (3.28)	444 (3.15)	428 (3.39)
4	456 (3.25)	359 (3.15)	320 (2.91)	398 (2.82)	383 (3.03)
5	429 (3.05)	324 (2.84)	277 (2.52)	349 (2.47)	345 (2.73)
6	396 (2.82)	302 (2.65)	256 (2.33)	337 (2.39)	322 (2.55)
7	407 (2.89)	318 (2.79)	272 (2.47)	365 (2.59)	340 (2.69)
8	671 (4.77)	487 (4.27)	411 (3.74)	673 (4.77)	560 (4.43)
9	692 (4.92)	497 (4.36)	535 (4.87)	717 (5.08)	610 (4.83)
10	718 (5.11)	540 (4.74)	606 (5.51)	760 (5.39)	656 (5.19)
11	742 (5.27)	593 (5.21)	581 (5.28)	716 (5.07)	658 (5.20)
12	674 (4.80)	536 (4.71)	533 (4.85)	573 (4.06)	579 (4.58)
13	648 (4.60)	511 (4.48)	506 (4.60)	539 (3.82)	550 (4.35)
14	530 (3.77)	460 (4.04)	439 (3.99)	472 (3.34)	475 (3.76)
15	496 (3.53)	496 (4.35)	465 (4.22)	472 (3.35)	482 (3.81)
16	520 (3.70)	526 (4.62)	494 (4.50)	525 (3.72)	516 (4.09)
17	534 (3.80)	538 (4.72)	519 (4.72)	548 (3.89)	535 (4.23)
18	557 (3.96)	532 (4.67)	523 (4.76)	665 (4.71)	570 (4.51)
19	625 (4.44)	497 (4.36)	482 (4.39)	767 (5.43)	593 (4.69)
20	658 (4.68)	452 (3.97)	455 (4.13)	782 (5.54)	587 (4.64)
21	720 (5.12)	514 (4.51)	559 (5.08)	861 (6.10)	664 (5.25)
22	688 (4.90)	511 (4.48)	510 (4.64)	776 (5.50)	621 (4.92)
23	659 (4.69)	532 (4.67)	519 (4.72)	708 (5.02)	604 (4.78)
24	610 (4.34)	509 (4.46)	496 (4.51)	620 (4.39)	559 (4.42)

Washington DC: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	565 (3.83)	462 (4.06)	445 (4.12)	533 (3.54)	501 (3.86)
2	534 (3.61)	427 (3.76)	394 (3.65)	483 (3.21)	459 (3.53)
3	478 (3.24)	381 (3.35)	345 (3.19)	433 (2.88)	409 (3.15)
4	434 (2.94)	333 (2.93)	304 (2.81)	389 (2.59)	365 (2.81)
5	404 (2.73)	302 (2.66)	267 (2.47)	345 (2.29)	329 (2.53)
6	382 (2.59)	293 (2.57)	254 (2.35)	342 (2.27)	317 (2.44)
7	502 (3.40)	375 (3.29)	303 (2.81)	475 (3.16)	413 (3.18)
8	811 (5.49)	608 (5.35)	562 (5.20)	837 (5.56)	704 (5.42)
9	878 (5.94)	637 (5.60)	643 (5.96)	938 (6.24)	774 (5.96)
10	796 (5.39)	601 (5.28)	595 (5.51)	852 (5.66)	711 (5.47)
11	690 (4.67)	564 (4.96)	533 (4.93)	701 (4.66)	622 (4.79)
12	634 (4.29)	518 (4.56)	469 (4.34)	596 (3.96)	554 (4.26)
13	598 (4.05)	506 (4.45)	501 (4.64)	538 (3.57)	535 (4.12)
14	549 (3.72)	468 (4.11)	457 (4.23)	492 (3.27)	491 (3.78)
15	504 (3.41)	442 (3.88)	389 (3.61)	468 (3.11)	451 (3.47)
16	500 (3.39)	444 (3.90)	388 (3.59)	484 (3.22)	454 (3.49)
17	572 (3.87)	497 (4.37)	444 (4.11)	603 (4.01)	529 (4.07)
18	755 (5.11)	567 (4.98)	555 (5.14)	867 (5.76)	686 (5.28)
19	730 (4.94)	499 (4.39)	472 (4.37)	880 (5.85)	645 (4.96)
20	715 (4.84)	468 (4.11)	476 (4.41)	850 (5.65)	627 (4.83)
21	758 (5.13)	493 (4.34)	531 (4.92)	858 (5.70)	660 (5.08)
22	710 (4.80)	490 (4.30)	503 (4.66)	761 (5.06)	616 (4.74)
23	659 (4.46)	505 (4.44)	484 (4.48)	700 (4.65)	587 (4.52)
24	613 (4.15)	496 (4.36)	485 (4.50)	621 (4.13)	554 (4.26)

Washington DC: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	564 (4.18)	479 (4.54)	458 (4.49)	541 (3.98)	510 (4.27)
2	543 (4.02)	443 (4.20)	400 (3.93)	491 (3.62)	469 (3.93)
3	487 (3.61)	392 (3.72)	350 (3.44)	436 (3.21)	416 (3.48)
4	443 (3.28)	342 (3.25)	309 (3.03)	392 (2.89)	371 (3.11)
5	415 (3.07)	312 (2.96)	275 (2.70)	347 (2.55)	337 (2.82)
6	384 (2.85)	293 (2.78)	255 (2.50)	335 (2.47)	317 (2.65)
7	403 (2.98)	312 (2.96)	271 (2.66)	368 (2.71)	338 (2.83)
8	551 (4.08)	420 (3.99)	381 (3.74)	544 (4.01)	474 (3.97)
9	691 (5.12)	497 (4.71)	505 (4.95)	734 (5.41)	606 (5.08)
10	690 (5.11)	509 (4.83)	529 (5.19)	730 (5.37)	614 (5.14)
11	631 (4.67)	502 (4.77)	490 (4.81)	633 (4.66)	564 (4.72)
12	615 (4.56)	492 (4.67)	470 (4.62)	561 (4.13)	534 (4.47)
13	549 (4.06)	437 (4.15)	433 (4.25)	474 (3.49)	473 (3.96)
14	513 (3.80)	428 (4.06)	409 (4.02)	457 (3.36)	451 (3.78)
15	506 (3.75)	444 (4.22)	414 (4.06)	467 (3.44)	457 (3.83)
16	477 (3.53)	428 (4.06)	424 (4.16)	446 (3.28)	444 (3.71)
17	506 (3.75)	420 (3.98)	414 (4.06)	481 (3.54)	455 (3.81)
18	554 (4.10)	453 (4.30)	440 (4.32)	633 (4.66)	520 (4.35)
19	637 (4.72)	475 (4.51)	473 (4.64)	779 (5.74)	591 (4.95)
20	714 (5.29)	487 (4.63)	497 (4.88)	865 (6.37)	641 (5.36)
21	712 (5.27)	484 (4.59)	530 (5.21)	815 (6.01)	635 (5.32)
22	668 (4.95)	478 (4.54)	481 (4.72)	732 (5.39)	590 (4.94)
23	643 (4.76)	503 (4.77)	490 (4.81)	689 (5.08)	581 (4.87)
24	609 (4.51)	506 (4.80)	489 (4.80)	627 (4.62)	557 (4.67)

Washington DC: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	568 (4.10)	477 (4.42)	461 (4.47)	551 (3.91)	514 (4.19)
2	544 (3.92)	437 (4.05)	396 (3.84)	500 (3.55)	469 (3.82)
3	487 (3.51)	388 (3.60)	348 (3.37)	445 (3.16)	417 (3.40)
4	434 (3.13)	334 (3.09)	304 (2.95)	389 (2.76)	365 (2.98)
5	403 (2.90)	301 (2.79)	265 (2.57)	342 (2.42)	327 (2.67)
6	387 (2.79)	287 (2.66)	249 (2.41)	341 (2.42)	316 (2.57)
7	458 (3.30)	345 (3.20)	289 (2.80)	426 (3.02)	379 (3.09)
8	689 (4.97)	511 (4.74)	443 (4.29)	691 (4.90)	583 (4.75)
9	756 (5.45)	556 (5.15)	540 (5.23)	804 (5.70)	664 (5.41)
10	709 (5.11)	532 (4.93)	550 (5.33)	746 (5.29)	634 (5.17)
11	633 (4.56)	506 (4.69)	503 (4.88)	630 (4.47)	568 (4.63)
12	573 (4.13)	466 (4.32)	448 (4.34)	528 (3.75)	503 (4.11)
13	563 (4.06)	470 (4.35)	456 (4.42)	507 (3.60)	499 (4.07)
14	521 (3.75)	455 (4.21)	449 (4.35)	474 (3.36)	474 (3.87)
15	487 (3.51)	435 (4.03)	396 (3.84)	458 (3.25)	444 (3.62)
16	486 (3.50)	442 (4.10)	415 (4.02)	461 (3.27)	451 (3.67)
17	523 (3.77)	442 (4.10)	419 (4.06)	508 (3.60)	473 (3.85)
18	604 (4.35)	463 (4.29)	418 (4.05)	677 (4.80)	540 (4.40)
19	678 (4.89)	483 (4.48)	464 (4.50)	818 (5.80)	611 (4.98)
20	693 (5.00)	461 (4.27)	459 (4.45)	836 (5.93)	612 (4.99)
21	729 (5.25)	475 (4.40)	499 (4.84)	855 (6.06)	639 (5.21)
22	705 (5.08)	508 (4.71)	538 (5.22)	786 (5.58)	634 (5.17)
23	643 (4.64)	519 (4.81)	514 (4.98)	701 (4.98)	594 (4.85)
24	601 (4.33)	496 (4.60)	492 (4.77)	624 (4.42)	553 (4.51)

Washington DC: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	591 (4.06)	501 (4.22)	468 (4.05)	572 (3.84)	533 (4.03)
2	564 (3.88)	457 (3.85)	408 (3.53)	508 (3.41)	484 (3.66)
3	509 (3.50)	407 (3.42)	357 (3.09)	454 (3.05)	431 (3.26)
4	463 (3.18)	356 (3.00)	316 (2.74)	407 (2.73)	385 (2.91)
5	435 (2.99)	321 (2.70)	274 (2.37)	357 (2.39)	346 (2.62)
6	409 (2.81)	300 (2.52)	253 (2.19)	349 (2.34)	327 (2.48)
7	447 (3.07)	333 (2.80)	284 (2.46)	406 (2.72)	367 (2.78)
8	588 (4.04)	486 (4.09)	451 (3.90)	631 (4.24)	539 (4.08)
9	787 (5.40)	600 (5.05)	584 (5.05)	890 (5.97)	715 (5.41)
10	803 (5.52)	642 (5.41)	669 (5.79)	884 (5.93)	750 (5.67)
11	718 (4.93)	611 (5.14)	630 (5.45)	718 (4.82)	669 (5.06)
12	671 (4.61)	562 (4.73)	568 (4.91)	600 (4.03)	600 (4.54)
13	579 (3.98)	497 (4.18)	512 (4.43)	500 (3.36)	522 (3.95)
14	592 (4.07)	513 (4.32)	527 (4.56)	516 (3.46)	537 (4.06)
15	583 (4.01)	555 (4.67)	569 (4.92)	543 (3.64)	562 (4.25)
16	568 (3.90)	552 (4.64)	557 (4.82)	569 (3.82)	561 (4.25)
17	629 (4.32)	547 (4.60)	513 (4.44)	664 (4.46)	588 (4.45)
18	558 (3.84)	497 (4.18)	490 (4.24)	654 (4.39)	550 (4.16)
19	628 (4.31)	493 (4.15)	474 (4.10)	785 (5.27)	595 (4.50)
20	736 (5.06)	549 (4.62)	546 (4.72)	944 (6.33)	694 (5.25)
21	683 (4.69)	481 (4.05)	532 (4.60)	774 (5.19)	618 (4.67)
22	679 (4.67)	507 (4.27)	523 (4.52)	742 (4.98)	613 (4.63)
23	686 (4.72)	568 (4.78)	542 (4.69)	753 (5.05)	637 (4.82)
24	646 (4.44)	547 (4.61)	515 (4.45)	683 (4.59)	598 (4.52)

Washington DC: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	586 (4.18)	495 (4.44)	465 (4.30)	565 (4.01)	528 (4.22)
2	568 (4.05)	460 (4.13)	410 (3.79)	512 (3.63)	487 (3.89)
3	511 (3.65)	409 (3.67)	359 (3.32)	458 (3.25)	434 (3.47)
4	465 (3.32)	358 (3.21)	318 (2.94)	410 (2.91)	387 (3.10)
5	437 (3.12)	322 (2.89)	275 (2.54)	360 (2.55)	348 (2.78)
6	402 (2.87)	300 (2.69)	254 (2.34)	346 (2.46)	325 (2.60)
7	411 (2.93)	321 (2.88)	278 (2.57)	376 (2.67)	346 (2.77)
8	560 (4.00)	433 (3.89)	415 (3.84)	558 (3.97)	492 (3.93)
9	702 (5.01)	504 (4.52)	505 (4.67)	754 (5.35)	616 (4.92)
10	701 (5.00)	546 (4.89)	569 (5.26)	766 (5.44)	645 (5.16)
11	685 (4.89)	572 (5.13)	553 (5.11)	705 (5.01)	629 (5.02)
12	647 (4.62)	525 (4.71)	487 (4.50)	593 (4.21)	563 (4.50)
13	681 (4.86)	563 (5.05)	512 (4.73)	616 (4.38)	593 (4.74)
14	593 (4.23)	512 (4.59)	472 (4.37)	542 (3.85)	530 (4.23)
15	522 (3.73)	474 (4.25)	446 (4.13)	479 (3.40)	480 (3.84)
16	507 (3.62)	466 (4.18)	460 (4.25)	481 (3.42)	478 (3.82)
17	483 (3.45)	428 (3.84)	438 (4.05)	459 (3.26)	452 (3.61)
18	520 (3.71)	471 (4.22)	531 (4.91)	563 (4.00)	521 (4.17)
19	654 (4.66)	500 (4.48)	534 (4.94)	787 (5.59)	619 (4.95)
20	681 (4.86)	480 (4.31)	496 (4.59)	818 (5.81)	619 (4.94)
21	722 (5.15)	479 (4.30)	501 (4.63)	833 (5.91)	634 (5.06)
22	680 (4.85)	491 (4.40)	515 (4.76)	743 (5.28)	607 (4.85)
23	680 (4.85)	535 (4.79)	530 (4.90)	723 (5.14)	617 (4.93)
24	619 (4.41)	509 (4.56)	494 (4.56)	634 (4.51)	564 (4.51)

Washington DC: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	562 (3.38)	463 (3.56)	442 (3.45)	540 (3.22)	502 (3.39)
2	556 (3.35)	427 (3.28)	391 (3.05)	490 (2.92)	466 (3.15)
3	483 (2.91)	385 (2.96)	347 (2.71)	438 (2.61)	413 (2.79)
4	437 (2.63)	335 (2.57)	306 (2.39)	389 (2.32)	366 (2.48)
5	408 (2.46)	305 (2.34)	267 (2.09)	344 (2.05)	331 (2.23)
6	388 (2.33)	296 (2.27)	254 (1.98)	349 (2.08)	321 (2.17)
7	595 (3.58)	407 (3.13)	310 (2.42)	566 (3.37)	469 (3.17)
8	921 (5.54)	722 (5.55)	679 (5.30)	967 (5.76)	822 (5.55)
9	1126 (6.78)	795 (6.11)	803 (6.27)	1153 (6.87)	969 (6.55)
10	952 (5.73)	743 (5.71)	743 (5.80)	959 (5.71)	849 (5.74)
11	860 (5.18)	693 (5.33)	693 (5.42)	800 (4.77)	761 (5.15)
12	755 (4.54)	623 (4.78)	639 (4.99)	645 (3.84)	665 (4.49)
13	727 (4.37)	588 (4.52)	596 (4.65)	629 (3.75)	634 (4.29)
14	674 (4.05)	561 (4.31)	547 (4.27)	585 (3.49)	591 (4.00)
15	615 (3.70)	581 (4.46)	556 (4.34)	589 (3.51)	585 (3.95)
16	646 (3.89)	614 (4.72)	620 (4.84)	633 (3.77)	628 (4.25)
17	756 (4.55)	649 (4.98)	599 (4.68)	829 (4.94)	708 (4.79)
18	717 (4.32)	641 (4.93)	610 (4.77)	910 (5.42)	720 (4.86)
19	739 (4.45)	620 (4.77)	623 (4.87)	972 (5.79)	739 (4.99)
20	759 (4.57)	536 (4.11)	661 (5.16)	885 (5.28)	710 (4.80)
21	787 (4.74)	499 (3.83)	545 (4.26)	903 (5.38)	683 (4.62)
22	783 (4.71)	516 (3.97)	560 (4.37)	820 (4.88)	670 (4.52)
23	719 (4.33)	528 (4.06)	545 (4.26)	740 (4.41)	633 (4.28)
24	648 (3.90)	489 (3.75)	470 (3.67)	644 (3.84)	562 (3.80)

Washington DC: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	553 (3.84)	462 (4.12)	454 (4.18)	528 (3.59)	499 (3.90)
2	528 (3.67)	422 (3.77)	393 (3.62)	476 (3.24)	455 (3.56)
3	474 (3.29)	375 (3.34)	342 (3.15)	425 (2.89)	403 (3.16)
4	430 (2.99)	330 (2.95)	303 (2.79)	383 (2.60)	361 (2.83)
5	399 (2.78)	301 (2.69)	267 (2.46)	338 (2.30)	326 (2.55)
6	372 (2.58)	283 (2.53)	250 (2.30)	329 (2.24)	308 (2.41)
7	419 (2.91)	318 (2.84)	277 (2.55)	385 (2.62)	349 (2.73)
8	713 (4.95)	530 (4.73)	460 (4.24)	735 (5.00)	609 (4.77)
9	886 (6.16)	596 (5.32)	554 (5.11)	928 (6.31)	741 (5.79)
10	737 (5.12)	542 (4.84)	565 (5.21)	779 (5.30)	656 (5.13)
11	630 (4.38)	527 (4.71)	528 (4.87)	650 (4.42)	584 (4.57)
12	599 (4.16)	500 (4.46)	484 (4.46)	567 (3.86)	537 (4.20)
13	551 (3.83)	489 (4.36)	487 (4.49)	511 (3.48)	509 (3.98)
14	524 (3.64)	457 (4.08)	452 (4.16)	473 (3.22)	476 (3.73)
15	549 (3.82)	499 (4.46)	472 (4.34)	516 (3.51)	509 (3.98)
16	637 (4.43)	538 (4.81)	472 (4.35)	614 (4.18)	565 (4.42)
17	623 (4.33)	521 (4.65)	470 (4.33)	652 (4.44)	567 (4.43)
18	687 (4.77)	529 (4.72)	496 (4.57)	805 (5.48)	629 (4.92)
19	774 (5.38)	512 (4.57)	491 (4.52)	915 (6.23)	673 (5.27)
20	733 (5.09)	506 (4.52)	549 (5.06)	874 (5.95)	666 (5.21)
21	701 (4.87)	467 (4.17)	530 (4.88)	792 (5.39)	622 (4.87)
22	657 (4.56)	497 (4.43)	541 (4.98)	735 (5.00)	607 (4.75)
23	626 (4.35)	513 (4.58)	524 (4.82)	686 (4.67)	587 (4.59)
24	586 (4.07)	487 (4.35)	497 (4.58)	601 (4.09)	543 (4.25)

Washington DC: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	561 (4.20)	469 (4.40)	448 (4.33)	539 (3.97)	504 (4.20)
2	541 (4.04)	435 (4.07)	395 (3.82)	489 (3.60)	465 (3.88)
3	486 (3.63)	387 (3.63)	347 (3.36)	437 (3.22)	414 (3.45)
4	442 (3.31)	340 (3.19)	308 (2.98)	393 (2.89)	371 (3.09)
5	414 (3.09)	308 (2.89)	269 (2.60)	347 (2.56)	334 (2.79)
6	391 (2.92)	292 (2.74)	251 (2.43)	343 (2.52)	319 (2.66)
7	410 (3.07)	314 (2.94)	273 (2.64)	374 (2.75)	343 (2.86)
8	629 (4.70)	485 (4.55)	431 (4.17)	644 (4.74)	547 (4.56)
9	734 (5.49)	521 (4.88)	507 (4.90)	776 (5.71)	634 (5.29)
10	694 (5.19)	520 (4.87)	538 (5.20)	739 (5.44)	623 (5.19)
11	607 (4.54)	539 (5.05)	562 (5.43)	633 (4.66)	585 (4.88)
12	576 (4.31)	495 (4.64)	498 (4.81)	535 (3.94)	526 (4.38)
13	553 (4.14)	487 (4.57)	473 (4.57)	515 (3.79)	507 (4.23)
14	483 (3.61)	431 (4.04)	436 (4.22)	431 (3.17)	445 (3.71)
15	453 (3.39)	443 (4.15)	420 (4.06)	438 (3.22)	439 (3.66)
16	443 (3.31)	434 (4.07)	412 (3.99)	441 (3.24)	432 (3.61)
17	487 (3.64)	433 (4.06)	404 (3.90)	487 (3.58)	453 (3.77)
18	565 (4.22)	455 (4.27)	441 (4.26)	618 (4.55)	520 (4.33)
19	629 (4.70)	482 (4.52)	466 (4.50)	783 (5.76)	590 (4.92)
20	699 (5.23)	475 (4.45)	490 (4.74)	835 (6.15)	625 (5.21)
21	694 (5.19)	458 (4.30)	500 (4.83)	788 (5.80)	610 (5.09)
22	652 (4.87)	469 (4.39)	485 (4.68)	717 (5.27)	580 (4.84)
23	630 (4.71)	506 (4.74)	509 (4.92)	676 (4.98)	580 (4.84)
24	601 (4.49)	491 (4.60)	482 (4.66)	611 (4.50)	546 (4.55)

Washington DC: City-wide, Demographic Group=All persons

HAPEM-MS3 Hour of the Day Exposure (Percent of Total Exposure) by Calendar Quarter and Annually for 1990

Hour of the Day Exposure in ug/m3, Percent of Total Exposure in Percent

Hour	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
1	575 (4.06)	481 (4.34)	461 (4.32)	551 (3.83)	517 (4.11)
2	548 (3.87)	440 (3.97)	401 (3.76)	496 (3.45)	471 (3.75)
3	488 (3.45)	389 (3.51)	349 (3.27)	440 (3.06)	416 (3.31)
4	442 (3.12)	339 (3.06)	308 (2.89)	394 (2.74)	370 (2.95)
5	412 (2.91)	308 (2.78)	269 (2.52)	348 (2.42)	334 (2.66)
6	386 (2.72)	291 (2.63)	253 (2.37)	340 (2.36)	317 (2.52)
7	437 (3.09)	334 (3.01)	285 (2.67)	406 (2.82)	365 (2.90)
8	679 (4.79)	503 (4.54)	448 (4.20)	689 (4.78)	579 (4.61)
9	788 (5.56)	566 (5.11)	553 (5.19)	844 (5.86)	688 (5.47)
10	736 (5.19)	551 (4.97)	568 (5.33)	783 (5.44)	659 (5.24)
11	651 (4.60)	531 (4.79)	528 (4.95)	655 (4.55)	591 (4.70)
12	607 (4.28)	499 (4.50)	484 (4.54)	560 (3.89)	537 (4.27)
13	574 (4.05)	477 (4.31)	471 (4.41)	513 (3.56)	508 (4.04)
14	524 (3.70)	453 (4.09)	442 (4.14)	473 (3.28)	473 (3.76)
15	505 (3.56)	459 (4.14)	430 (4.03)	471 (3.27)	466 (3.71)
16	516 (3.64)	469 (4.23)	436 (4.09)	498 (3.46)	480 (3.81)
17	557 (3.93)	481 (4.34)	447 (4.19)	572 (3.97)	514 (4.09)
18	639 (4.51)	510 (4.60)	486 (4.55)	733 (5.09)	592 (4.71)
19	694 (4.90)	498 (4.50)	489 (4.58)	839 (5.83)	630 (5.01)
20	718 (5.07)	484 (4.37)	501 (4.70)	855 (5.94)	639 (5.09)
21	734 (5.18)	484 (4.37)	518 (4.86)	841 (5.84)	644 (5.12)
22	688 (4.86)	499 (4.50)	518 (4.85)	759 (5.27)	616 (4.90)
23	656 (4.63)	524 (4.73)	520 (4.88)	707 (4.91)	602 (4.78)
24	615 (4.34)	509 (4.59)	501 (4.69)	631 (4.38)	564 (4.48)