MMWR™
Morbidity and Mortality Weekly Report
Weekly October 8, 2004 / Vol. 53 / No. 39

Smoking During Pregnancy — United States, 1990–2002

Cigarette smoking during pregnancy adversely affects the health of both mother and child. The risk for adverse maternal conditions (e.g., premature rupture of membranes, abruptio placentae, and placenta previa) and poor pregnancy outcomes (e.g., neonatal mortality and stillbirth, preterm delivery, and sudden infant death syndrome) is increased by maternal smoking (*1–3*). Infants born to mothers who smoke weigh less than other infants, and low birthweight (<2,500 grams) is a key predictor for infant mortality (*1,2,4*). Infertility and conception delay also might be elevated by smoking (*1*). National health objectives for 2010 target an increase in cessation to 30% among pregnant smokers during the first trimester (objective 27-6) and abstinence from cigarettes by 99% of women giving birth (objective 16-17) (*5*). To assess progress toward these goals, CDC analyzed state-specific trends in maternal smoking during 1990–2002 by using data collected on birth certificates. This report summarizes the results of those analyses, which indicated that whereas participating areas observed a significant decline in maternal smoking during the surveillance period, 10 states reported recent increases in smoking by pregnant teens. Although the widespread public health message to abstain from smoking during pregnancy has helped decrease maternal smoking, to reduce prevalence further, implementation of additional interventions are required.

Data for the analyses were collected on birth certificates and reported by 49 reporting states, the District of Columbia (DC), and New York City (NYC) to CDC's National Vital Statistics System, operated by the National Center for Health Statistics. Data on maternal smoking in California were not included because the state's birth certificate does not collect this information in the standard format. Not all states had data available for the entire observation period (1990–2002). To obtain statistically reliable prevalences for smoking during pregnancy among teen mothers by state, 2 years of data were averaged and compared for three periods (i.e., 1990–1991, 1995–1996, and 2001–2002). All differences are statistically significant ($p<0.05$) unless otherwise noted.

In 2002, smoking during pregnancy was reported by 11.4% of all women giving birth in the United States, a decrease of 38% from 1990, when 18.4% reported smoking (*3*) (Figure and Table 1). From 1990 to 2002, all 44 states (and DC) with comparable data for the entire observation period reported significant declines in maternal smoking (Table 1). However, the declines were variable, ranging from 5.8% in West Virginia (from 27.8% in 1990 to 26.2% in 2002) to 68.0% in Massachusetts (from 25.3% in 1990 to 8.1% in 2002).

Since 1990, maternal smoking for females aged 15–19 years has fluctuated. Every year from 1996 through 2001, these mothers had the highest percentage of smoking during pregnancy than any other age group (*3,6*). However, in 2002, the percentage of maternal smokers aged 15–19 years (16.7%) was the same as that for women aged 20–24 years, with the highest percentage observed among women aged 18–19 years (18.2%).

Of 45 states (and DC) where maternal smoking percentages were calculated for teen mothers during both 1990–1991 and 1995–1996, a total of 34 states had significant declines (Table 2). Of the 45 reporting states, DC, and NYC, where

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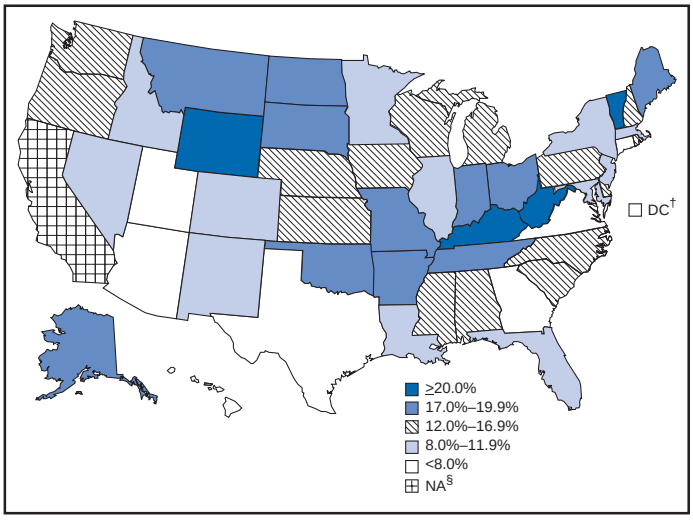
DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

The *MMWR* series of publications is published by the Coordinating Center for Health Information and Service (Proposed), Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION
Centers for Disease Control and Prevention. [Article Title]. MMWR 2004;53:[inclusive page numbers].

FIGURE. Percentage of mothers who smoked during pregnancy — United States*, 2002



* Overall U.S. rate was 11.4%.
† District of Columbia.
§ Data not available. California does not report maternal smoking.

maternal smoking percentages could be calculated for teen mothers for both 1995–1996 and 2001–2002, a total of 16 states and NYC had significant declines, but 15 states had significant increases for teen maternal smoking. Of these 15 states, 10 had a complete trend reversal from a significant decrease from 1990–1991 to 1995–1996 to a significant increase from 1995–1996 to 2001–2002.

Thirteen states had consistent and significant declines among pregnant women aged 15–19 years, both from 1990–1991 to 1995–1996 and from 1995–1996 to 2001–2002; four states had significantly higher teen smoking percentages in 2001–2002, compared with 1990–1991.

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Editorial Note: Smoking during pregnancy has declined in the United States, in response to public education and public health campaigns (*1*). Neonatal health-care costs attributable to maternal smoking in the United States have been estimated at $366 million per year (*4*). Smoking-cessation programs remain a crucial strategy for preventing poor birth outcomes and decreasing the social and financial costs of smoking during pregnancy.

The findings in this report are subject to at least two limitations. First, no data are presented from California, where 13.2% of U.S. births occurred in 2002, but smoking is not reported on birth certificates in the standard format. However, California annually samples mothers aged ≥15 years through its Maternal and Infant Health Assessment program. Data are stratified by age, region, maternal education, and

TABLE 1. Percentage of mothers who smoked during pregnancy, by area — United States, 1990, 1996, and 2002

Area	1990* %	1996† %	2002§ %	% change 1990–2002
Total	**18.4**	**13.6**	**11.4¶**	**-38.0¶**
Alabama	16.5	13.0	12.1	-26.7
Alaska	21.9	20.5	17.9	-18.3
Arizona	15.0	10.3	6.3	-58.0
Arkansas	22.6	19.3	18.0	-20.4
California	NA**	NA	NA	NA
Colorado	18.1	12.6	8.5	-53.0
Connecticut	13.4	10.0	7.0	-47.8
Delaware	19.6	14.0	12.9	-34.2
District of Columbia	16.3	7.0	3.9	-76.1
Florida	18.3	12.2	8.6	-53.0
Georgia	15.5	10.4	7.9	-49.0
Hawaii	12.5	8.6	7.1	-43.2
Idaho	15.9	14.3	10.5	-34.0
Illinois	16.6	12.5	10.1	-39.2
Indiana	NA	NA	19.1	-8.6††
Iowa	22.6	19.0	16.5	-27.0
Kansas	14.3	12.9	12.7	-11.2
Kentucky	28.5	24.5	24.4	-14.4
Louisiana	15.1	10.7	10.0	-33.8
Maine	21.5	19.3	17.1	-20.5
Maryland	15.8	11.3	8.1	-48.7
Massachusetts	25.3	13.2	8.1	-68.0
Michigan	22.6	17.6	15.1	-33.2
Minnesota	15.8	13.1	10.5	-33.5
Mississippi	15.8	12.8	12.1	-23.4
Missouri	24.8	19.6	18.2	-26.6
Montana	20.5	18.0	19.1	-6.8
Nebraska	20.8	16.5	14.1	-32.2
Nevada	20.1	13.4	10.0	-50.2
New Hampshire	20.8	16.8	14.0	-32.7
New Jersey	13.2	12.1	8.5	-35.6
New Mexico	11.3	11.3	10.1	-10.6
New York	NA	NA	8.1	-12.9††
New York City	NA	4.9	2.4	-63.1§§
New York state¶¶	NA	NA	13.3	-6.3††
North Carolina	20.7	15.8	13.2	-36.2
North Dakota	21.9	18.4	17.4	-20.5
Ohio	24.9	19.5	17.9	-28.1
Oklahoma	NA	17.4	18.1	-7.7***
Oregon	22.3	17.8	12.4	-44.4
Pennsylvania	20.9	18.1	15.6	-25.4
Rhode Island	22.4	16.4	12.1	-46.0
South Carolina	19.5	14.3	13.0	-33.3
South Dakota	NA	NA	19.3	-2.5†† †††
Tennessee	21.9	17.6	17.1	-21.9
Texas	10.4	7.7	6.3	-39.4
Utah	10.8	9.3	7.0	-35.2
Vermont	22.6	19.0	20.1	NA§§§
Virginia	15.9	11.8	7.5	-52.8
Washington	20.2	16.0	12.0	-40.6
West Virginia	27.8	25.5	26.2	-5.8
Wisconsin	22.9	18.1	14.9	-34.9
Wyoming	24.3	20.5	20.7	-14.8

* Total excludes California, Indiana, New York City, New York state, Oklahoma, and South Dakota.
† Total excludes California, Indiana, New York state, and South Dakota.
§ Total excludes California.
¶ Vermont revised its smoking question; however, national data were not affected.
** Data not available.
†† 1999–2002.
§§ 1994–2002.
¶¶ All of New York outside of New York City.
*** 1991–2002.
††† Not significant ($p \geq 0.05$).
§§§ In 2001, Vermont revised its smoking question; therefore, data are not comparable.

ethnicity and weighted so that results can be generalized statewide. In 1999, maternal smoking prevalence was 11.5%, lower than the 12.6% reported for the United States; among teen mothers in California aged 15–19 years, smoking prevalence was 16.7% (*7*), compared with 18.1% for the United States. Second, prenatal smoking is underreported on birth certificates (*1*). Underreporting might be related to the wording of the smoking question, the timing of the data collection (e.g., during prenatal care versus after the live birth), and the stigma associated with smoking during pregnancy, particularly in cases of poor birth outcome. However, despite underreporting, the trends and variations in smoking derived from birth certificate data have been confirmed with data from other sources (e.g., National Survey of Family Growth and Pregnancy Risk Assessment Monitoring System) (*8*).

Changes in the smoking question on the birth certificate can help clarify smoking behavior during pregnancy. On the basis of a study of alternative smoking questions in California (*9*), the question on maternal smoking has been redesigned for the revised U.S. standard certificate of live birth. The new question on smoking during pregnancy asks whether the mother smoked during the 3 months before pregnancy and during each trimester of pregnancy, clarifying the time of initiation and duration of smoking and providing data on women who quit smoking early in pregnancy.

Vermont implemented a revised smoking question on its birth certificate in 2000, and data for 2001–2002 indicated higher percentages because of more complete identification of smoking during pregnancy (*10*). The impact from this change on national data was negligible because Vermont accounts for less than 0.2% of all U.S. births. All states are expected to revise their smoking questions, resulting in discontinuity of data such as those in this report, but improving accuracy of reporting.

Women who quit smoking before or during pregnancy can substantially reduce or eliminate risks to themselves and their infants (*1*). The National Partnership to Help Pregnant Smokers Quit includes CDC and approximately 60 other organizations, working to ensure that health-care providers assess smoking status before, during, and after pregnancy and provide best-practice counseling on smoking cessation. Evidence suggests that specific cessation programs have been at least partly successful (*6*). However, not all women have responded to this public health message (*1*); further efforts are needed to persuade these women of the health risks posed to their infants and themselves from smoking during pregnancy.

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TABLE 2. Percentage of females aged 15–19 years who smoked during pregnancy, by area — United States, 1990–1991, 1995–1996, and 2001–2002

Area	1990–1991* %	1995–1996† %	2001–2002§ %	% change 1990–1991 to 1995–1996	% change 1995–1996 to 2001–2002	% change 1990–1991 to 2001–2002
Total	**20.3**	**17.0**	**17.1¶**	**-16**	**1****	**-16**
Alabama	14.8	13.6	15.2	-8	12	3**
Alaska	31.7	29.5	26.1	-7**	-12	-18
Arizona	15.3	10.9	7.0	-29	-36	-54
Arkansas	20.6	19.9	22.1	-3**	11	7
California	NA††	NA	NA	NA	NA	NA
Colorado	24.9	17.9	13.7	-28	-23	-45
Connecticut	18.2	15.6	13.3	-14	-15	-27
Delaware	19.6	15.1	17.5	-23	16	-11**
District of Columbia	4.0	3.8	2.9	-5**	-24**	-28
Florida	16.4	13.1	11.2	-20	-15	-32
Georgia	13.5	11.7	11.6	-13	-1**	-14
Hawaii	16.2	10.7	12.2	-34	14	-25
Idaho	24.7	23.5	18.7	-5**	-20	-24
Illinois	16.5	14.4	14.7	-13	2**	-11
Indiana	NA	NA	28.7	NA	NA	NA
Iowa	33.0	29.4	29.7	-11	1**	-10
Kansas	17.9	18.4	19.2	3**	4**	7
Kentucky	32.9	31.2	34.1	-5	9	4**
Louisiana	11.2	9.8	11.4	-13	16	2**
Maine	37.3	33.2	34.1	-11	3**	-9
Maryland	19.1	13.1	13.8	-31	5**	-28
Massachusetts	31.3	22.5	17.4	-28	-23	-44
Michigan	24.0	22.4	23.8	-7	6	-1**
Minnesota	28.2	25.3	23.3	-10	-8	-17
Mississippi	12.0	10.4	12.7	-13	22	6**
Missouri	26.2	24.5	27.2	-6	11	4**
Montana	28.3	29.5	33.1	4**	12	17
Nebraska	28.6	25.4	21.5	-11	-15	-25
Nevada	19.3	14.5	11.1	-25	-23	-42
New Hampshire	37.2	34.6	36.0	-7**	4**	-3**
New Jersey	15.1	13.2	13.7	-13	4**	-9
New Mexico	12.0	10.5	11.4	-13	9**	-5**
New York	NA	NA	14.7	NA	NA	NA
New York City	NA	5.1	3.0	NA	-41	NA
New York state§§	NA	NA	26.6	NA	NA	NA
North Carolina	21.1	17.9	18.4	-15	3**	-13
North Dakota	33.4	30.3	33.7	-9**	11**	1**
Ohio	30.3	26.7	28.2	-12	6	-7
Oklahoma	NA	20.4	23.0	NA	13	NA
Oregon	33.3	27.9	22.7	-16	-19	-32
Pennsylvania	26.9	24.8	25.2	-8	2**	-6
Rhode Island	30.8	23.7	21.2	-23	-11**	-31
South Carolina	17.5	15.0	15.7	-14	5**	-10
South Dakota	NA	NA	30.8	NA	NA	NA
Tennessee	22.8	19.8	22.1	-13	12	-3**
Texas	9.7	8.5	7.8	-12	-8	-20
Utah	22.0	20.6	16.8	-6**	-18	-24
Vermont	36.9	38.2	48.7	4**	NA¶¶	NA¶¶
Virginia	18.5	15.5	13.1	-16	-15	-29
Washington	30.8	26.7	22.1	-13	-17	-28
West Virginia	33.4	32.3	38.0	-3**	18	14
Wisconsin	31.3	26.8	25.3	-14	-6	-19
Wyoming	29.6	29.0	33.1	-2**	14	12**

* Total excludes California, Indiana, New York City, New York state, Oklahoma, and South Dakota.
† Total excludes California, Indiana, New York state, and South Dakota.
§ Total excludes California.
¶ Vermont revised its smoking question; however, national data were not significantly affected.
** Not significant ($p \geq 0.05$).
†† Data not available.
§§ All of New York outside New York City.
¶¶ In 2001, Vermont revised its smoking question; therefore, data are not comparable.

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State Estimates of Neonatal Health-Care Costs Associated with Maternal Smoking — United States, 1996

Smoking during pregnancy can cause poor outcomes for both the pregnant woman and her unborn child (*1*) and also result in added health-care expenditures. To characterize costs by state, CDC analyzed pregnancy risk surveillance and birth certificate data to estimate the association between maternal smoking and the probability of infant admission to a neonatal intensive care unit (NICU). Neonatal health-care costs, in 1996 dollars, were assigned on the basis of data from private health insurance claims. This report summarizes the results of that analysis, which estimated smoking-attributable neonatal expenditures (SAEs) of $366 million in the United States in 1996, or $704 per maternal smoker (*2*), and indicated wide variations in SAEs among states. These costs are preventable. States can use these data to justify or support their prevention and cessation treatment strategies.

CDC has incorporated this analysis into its Maternal and Child Health Smoking-Attributable Mortality, Morbidity, and Economic Costs (MCH SAMMEC) software, which generates estimates of the smoking-attributable fraction of neonatal expenditures and provides area-specific estimates of SAEs for all women giving birth and for selected subsets of that population. Costs for 1996 (the most recent data available when MCH SAMMEC was developed) for each area were estimated by mother's age, race, education level, health insurance status, and timing of initiation of prenatal care. Separate estimates for populations of Hispanic ethnicity were not provided; an update of MCH SAMMEC will allow for selection of Hispanic and other racial/ethnic populations.

MCH SAMMEC used national and state-specific maternal smoking prevalence estimates for 1997 by using birth certificate data collected by the National Center for Health Statistics from all areas except California, Indiana, New York state (outside of New York City), and South Dakota. Mothers were asked whether they smoked during their pregnancy and, if they did, how many cigarettes daily. For California, MCH SAMMEC used Maternal and Infant Health Assessment data. For Indiana, New York state, and South Dakota, smoking prevalence data for women aged 18–44 years were obtained from the Behavioral Risk Factor Surveillance System. Data in MCH SAMMEC are derived by extrapolating the results of a multivariate model estimated on 1995 Pregnancy Risk Assessment Monitoring System (PRAMS) data for 13 states* to all 50 states. This model estimates the association between maternal smoking and the probability of admission to an NICU and infant length of stay, whether in an NICU or regular nursery bed. These measures of resource utilization (i.e., NICU admission and infant nights in hospital) were assigned dollar costs based on a 1996 private-sector claims database. Details of the MCH SAMMEC methodology and estimation procedure have been published previously (*3*).

The MCH SAMMEC software provided a national estimate of smoking-attributable neonatal expenditures of $366 million in 1996, or $704 per maternal smoker (*2*). Across areas, higher total SAE estimates by MCH SAMMEC were associated with higher numbers of births and higher smoking prevalence. SAE totals ranged from $34 million in California to $537,661 in the District of Columbia (DC). After California, states with the highest SAEs were New York, Ohio, Pennsylvania, and Texas; states with the lowest SAEs were Alaska, Hawaii, Vermont, and Wyoming (Table 1). Although overall prevalence of maternal smoking was 13.2% in 1997, prevalence by area ranged from 4.8% in New York City to 25.3% in West Virginia (*4*). To focus on the population at risk for excess costs in and across areas, SAEs per maternal smoker were estimated. SAEs per maternal smoker ranged from $519 in Hawaii to $1,334 in DC (Table 1).

Although higher smoking prevalence usually is associated with white mothers as compared with blacks, smoking prevalence was higher among black mothers in 13 states and DC. Among

* Alabama, Alaska, California, Florida, Georgia, Indiana, Maine, Michigan, New York (excluding New York City), Oklahoma, South Carolina, Washington, and West Virginia.

TABLE 1. Total neonatal and smoking-attributable expenditures (SAEs), overall smoking-attributable fraction (SAF), SAF among smokers, and SAE per maternal smoker, in 1996 dollars, by area — United States

Area	Total neonatal expenditures ($)	SAEs ($)	Overall SAF (%)	SAF among smokers (%)	SAE/ maternal smoker ($)
Alabama	287,151,918	5,498,592	1.91	14.34	728
Alaska	33,348,857	984,031	2.95	13.90	540
Arizona	258,950,461	3,978,129	1.54	14.63	626
Arkansas	165,732,767	4,821,535	2.91	14.39	727
California	1,634,956,655	34,243,829	2.09	14.18	567
Colorado	192,589,414	3,729,109	1.94	14.55	606
Connecticut	198,576,762	3,021,337	1.52	13.72	771
Delaware	47,444,776	1,187,294	2.50	14.76	823
District of Columbia	47,799,085	537,661	1.12	15.92	1,334
Florida	878,563,251	16,479,130	1.88	14.52	758
Georgia	561,609,783	8,966,266	1.60	14.55	774
Hawaii	56,053,449	702,330	1.25	13.55	519
Idaho	60,231,528	1,332,795	2.21	14.38	580
Illinois	779,345,259	17,249,252	2.21	14.65	789
Indiana	334,551,545	14,752,377	4.41	14.03	645
Iowa	144,228,047	4,387,381	3.04	14.20	677
Kansas	148,259,650	3,353,920	2.26	14.21	682
Kentucky	227,756,467	8,901,916	3.91	14.25	704
Louisiana	327,127,644	5,304,310	1.62	14.59	788
Maine	60,368,562	1,768,934	2.93	13.32	693
Maryland	326,981,474	6,066,838	1.86	14.82	840
Massachusetts	367,405,406	7,292,925	1.98	13.55	738
Michigan	571,758,116	17,032,066	2.98	14.44	737
Minnesota	252,395,391	5,478,141	2.17	14.25	691
Mississippi	210,011,551	4,009,990	1.91	14.53	779
Missouri	313,084,733	10,145,819	3.24	14.31	707
Montana	36,084,379	1,092,290	3.03	14.21	571
Nebraska	92,234,679	2,589,196	2.81	14.18	674
Nevada	95,499,731	2,271,909	2.38	14.73	646
New Hampshire	62,624,266	1,682,192	2.69	13.34	693
New Jersey	540,884,973	10,873,802	2.01	14.04	857
New Mexico	91,949,820	1,610,672	1.75	14.59	619
New York	1,206,065,646	23,939,678	1.98	13.53	739
North Carolina	494,425,732	12,478,878	2.52	14.53	778
North Dakota	32,357,533	1,032,836	3.19	13.87	636
Ohio	655,523,565	21,511,552	3.28	14.41	726
Oklahoma	204,087,236	5,764,723	2.82	14.18	704
Oregon	148,356,815	4,193,238	2.83	14.51	602
Pennsylvania	685,273,992	19,819,638	2.89	13.79	786
Rhode Island	56,199,357	1,445,445	2.57	13.49	733
South Carolina	254,169,307	5,619,481	2.21	14.56	781
South Dakota	38,460,039	1,146,046	2.98	13.23	564
Tennessee	341,798,052	9,589,494	2.81	14.46	749
Texas	1,420,215,997	17,766,009	1.25	14.41	739
Utah	136,763,571	2,128,298	1.56	14.34	575
Vermont	28,979,539	785,020	2.71	13.37	701
Virginia	416,408,469	8,186,727	1.97	14.64	796
Washington	264,618,641	6,775,725	2.56	14.47	597
West Virginia	87,333,248	3,553,629	4.07	14.26	701
Wisconsin	270,981,125	8,306,638	3.07	14.31	706
Wyoming	21,558,821	747,201	3.47	14.35	578
Total	**16,169,139,608**	**366,136,636**	**2.26**	**14.25**	
Average					**704**

black mothers in these 13 states, smoking prevalence ranged from 6.7% to 21.3%, and SAE per maternal smoker ranged from $1,008 to $1,403. Among all states, the average SAE for black mothers was almost double that for white mothers ($1,207 versus $651). However, adverse outcomes among black infants are more likely regardless of maternal smoking; at least one study suggests stronger effects of smoking on birthweight among black women compared with white women (*1*).

In every area except DC, Indiana, and Mississippi, smoking prevalence was higher for women aged <20 years than for women aged ≥20 years. In all areas, the prevalence of smoking among pregnant women with less education was more than double the prevalence of women with more education.

Persons who were uninsured or who were on Medicaid while pregnant had greater smoking prevalence than those with private or other health insurance. In all areas except DC and Texas, the prevalence of smoking among Medicaid/uninsured mothers was >10%; prevalence was highest in Indiana (37.7%) (Table 2). The highest SAE per maternal smoker among the Medicaid/uninsured group was in DC ($1,355); the lowest was in Hawaii ($523). Among women in the private/other insurance group, smoking prevalence was <10% in 28 states. The average SAEs per maternal smoker, from all areas, were $753 for those in the Medicaid/uninsured group and $626 for those in the private/other insurance group.

Mothers who are on Medicaid or uninsured are less likely to initiate prenatal care in the first trimester (*5*). Both the prevalence of maternal smoking and SAE per maternal smoker were higher for mothers who began prenatal care in the third trimester or who had no prenatal care, compared with mothers who received prenatal care in the first or second trimester. The average SAEs per maternal smoker ranged from $485 in Hawaii to $1,112 in DC for mothers beginning care in the first or second trimester and from $821 to $2,166 in the same two areas for women beginning prenatal care in the third trimester, or having no care at all.

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TABLE 2. Smoking-attributable expenditure (SAE) per maternal smoker, in 1996 dollars, by insurance status and area — United States

Area	Receiving Medicaid or uninsured		Private or other insurance	
	SAE per maternal smoker ($)	Prevalence (%)	SAE per maternal smoker ($)	Prevalence (%)
Alabama	750	16.4	670	8.0
Alaska	543	27.2	542	12.1
Arizona	649	11.6	585	5.7
Arkansas	753	23.4	664	11.7
California	674	15.5	437	8.9
Colorado	627	17.3	576	7.2
Connecticut	810	16.3	728	6.0
Delaware	863	19.0	733	9.1
District of Columbia	1,355	7.0	1,202	1.8
Florida	782	15.3	701	7.0
Georgia	799	13.4	715	5.9
Hawaii	523	12.8	507	4.6
Idaho	591	20.4	556	7.6
Illinois	844	18.2	700	7.8
Indiana	696	37.7	560	18.6
Iowa	700	29.0	643	11.4
Kansas	708	21.0	646	8.4
Kentucky	720	32.7	664	14.5
Louisiana	815	13.0	710	6.5
Maine	710	33.2	672	11.9
Maryland	882	16.0	739	5.8
Massachusetts	767	22.6	709	8.0
Michigan	775	26.7	677	11.0
Minnesota	714	21.4	650	7.8
Mississippi	813	14.9	695	9.0
Missouri	740	29.6	655	12.4
Montana	579	29.5	557	10.6
Nebraska	697	26.0	640	11.2
Nevada	678	17.9	595	9.2
New Hampshire	714	31.6	667	11.1
New Jersey	945	18.8	748	7.7
New Mexico	635	13.0	583	6.7
New York	842	20.4	582	8.1
North Carolina	804	20.7	703	9.2
North Dakota	643	32.0	624	13.0
Ohio	761	29.8	668	12.3
Oklahoma	717	23.5	666	9.8
Oregon	616	24.9	575	10.0
Pennsylvania	835	28.4	725	11.5
Rhode Island	769	27.2	685	10.6
South Carolina	806	18.1	710	8.9
South Dakota	564	28.2	566	12.6
Tennessee	778	23.0	683	10.6
Texas	755	9.6	692	4.4
Utah	587	16.0	550	4.8
Vermont	716	31.7	680	10.7
Virginia	830	16.6	719	6.4
Washington	610	23.2	577	9.2
West Virginia	710	34.1	676	14.2
Wisconsin	743	28.2	649	11.3
Wyoming	590	30.7	561	13.8
Total	**245,284,878**	**19.3**	**120,851,759**	**8.8**
Average	**753**		**626**	

Editorial Note: In 2001, the estimated prevalence of smoking during pregnancy for all U.S. women was 11.4%, ranging from 3.9% in DC to 26.2% in West Virginia (*6,7*). Maternal smoking prevalences were higher among women who were younger, white, had less education and lower incomes, and were either on Medicaid or had no insurance (*6,8*). However, factors other than maternal smoking can result in higher neonatal costs among certain populations. For example, mothers with late or no prenatal care might be more likely to engage in other risk behaviors that affect pregnancy outcomes and increase costs (*9*). In addition, black infants have a greater likelihood for lower birthweight and adverse outcomes, regardless of maternal smoking (*1*).

The findings in this report are subject to at least three limitations. First, SAEs do not include neonatal costs incurred after the infant's initial hospital stay or any costs associated with secondhand smoke. Second, although PRAMS data include measures of resource utilization necessary to estimate costs, PRAMS data were not available for all areas. Thus, the models that used sociodemographic characteristics of pregnant women found in both PRAMS and birth certificate data were used to extrapolate SAEs to each area. Finally, SAEs in this report are in 1996 dollars (the most recent available when MCH SAMMEC was developed) and do not reflect cost-of-living variations across states or subsequent increases in costs.

State-specific estimates of SAEs per maternal smoker can help states explore potential cost savings from smoking-cessation interventions and other policies (e.g., excise taxes) that can reduce smoking prevalence among pregnant women (*10*). All pregnant smokers should be treated according to Public Health Service recommendations. However, sociodemographic data can help states tailor smoking interventions to populations with the highest prevalence.

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State-Specific Trends in Chronic Kidney Failure — United States, 1990–2001

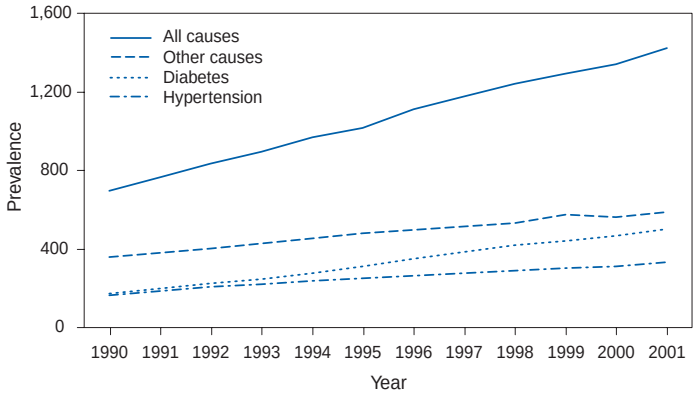
Kidney disease is the ninth leading cause of death in the United States (*1*). Approximately 19 million U.S. adults have chronic kidney disease (*2*), and an estimated 80,000 persons have chronic kidney failure diagnosed annually (*3*). Major causes of chronic kidney failure are diabetes mellitus and hypertension, which account for approximately 60% of new cases (*3*). To assess national and state-specific trends in the prevalence of chronic kidney failure during 1990–2001, CDC analyzed data from the United States Renal Data System (USRDS). This report summarizes the results of that analysis, which indicated that the prevalence of chronic kidney failure in the United States increased 104% during 1990–2001. Treating and controlling risk factors and screening persons at high risk for chronic kidney failure are key steps that health-care providers and public health practitioners can take to reverse the upward trend in this disease.

Data from the Renal Data Extraction and Referencing System (RenDER), version 2.0, were used to document state-specific trends in the prevalence of chronic kidney failure during 1990–2001. RenDER is an online data-querying application that enables users to access information regarding chronic kidney failure (*4*). Data obtained from RenDER originate from several sources, including the Centers for Medicare and Medicaid Services, and encompass all persons being treated for chronic kidney failure in the United States. Overall and state-specific trends in the prevalence of chronic kidney failure are presented for all causes and by the diagnosed cause of the kidney disease: diabetes, hypertension, and other (i.e., all causes except diabetes or hypertension).

During 1990–2001, the national prevalence of chronic kidney failure (from all causes) increased 104%, from 697 to 1,424 cases per million population (Figure). The largest increase was in the prevalence of diabetes-related chronic kidney failure, which increased 194%, from 171 to 503 cases per million population. The prevalence of hypertension-related chronic kidney failure increased 99% (from 166 to 331 cases per million population), and the prevalence of chronic kidney failure related to other causes increased 64% (from 360 to 590 cases per million population).

During 1990–2001, the prevalence of chronic kidney failure increased in all 50 states and the District of Columbia (DC) (Table). In 2001, the total prevalence of chronic kidney failure and the prevalence of hypertension-related chronic kidney failure were highest in DC, Louisiana, and Mississippi; the prevalence of diabetes-related chronic kidney failure was highest in DC, Hawaii, and New Mexico; and the prevalence of chronic kidney failure related to other causes was highest in DC, Delaware, and Hawaii.

FIGURE. Prevalence* of chronic kidney failure, by year and cause — United States, 1990–2001



* Per million U.S. population.

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Editorial Note: During 2001, expenditures for chronic kidney failure in the United States exceeded $20 billion (*3*), and Medicare payments for chronic kidney failure increased threefold during 1991–2001, from $5.8 billion to $15.4 billion (*5*). The findings in this report indicate that the prevalence of chronic kidney failure more than doubled during 1990–2001. Potential explanations for this increase include 1) an increase in the prevalence of underlying risk factors, including diabetes and hypertension (*6,7*); 2) the aging of the U.S. population; and 3) a higher survival rate among persons with chronic kidney failure (*3*).

The prevalence of chronic kidney failure varied substantially by state/area. This variation might reflect differences in sociodemographics factors (e.g., age, sex, race/ethnicity, and economic resources); the prevalence of diabetes, hypertension, obesity, and other risk factors for chronic kidney failure; and availability of and access to health care among patients with chronic kidney disease. Health-care providers can use various strategies to reduce chronic kidney failure (Box).

The findings in this report are subject to at least two limitations. First, although USRDS has made progress in identifying and eliminating duplicate cases of chronic kidney failure, the possibility of duplicate cases remains (*3*), and such duplication would have led to an overestimate of the prevalence of disease. Second, the analysis did not adjust for age. Because age is a risk factor for chronic kidney failure, the aging of the U.S. population might result in an increase in the prevalence of disease. However, when the data were analyzed through direct standardization of the survey population to the age distribution of the

TABLE. Unadjusted prevalence* of chronic kidney failure, by area and cause — United States, 1990 and 2001

Area	All causes			Hypertension			Diabetes			Other causes		
	1990	2001	% change† 1990–2001	1990	2001	% change 1990–2001	1990	2001	% change 1990–2001	1990	2001	% change 1990–2001
Alabama	**897**	**1,809**	**102**	251	509	103	156	625	301	490	675	38
Alaska	**267**	**811**	**204**	29	97	240	59	269	357	180	445	147
Arizona	**711**	**1,338**	**88**	112	219	96	236	618	162	363	501	38
Arkansas	**657**	**1,355**	**106**	182	400	120	136	451	232	39	504	1,206
California	**636**	**1,326**	**108**	140	309	121	166	487	194	331	530	61
Colorado	**509**	**920**	**81**	68	114	68	151	356	136	290	450	55
Connecticut	**668**	**1,318**	**97**	138	240	74	154	422	174	376	657	74
Delaware	**814**	**1,649**	**103**	181	352	95	213	567	166	419	730	74
District of Columbia	**1,574**	**3,709**	**136**	570	1,457	156	381	1,078	183	623	1,175	89
Florida	**767**	**1,409**	**84**	218	379	74	170	461	172	380	569	50
Georgia	**844**	**1,663**	**97**	283	519	84	196	573	193	365	572	57
Hawaii	**831**	**1,851**	**123**	86	225	160	287	904	215	457	722	58
Idaho	**491**	**901**	**84**	65	123	88	145	332	128	280	447	60
Illinois	**750**	**1,518**	**102**	185	396	114	160	479	199	405	643	59
Indiana	**655**	**1,338**	**104**	164	314	92	149	447	200	342	578	69
Iowa	**614**	**1,192**	**94**	103	215	109	141	397	182	371	580	57
Kansas	**602**	**1,115**	**85**	122	182	49	150	407	172	331	527	59
Kentucky	**605**	**1,236**	**104**	116	249	114	132	422	220	358	565	58
Louisiana	**872**	**1,943**	**123**	342	696	103	203	689	239	327	558	71
Maine	**494**	**1,063**	**115**	67	149	125	105	350	235	323	564	75
Maryland	**778**	**1,754**	**125**	227	513	126	185	551	198	366	690	88
Massachusetts	**613**	**1,147**	**87**	115	213	86	123	348	183	375	586	56
Michigan	**689**	**1,455**	**111**	173	353	104	172	525	205	345	577	68
Minnesota	**620**	**1,200**	**94**	88	177	102	190	388	105	343	635	86
Mississippi	**893**	**1,930**	**116**	277	676	144	183	658	260	433	596	38
Missouri	**717**	**1,420**	**98**	196	367	87	165	487	195	356	566	59
Montana	**546**	**1,114**	**104**	52	80	54	190	476	150	304	558	84
New Hampshire	**491**	**872**	**78**	87	144	67	116	253	117	288	475	65
Nebraska	**573**	**1,222**	**113**	98	208	113	172	468	172	303	546	80
Nevada	**572**	**1,069**	**87**	137	282	106	129	386	201	307	401	31
New Jersey	**762**	**1,526**	**100**	189	362	91	173	511	195	400	653	63
New Mexico	**640**	**1,549**	**142**	99	165	67	232	821	254	363	564	55
New York	**694**	**1,497**	**116**	151	317	110	155	486	213	388	694	79
North Carolina	**795**	**1,649**	**107**	262	432	65	188	589	214	345	628	82
North Dakota	**595**	**1,204**	**103**	63	225	257	205	423	107	327	556	70
Ohio	**691**	**1,476**	**114**	135	288	114	180	546	203	375	642	71
Oklahoma	**598**	**1,270**	**112**	128	243	90	181	524	189	289	503	74
Oregon	**562**	**1,022**	**82**	98	156	60	149	332	124	316	533	69
Pennsylvania	**767**	**1,535**	**100**	170	326	92	184	505	174	413	704	70
Rhode Island	**642**	**1,279**	**99**	123	231	88	135	378	179	384	670	74
South Carolina	**920**	**1,870**	**103**	314	582	85	214	671	214	392	617	57
South Dakota	**601**	**1,321**	**120**	72	170	137	180	560	211	349	591	70
Tennessee	**763**	**1,459**	**91**	219	427	95	146	479	228	398	553	39
Texas	**728**	**1,502**	**106**	171	337	97	215	627	192	343	538	57
Utah	**470**	**868**	**85**	25	57	131	165	340	107	280	471	68
Vermont	**449**	**1,009**	**125**	46	111	143	118	344	191	285	553	94
Virginia	**745**	**1,547**	**108**	208	380	83	162	524	223	375	643	71
Washington	**557**	**1,027**	**84**	75	136	83	139	353	153	343	538	57
West Virginia	**616**	**1,430**	**132**	140	291	107	152	566	273	324	573	77
Wisconsin	**648**	**1,280**	**98**	110	240	119	178	419	135	360	622	73
Wyoming	**446**	**880**	**98**	48	83	71	132	344	161	266	454	71

* Per million U.S. population.
† Percentage change = (2001 prevalence - 1990 prevalence) ÷ (1990 prevalence) x 100.

2001 U.S. population, prevalence trends were similar to those presented in this report, with the overall prevalence of chronic kidney failure increasing 96% during 1990–2001.

Reducing kidney failure in the United States will require additional public health efforts, including effective prevention strategies such as the promotion of regular physical activity and a healthy diet. In addition, prevention, treatment, and control of risk factors for chronic kidney disease, particularly diabetes and hypertension, are important. Heightened awareness about chronic kidney disease, its causes, signs, and symp-

BOX. Strategies for health-care providers to reduce chronic kidney failure

- **Control diabetes**
  - — Among persons with diabetes, those with glycated hemoglobin (HbA1c) levels of <7% are less likely to have chronic kidney failure (*1*).
  - — Only 37% of adults with diabetes have HbA1c levels of <7% (*2*).
- **Control blood pressure**
  - — Among persons with hypertension, the risk for chronic kidney failure is lower for those who control their blood pressure (*1*).
  - — Only one third of persons with hypertension have their blood pressure under control (*3*).
- **Monitor kidney function**
  - — For persons at high risk for kidney disease, blood and urine screening for elevated creatinine and proteinuria are recommended for determining the risk for most types of chronic kidney disease (*4*).
  - — Persons with elevated creatinine levels can reduce their chances of having chronic kidney failure by being treated with an angiotensin-converting enzyme (ACE) inhibitor (*5*,*6*).
  - — Only 32% of Georgia Medicare beneficiaries with diabetes and a serum creatinine level of >1.5 mg/dL receive an ACE inhibitor at hospital discharge (*7*).

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toms, and the importance of early detection and treatment also are effective strategies for reducing the prevalence of chronic kidney failure.

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Carbon Monoxide Releases and Poisonings Attributed to Underground Utility Cable Fires — New York, January 2000–June 2004

Carbon monoxide (CO) is a potentially deadly gas that is odorless, colorless, tasteless, and nonirritating. Each year, CO poisoning causes approximately 500 unintentional deaths in the United States (*1*). CO is generated during the incomplete combustion of carbon-based fuels such as oil, natural gas, kerosene, coal, charcoal, gasoline, and wood (*1*,*2*). Common sources of CO poisonings include furnaces, generators, and nonelectric space heaters. Another potential cause of CO poisonings is the unintentional burning of underground utility cables. The oxygen-poor environment below ground promotes incomplete combustion and the production of CO. The New York State Department of Health (NYSDOH) documented 234 events during January 2000–June 2004* in which CO releases resulted from underground utility cable fires (also known as CO burnout events). This report describes these events, summarizes data on reported CO burnouts, and discusses associated injuries†. The findings underscore the need for preventive actions, such as installation of CO detectors in central locations in homes

* Data for 2003–2004 are preliminary.
† Includes symptoms and other adverse health effects.

and businesses. In homes, CO detectors should be installed outside of each separate sleeping area (*3*).

In 1990, the Agency for Toxic Substances and Disease Registry (ATSDR) created the Hazardous Substances Emergency Events Surveillance (HSEES) system. This active, multistate[§] health department surveillance system tracks acute morbidity and mortality from releases of nonpetroleum hazardous substances during emergency events[¶] (*4*). The only HSEES data available on CO burnout events are those reported by NYSDOH during the surveillance period of January 2000–June 2004. The HSEES system does not have a variable to identify CO burnout events; to capture these releases, the system was first queried by identifying all CO events and then by conducting a word search on these events with such terms as "burnout(s)" and "manhole fire(s)." The following case reports describe actual HSEES events that are representative of typical CO burnouts that occurred in New York.

Case Reports

Kings County (Brooklyn). In December 2003, an underground cable burnout caused CO to seep into a block of two-family homes. No one was injured; however, at least 20 residents were evacuated overnight as utility workers turned off the electricity. After the electricity was turned off, approximately 65 firefighters from 12 fire companies extinguished the fire. The street was excavated and blowers were installed to disperse the CO.

Queens County (Flushing). In March 2003, an underground cable burnout released CO into the basement of a nursing home. The utility company reported a reading of 300 parts per million (ppm) CO; the recommended indoor air level for CO is <10 ppm for any 8-hour period and <25 ppm for any 1-hour period (*5*). Immediate response and venting by the utility company eliminated any need to evacuate nursing home residents.

Kings County (Brooklyn). In February 2003, a total of 25 children and staff were evacuated from a private school after an underground cable burnout caused elevated CO levels. The fire department measured 115 ppm CO. An emergency crew from the utility company vented the building and allowed evacuees to return after 1 hour.

Bronx County (Bronx). In January 2001, an underground cable burnout caused CO to seep into a laundromat. Four customers were exposed to CO and experienced gastrointestinal symptoms (e.g., nausea and vomiting). All four were treated at a hospital; two were admitted. A hazardous materials crew responded, and the building was evacuated.

Bronx County (Bronx). In May 2000, CO from an underground cable burnout entered the basement of a medical center through conduits and the ventilation intake. CO levels in the basement were 1,300 ppm. An unknown number of building occupants were evacuated. The utility company used blowers to vent the basement. The evacuation lasted 3 hours.

Surveillance Data

During January 2000–June 2004, NYSDOH reported 234 CO burnout events. All occurred in the New York City (NYC) metropolitan area in the following counties: Queens County (73 [31%]), New York County (72 [31%]), Kings County (59 [25%]), Bronx County (29 [12%]), and Richmond County (one [<1%]). The majority of these events (214 [91%]) occurred in commercial or residential areas. More than half (130 [56%]) occurred during November–February.

Twelve of the burnout events resulted in injury to 37 persons, of whom 28 (76%) were members of the general public, five (13%) were firefighters, and four (11%) were of unknown affiliation. The injuries most frequently sustained included dizziness and other central nervous system symptoms and gastrointestinal irritation. Twenty-eight persons (76%) were treated at a hospital; of these, two (7%) were admitted, and 26 (93%) were treated and released. In addition, seven (19%) of the 37 injured persons were treated on the scene; for two (5%) persons, disposition was unknown. No fatalities were reported.

Of the 234 events, 220 (94%) were known to have involved ordered evacuations in which at least 3,855 persons were evacuated (range: one to 810 persons). The average length of these ordered evacuations was 1.7 hours (range: <1–12 hours).

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Editorial Note: CO exposure from indoor sources has long been recognized as a public health hazard; however, the events described in this report illustrate a source that is much less reported — fires in underground utility lines. Underground fires typically begin when the rubber coating of utility cables crack and split because of normal wear and tear, freezing and thawing, and excavation. As the cable insulation is breached, water (i.e., rain or runoff) and road salt from de-icing cause electrical shorts and underground fires. The burning cable and insulation creates noxious emissions containing CO. The CO gas released travels along conduits under streets and

[§] During the period reported, 15 state health departments participated in HSEES: Alabama, Colorado, Iowa, Louisiana, New Jersey, New York, Minnesota, Mississippi, Missouri, North Carolina, Oregon, Texas, Utah, Washington, and Wisconsin.

[¶] An HSEES event is defined as one involving the release or threatened release of a hazardous substance that requires (or would have required) removal, clean-up, or neutralization according to federal, state, or local law (*4*). A hazardous substance (e.g., CO) is one that can reasonably be expected to cause an adverse health effect.

ultimately migrates into residential, commercial, and industrial settings. Smoke and CO also can be emitted from utility portals (i.e., "manholes") and drawn into nearby buildings through ventilation systems. As more lines are buried, CO burnouts might increase in frequency.

Approximately half of these CO burnout events occurred during the snow season. Anecdotal information recorded in the HSEES system suggests that these events often occur when road salt is applied for de-icing after large snow or ice storms. Before several of the CO burnout events in December 2003, approximately 105,000 tons of salt were spread on NYC streets after a snowstorm. The utility company reported that rock salt penetrated into underground electrical cables, leading to fires and CO releases several days later.

Because burning rubber and insulation materials release noxious odors that are highly noticeable, the percentage of CO burnout events with victims probably is lower than that of other traditional CO events with victims. Traditional CO events, particularly those associated with gas appliances, tend to take longer to identify because CO itself has no odor. Although few injuries resulted from the CO burnout events described in this report, thousands of persons were evacuated.

Common symptoms of CO poisoning include headache, dizziness, weakness, nausea, vomiting, loss of muscle control, shortness of breath, chest tightness and pain, visual changes, sleepiness, fluttering of the heart, and confusion. At higher CO levels, loss of consciousness and death can occur (*1,2,5*).

The findings in this report are subject to at least three limitations. First, ATSDR began collecting data on CO burnout events in January 2000; CO events before 2000 were not captured. Second, a major utility company in NYC voluntarily reported these CO burnout events; however, reporting of these events is not required. Finally, discussions with staff of the NYC Department of Health and Mental Hygiene indicated that not all events were captured by the project. Therefore, the true number of CO burnout events in NYC was likely underreported.

Certain actions can decrease or prevent exposure from CO burnout events. The public should be aware that emissions from underground utility fires might contain CO, which can migrate into living and working spaces. CO detectors, which sound an alarm in the presence of elevated CO, are effective at preventing fatalities from CO poisoning (*3*). CO detectors should be installed in central locations in homes and businesses. In homes, CO detectors should be installed outside of each separate sleeping area (*3*). Proper sealing of existing conduits at building interfaces can reduce smoke and CO entry into interior spaces. In addition, sealing utility chases can prevent smoke migration throughout the building. Finally, preventive maintenance of underground utility lines can reduce the frequency of these events.

References

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West Nile Virus Activity — United States, September 29–October 5, 2004

During September 29–October 5, a total of 81 cases of human West Nile virus (WNV) illness were reported from 18 states (Alabama, Arizona, Arkansas, California, Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, Minnesota, Missouri, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, and Virginia).

During 2004, a total of 40 states have reported 1,865 cases of human WNV illness to CDC through ArboNET (Table and Figure). Of these, 583 (31%) cases were reported in California, 370 (20%) in Arizona, and 225 (12%) in Colorado. A total of 1,071 (58%) of the 1,833 cases for which such data were available occurred in males; the median age of patients was 51 years (range: 1 month–99 years). Illness onset ranged from April 23 to September 23; a total of 59 cases were fatal.

A total of 177 presumptive West Nile viremic blood donors (PVDs) have been reported to ArboNET in 2004. Of these, 70 (40%) were reported in California; 37 (21%) in Arizona; 15 in Texas; 12 in New Mexico; five each in Colorado, Louisiana, and Nevada; four each in Georgia and Oklahoma; three each in Florida and South Dakota; two each in Minnesota, Missouri, and Wisconsin; and one each in Delaware, Iowa, Michigan, Nebraska, New Jersey, North Dakota, Oregon, and Pennsylvania. Of the 177 PVDs, three persons aged 35, 69, and 77 years subsequently had neuroinvasive illness, and 36 persons (median age: 53 years; range: 17–73 years) subsequently had West Nile fever.

In addition, during 2004, a total of 4,706 dead corvids and 1,138 other dead birds with WNV infection have been

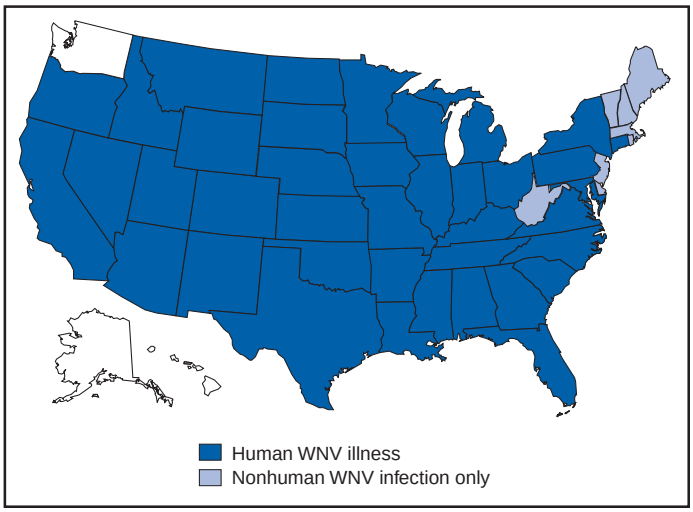
TABLE. Number of human cases of West Nile virus (WNV) illness, by area — United States, 2004*

Area	Neuro-invasive disease†	West Nile fever§	Other clinical/ unspecified¶	Total reported to CDC**	Deaths
Alabama	13	0	0	**13**	0
Arizona	128	66	176	**370**	7
Arkansas	8	6	1	**15**	0
California	131	206	246	**583**	16
Colorado	32	193	0	**225**	2
Connecticut	0	1	0	**1**	0
District of Columbia	1	0	0	**1**	0
Florida	27	5	0	**32**	1
Georgia	11	5	0	**16**	0
Idaho	0	0	2	**2**	0
Illinois	22	25	1	**48**	2
Indiana	2	0	1	**3**	1
Iowa	8	8	0	**16**	1
Kansas	16	21	0	**37**	1
Kentucky	1	5	0	**6**	0
Louisiana	42	8	0	**50**	3
Maryland	5	5	1	**11**	0
Michigan	5	1	0	**6**	0
Minnesota	12	16	0	**28**	2
Mississippi	20	4	1	**25**	3
Missouri	20	4	3	**27**	1
Montana	1	3	1	**5**	0
Nebraska	2	20	0	**22**	0
Nevada	23	16	0	**39**	0
New Mexico	26	42	4	**72**	4
New York	3	2	0	**5**	0
North Carolina	2	0	0	**2**	0
North Dakota	2	17	0	**19**	1
Ohio	5	1	0	**6**	2
Oklahoma	7	2	0	**9**	1
Oregon	0	1	0	**1**	0
Pennsylvania	5	3	0	**8**	0
South Carolina	0	1	0	**1**	0
South Dakota	5	41	0	**46**	1
Tennessee	5	1	0	**6**	0
Texas	65	13	0	**78**	8
Utah	5	4	0	**9**	0
Virginia	4	0	1	**5**	1
Wisconsin	4	5	0	**9**	1
Wyoming	2	5	1	**8**	0
Total	**670**	**756**	**439**	**1,865**	**59**

* As of October 5, 2004.
† Cases with neurologic manifestations (i.e., West Nile meningitis, West Nile encephalitis, and West Nile myelitis).
§ Cases with no evidence of neuroinvasion.
¶ Illnesses for which sufficient clinical information was not provided.
** Total number of human cases of WNV illness reported to ArboNet by state and local health departments.

reported from 45 states and New York City. WNV infections have been reported in horses in 36 states; one bat in Wisconsin; six dogs in Nevada, New Mexico, and Wisconsin; six squirrels in Arizona and Wyoming; and 13 unidentified animal species in eight states (Arizona, Idaho, Illinois, Iowa, Missouri, Nevada, New York, and South Carolina). WNV seroconversions have been reported in 964 sentinel chicken flocks in 13 states (Alabama, Arizona, Arkansas, California, Delaware, Florida, Iowa, Louisiana, Nebraska, Nevada, Pennsylvania, South Dakota, and Utah) and in 25 wild hatchling birds in Missouri and Ohio. Four seropositive sentinel horses were reported in Minnesota and Puerto Rico. A total of 6,585 WNV-positive mosquito pools have been reported in 36 states, District of Columbia, and New York City.

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2004*



* As of 3 a.m., Mountain Standard Time, October 5, 2004.

Additional information about national WNV activity is available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm and at http://westnilemaps.usgs.gov.

Interim Influenza Vaccination Recommendations, 2004–05 Influenza Season

On October 5, this report was posted as an MMWR Dispatch *on the* MMWR *website* (http://www.cdc.gov/mmwr).

On October 5, 2004, CDC was notified by Chiron Corporation that none of its influenza vaccine (Fluvirin®) would be available for distribution in the United States for the 2004–05 influenza season. The company indicated that the Medicines and Healthcare Products Regulatory Agency (MHRA) in the United Kingdom, where Chiron's Fluvirin vaccine is produced, has suspended the company's license to manufacture Fluvirin vaccine in its Liverpool facility for 3 months, preventing any release of the vaccine for this influenza season. This action will reduce by approximately one half the expected supply of trivalent inactivated vaccine (flu shot) available in the United States for the 2004–05 influenza season.

The remaining supply of influenza vaccine expected to be available in the United States this season is approximately 54

million doses of Fluzone® (inactivated flu shot) manufactured by Aventis Pasteur, Inc. Of these doses, approximately 30 million doses already have been distributed by the manufacturer. In addition, approximately 1.1 million doses of live attenuated influenza vaccine (LAIV/FluMist®) manufactured by MedImmune will be available this season.

Because of this urgent situation, CDC, in coordination with its Advisory Committee for Immunization Practices (ACIP), is issuing interim recommendations for influenza vaccination during the 2004–05 season. These interim recommendations were formally recommended by ACIP on October 5 and take precedence over earlier recommendations.

Priority Groups for Influenza Vaccination

The following priority groups for vaccination with inactivated influenza vaccine this season are considered to be of equal importance and are:

- all children aged 6–23 months;
- adults aged ≥65 years;
- persons aged 2–64 years with underlying chronic medical conditions;
- all women who will be pregnant during the influenza season;
- residents of nursing homes and long-term care facilities;
- children aged 6 months–18 years on chronic aspirin therapy;
- health-care workers involved in direct patient care; and
- out-of-home caregivers and household contacts of children aged <6 months.

Other Vaccination Recommendations

- Persons in priority groups identified above should be encouraged to search locally for vaccine if their regular health-care provider does not have vaccine available.
- Intranasally administered, live, attenuated influenza vaccine, if available, should be encouraged for healthy persons who are aged 5–49 years and are not pregnant, including health-care workers (except those who care for severely immunocompromised patients in special care units) and persons caring for children aged <6 months.
- Certain children aged <9 years require 2 doses of vaccine if they have not previously been vaccinated. All children at high risk for complications from influenza, including those aged 6–23 months, who are brought for vaccination, should be vaccinated with a first or second dose, depending on vaccination status. However, doses should not be held in reserve to ensure that 2 doses will be available. Instead, available vaccine should be used to vaccinate persons in priority groups on a first-come, first-serve basis.

Vaccination of Persons in Nonpriority Groups

Persons who are not included in one of the priority groups described above should be informed about the urgent vaccine supply situation and asked to forego or defer vaccination.

Persons Who Should Not Receive Influenza Vaccine

Persons in the following groups should not receive influenza vaccine before talking with their doctor:

- persons with a severe allergy (i.e., anaphylactic allergic reaction) to hens' eggs and
- persons who previously had onset of Guillain-Barré syndrome during the 6 weeks after receiving influenza vaccine.

Additional information is available at http://www.cdc.gov/flu or through the CDC public response hotline, telephone 888-246-2675 (English), 888-246-2857 (Español), or 866-874-2646 (TTY).

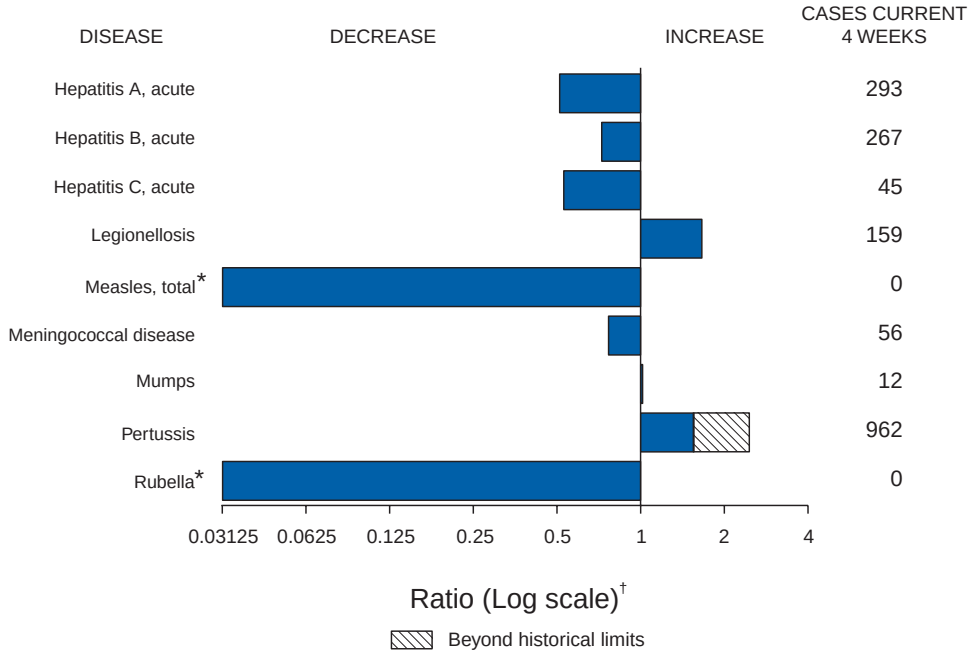
Notice to Readers

Health Protection Research Initiative

In 2003, CDC began developing a comprehensive strategy for conducting and fostering public health research. As part of this strategy, CDC launched the Health Protection Research Initiative, in spring 2004, to promote research to prevent disease, injury or disability, and to protect persons from infectious, environmental, and terrorist threats.

During the first year of this multiyear initiative, CDC has awarded $21.7 million in 57 research grants to 1) develop effective health promotion and prevention programs in the workplace (31 awards), 2) support researcher and institutional training in public health research (24 awards), and 3) create new Centers of Excellence in health promotion economics to explore economic solutions and cost-effective strategies for health-promotion programs and policies (two awards). Of the workplace-focused grants, 21 involve projects designed to increase physical activity, improve diets and nutrition, and reduce obesity. Additional information on CDC's Health Protection Research Initiative and the recent grants is available at http://www.cdc.gov/od/hpri.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals October 2, 2004, with historical data



* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 39 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending October 2, 2004 (39th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	104	119
Botulism:	-	-	HIV infection, pediatric†¶	113	159
foodborne	11	9	Measles, total	24**	51††
infant	57	51	Mumps	149	166
other (wound & unspecified)	8	21	Plague	1	1
Brucellosis†	85	73	Poliomyelitis, paralytic	-	-
Chancroid	27	44	Psittacosis†	9	9
Cholera	4	1	Q fever†	57	54
Cyclosporiasis†	196	58	Rabies, human	3	2
Diphtheria	-	-	Rubella	15	7
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE)†	216	240	SARS-associated coronavirus disease†§§	-	8
human monocytic (HME)†	207	194	Smallpox†¶¶	-	NA
human, other and unspecified	19	37	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)†¶¶	4	NA
California serogroup viral†§	61	99	Vancomycin-resistant (VRSA)†¶¶	1	NA
eastern equine†§	3	13	Streptococcal toxic-shock syndrome†	83	130
Powassan†§	-	-	Tetanus	10	15
St. Louis†§	7	39	Toxic-shock syndrome	100	96
western equine†§	-	-	Trichinosis	5	1
Hansen disease (leprosy)†	61	67	Tularemia†	66	65
Hantavirus pulmonary syndrome†	17	18	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update August 29, 2004.
** Of 24 cases reported, 11 were indigenous, and 13 were imported from another country.
†† Of 51 cases reported, 31 were indigenous, and 20 were imported from another country.
§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
¶¶ Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2004, and September 27, 2003 (39th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile§	
	Cum. 2004¶	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	27,094	31,529	651,546	640,128	4,377	2,741	2,440	2,456	670	2,701
NEW ENGLAND	873	1,149	22,799	20,561	-	-	138	148	-	23
Maine	15	49	1,540	1,484	N	N	17	16	-	-
N.H.	30	25	1,289	1,182	-	-	27	18	-	2
Vt.	13	14	765	798	-	-	21	26	-	-
Mass.	289	476	10,277	8,053	-	-	47	64	-	11
R.I.	98	82	2,525	2,214	-	-	4	12	-	2
Conn.	428	503	6,403	6,830	N	N	22	12	-	8
MID. ATLANTIC	5,955	7,099	80,308	79,245	-	-	338	308	8	201
Upstate N.Y.	683	723	16,680	14,564	N	N	90	87	1	-
N.Y. City	3,288	3,512	24,608	25,404	-	-	71	88	2	52
N.J.	1,014	1,207	11,781	11,813	-	-	23	13	-	20
Pa.	970	1,657	27,239	27,464	N	N	154	120	5	129
E.N. CENTRAL	2,398	2,920	110,292	115,613	13	7	699	758	38	140
Ohio	487	554	25,515	31,736	N	N	187	97	5	77
Ind.	276	379	13,630	12,855	N	N	75	73	2	14
Ill.	1,126	1,342	30,593	35,731	-	-	69	78	22	29
Mich.	386	509	27,696	22,488	13	7	129	101	5	13
Wis.	123	136	12,858	12,803	-	-	239	409	4	7
W.N. CENTRAL	597	586	39,757	37,161	5	2	303	415	65	674
Minn.	149	122	6,965	8,107	N	N	104	118	12	47
Iowa	47	63	4,864	3,817	N	N	64	78	8	78
Mo.	263	268	15,540	13,430	3	1	47	31	20	35
N. Dak.	14	3	1,148	1,162	N	N	10	11	2	94
S. Dak.	7	8	1,899	1,918	-	-	33	32	5	149
Nebr.**	33	38	3,842	3,502	2	1	23	16	2	188
Kans.	84	84	5,499	5,225	N	N	22	129	16	83
S. ATLANTIC	8,434	9,001	128,931	120,372	-	3	411	267	50	167
Del.	108	183	2,159	2,239	N	N	-	3	-	11
Md.	991	1,147	14,291	12,039	-	3	14	19	5	45
D.C.	523	764	2,390	2,346	-	-	11	8	1	3
Va.	481	697	16,245	14,172	-	-	44	33	4	18
W. Va.	57	60	2,114	1,923	N	N	4	4	-	1
N.C.	427	886	21,769	19,337	N	N	64	34	2	15
S.C.**	509	597	14,941	10,626	-	-	15	6	-	2
Ga.	1,185	1,376	23,964	26,360	-	-	154	89	11	21
Fla.	4,153	3,291	31,058	31,330	N	N	105	71	27	51
E.S. CENTRAL	1,336	1,454	42,387	41,735	4	1	105	104	39	79
Ky.	160	141	4,173	6,078	N	N	36	21	1	11
Tenn.**	533	607	16,646	15,198	N	N	28	33	5	18
Ala.	316	344	9,117	10,921	-	-	20	40	13	22
Miss.	327	362	12,451	9,538	4	1	21	10	20	28
W.S. CENTRAL	3,181	3,352	81,129	79,589	2	-	55	81	122	552
Ark.	134	146	5,571	5,916	1	-	14	14	8	20
La.	655	443	16,933	15,264	1	-	3	2	42	79
Okla.	133	162	8,279	8,709	N	N	16	10	7	49
Tex.**	2,259	2,601	50,346	49,700	-	-	22	55	65	404
MOUNTAIN	973	1,193	36,357	36,451	2,780	1,823	137	103	217	865
Mont.	5	11	1,704	1,416	N	N	34	17	1	75
Idaho	15	21	2,125	1,851	N	N	21	20	-	-
Wyo.	15	5	801	738	2	1	3	4	2	92
Colo.	166	313	8,928	9,653	N	N	46	27	32	618
N. Mex.	140	90	4,212	5,539	18	7	10	9	26	73
Ariz.	385	485	11,943	10,233	2,688	1,779	17	5	128	5
Utah	54	52	2,729	2,777	27	6	4	14	5	-
Nev.	193	216	3,915	4,244	45	30	2	7	23	2
PACIFIC	3,347	4,775	109,586	109,401	1,573	905	254	272	131	-
Wash.	291	310	13,217	12,267	N	N	36	25	-	-
Oreg.	219	184	6,205	5,387	-	-	29	32	-	-
Calif.	2,727	4,184	85,264	84,874	1,573	905	187	214	131	-
Alaska	37	15	2,722	2,854	-	-	-	1	-	-
Hawaii	73	82	2,178	4,019	-	-	2	-	-	-
Guam	2	5	-	468	-	-	-	-	-	-
P.R.	403	789	2,615	1,732	N	N	N	N	-	-
V.I.	10	28	143	299	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	32	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update August 29, 2004.

** Contains data reported through National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2004, and September 27, 2003 (39th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,819	1,800	174	177	127	117	13,018	13,734	229,964	244,716
NEW ENGLAND	117	111	43	32	16	12	1,185	1,104	5,341	5,352
Maine	8	9	-	-	-	-	94	127	170	146
N.H.	15	13	5	3	-	-	31	27	93	91
Vt.	10	13	-	-	-	-	127	92	65	64
Mass.	53	46	13	8	16	12	537	559	2,414	2,100
R.I.	6	1	1	-	-	-	92	84	640	741
Conn.	25	29	24	21	-	-	304	215	1,959	2,210
MID. ATLANTIC	204	196	24	18	27	28	2,772	2,743	25,914	30,532
Upstate N.Y.	95	70	12	9	12	14	1,000	733	5,402	5,740
N.Y. City	31	7	-	-	-	-	748	905	7,826	9,927
N.J.	30	27	3	2	5	-	275	387	4,637	6,154
Pa.	48	92	9	7	10	14	749	718	8,049	8,711
E.N. CENTRAL	325	411	34	27	23	14	1,776	2,381	45,545	51,726
Ohio	78	76	10	14	18	14	613	650	12,950	16,694
Ind.	46	68	-	-	-	-	-	-	4,921	4,943
Ill.	49	91	1	2	1	-	338	717	13,365	16,073
Mich.	65	62	6	-	4	-	540	557	11,015	9,809
Wis.	87	114	17	11	-	-	285	457	3,294	4,207
W.N. CENTRAL	404	301	25	35	16	17	1,470	1,478	12,575	12,965
Minn.	94	105	13	16	1	1	546	544	2,202	2,232
Iowa	112	64	-	-	-	-	226	205	854	962
Mo.	68	61	12	10	7	1	372	379	6,614	6,442
N. Dak.	13	8	-	3	6	6	20	28	80	59
S. Dak.	29	21	-	4	-	-	42	56	214	162
Nebr.	60	19	-	2	-	-	112	107	756	1,153
Kans.	28	23	-	-	2	9	152	159	1,855	1,955
S. ATLANTIC	134	113	28	35	36	32	2,078	1,965	58,244	59,976
Del.	2	5	N	N	N	N	39	35	669	868
Md.	20	12	3	2	1	1	86	82	6,105	5,791
D.C.	1	1	-	-	-	-	48	37	1,811	1,824
Va.	29	32	10	9	-	-	385	248	6,482	6,633
W. Va.	2	3	-	-	-	-	28	33	702	654
N.C.	-	-	-	-	24	25	N	N	11,477	11,086
S.C.	7	1	-	-	-	-	49	105	7,288	6,209
Ga.	20	23	10	5	-	-	599	642	10,431	13,077
Fla.	53	36	5	19	11	6	844	783	13,279	13,834
E.S. CENTRAL	73	65	1	2	8	5	294	280	18,449	20,804
Ky.	22	22	1	2	5	5	N	N	1,879	2,703
Tenn.	31	27	-	-	3	-	151	126	6,226	6,277
Ala.	13	12	-	-	-	-	143	154	5,537	6,964
Miss.	7	4	-	-	-	-	-	-	4,807	4,860
W.S. CENTRAL	60	72	2	4	1	4	242	225	31,209	32,956
Ark.	11	9	1	-	-	-	97	115	2,776	3,165
La.	3	3	-	-	-	-	36	9	7,889	8,745
Okla.	15	21	-	-	-	-	106	101	3,522	3,526
Tex.	31	39	1	4	1	4	3	-	17,022	17,520
MOUNTAIN	188	215	16	21	-	5	1,142	1,157	7,777	7,808
Mont.	13	12	-	-	-	-	52	82	50	79
Idaho	42	46	9	14	-	-	140	137	68	56
Wyo.	7	2	1	-	-	-	19	17	48	33
Colo.	44	53	2	3	-	5	400	337	1,980	2,164
N. Mex.	9	10	1	3	-	-	55	39	574	902
Ariz.	20	25	N	N	N	N	138	189	2,880	2,818
Utah	38	48	2	-	-	-	248	258	426	278
Nev.	15	19	1	1	-	-	90	98	1,751	1,478
PACIFIC	314	316	1	3	-	-	2,059	2,401	24,910	22,597
Wash.	118	79	-	1	-	-	273	246	2,036	2,060
Oreg.	53	88	1	2	-	-	350	318	887	736
Calif.	132	140	-	-	-	-	1,320	1,706	21,028	18,509
Alaska	1	3	-	-	-	-	57	63	417	416
Hawaii	10	6	-	-	-	-	59	68	542	876
Guam	N	N	-	-	-	-	-	2	-	50
P.R.	-	1	-	-	-	-	77	208	191	193
V.I.	-	-	-	-	-	-	-	-	49	67
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	3	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2004, and September 27, 2003 (39th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,410	1,422	10	21	74	90	138	155	4,212	5,008
NEW ENGLAND	121	100	1	2	5	5	3	3	792	242
Maine	12	4	-	-	-	-	-	1	10	8
N.H.	15	11	-	1	2	-	-	-	17	14
Vt.	6	7	-	-	-	-	1	-	8	6
Mass.	49	45	1	1	-	5	2	1	677	133
R.I.	3	6	-	-	-	-	-	1	19	12
Conn.	36	27	-	-	3	-	-	-	61	69
MID. ATLANTIC	287	309	-	1	4	3	32	40	484	988
Upstate N.Y.	96	112	-	1	4	3	5	8	75	88
N.Y. City	59	53	-	-	-	-	11	11	188	351
N.J.	59	56	-	-	-	-	3	8	96	166
Pa.	73	88	-	-	-	-	13	13	125	383
E.N. CENTRAL	220	234	-	3	6	3	34	42	417	474
Ohio	81	58	-	-	2	-	14	10	39	84
Ind.	40	37	-	-	4	-	1	5	83	52
Ill.	50	87	-	-	-	-	11	20	146	144
Mich.	18	19	-	3	-	3	6	1	120	154
Wis.	31	33	-	-	-	-	2	6	29	40
W.N. CENTRAL	89	89	2	1	3	7	9	12	145	136
Minn.	37	36	1	1	3	7	-	2	30	37
Iowa	1	-	1	-	-	-	-	-	38	23
Mo.	33	35	-	-	-	-	6	9	45	42
N. Dak.	3	2	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	3	-
Nebr.	8	1	-	-	-	-	1	-	8	11
Kans.	7	14	-	-	-	-	2	1	20	23
S. ATLANTIC	351	311	-	1	20	12	27	17	829	1,231
Del.	-	-	-	-	-	-	-	-	5	7
Md.	50	71	-	-	4	5	-	1	90	118
D.C.	-	1	-	-	-	-	-	-	5	30
Va.	28	40	-	-	-	-	1	5	102	70
W. Va.	14	14	-	-	1	-	3	-	6	13
N.C.	45	35	-	-	6	3	1	1	75	72
S.C.	4	5	-	-	-	-	-	1	24	33
Ga.	120	57	-	-	-	-	20	6	295	574
Fla.	90	88	-	1	9	4	2	3	227	314
E.S. CENTRAL	57	61	1	1	-	2	7	6	135	172
Ky.	5	5	-	-	-	1	-	-	29	26
Tenn.	37	33	-	-	-	1	5	3	77	115
Ala.	12	21	1	1	-	-	2	3	7	17
Miss.	3	2	-	-	-	-	-	-	22	14
W.S. CENTRAL	59	66	1	2	6	10	1	4	288	487
Ark.	2	6	-	-	-	1	-	-	54	23
La.	11	20	-	-	-	2	1	4	37	39
Okla.	45	37	-	-	6	7	-	-	19	10
Tex.	1	3	1	2	-	-	-	-	178	415
MOUNTAIN	155	130	3	6	22	22	19	13	361	365
Mont.	-	-	-	-	-	-	-	-	5	8
Idaho	5	4	-	-	-	-	2	1	19	12
Wyo.	1	1	-	-	-	-	1	-	5	1
Colo.	39	26	-	-	-	-	5	5	43	56
N. Mex.	31	15	-	-	7	4	5	1	17	17
Ariz.	56	64	-	6	10	9	2	4	219	199
Utah	12	10	2	-	2	5	3	2	42	28
Nev.	11	10	1	-	3	4	1	-	11	44
PACIFIC	71	122	2	4	8	26	6	18	761	913
Wash.	3	9	2	-	-	6	1	2	47	45
Oreg.	35	30	-	-	-	-	2	2	56	45
Calif.	21	54	-	4	8	20	1	9	632	805
Alaska	4	18	-	-	-	-	1	5	5	8
Hawaii	8	11	-	-	-	-	1	-	21	10
Guam	-	-	-	-	-	-	-	-	-	2
P.R.	-	-	-	-	-	-	-	-	19	62
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2004, and September 27, 2003 (39th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	4,745	5,204	782	794	1,364	1,580	474	495	12,690	16,030
NEW ENGLAND	263	265	7	6	41	89	26	36	1,631	3,110
Maine	1	1	-	-	-	2	5	6	53	122
N.H.	27	12	-	-	7	8	2	3	164	127
Vt.	5	3	3	6	3	5	1	-	40	37
Mass.	147	173	3	-	6	45	3	14	510	1,371
R.I.	5	11	-	-	10	13	1	-	166	434
Conn.	78	65	1	-	15	16	14	13	698	1,019
MID. ATLANTIC	919	585	99	91	378	464	116	103	8,662	10,638
Upstate N.Y.	67	67	10	11	77	115	38	25	2,861	3,401
N.Y. City	82	156	-	-	35	53	14	17	-	184
N.J.	539	144	-	-	70	68	19	22	2,357	2,517
Pa.	231	218	89	80	196	228	45	39	3,444	4,536
E.N. CENTRAL	420	374	83	122	374	323	80	66	780	810
Ohio	95	106	5	7	178	175	35	18	58	53
Ind.	34	28	7	7	62	24	16	5	14	18
Ill.	63	51	11	18	18	39	5	18	-	63
Mich.	205	152	60	85	109	69	22	17	22	6
Wis.	23	37	-	5	7	16	2	8	686	670
W.N. CENTRAL	278	241	178	168	40	57	10	13	408	288
Minn.	39	29	15	7	7	3	3	3	307	195
Iowa	13	9	-	1	4	9	1	-	36	43
Mo.	181	165	163	158	20	28	4	6	53	44
N. Dak.	4	2	-	-	2	1	-	-	-	-
S. Dak.	-	2	-	-	3	2	-	-	-	1
Nebr.	28	20	-	2	1	5	2	3	7	2
Kans.	13	14	-	-	3	9	-	1	5	3
S. ATLANTIC	1,472	1,486	133	117	288	404	81	97	1,032	960
Del.	28	6	-	-	12	21	N	N	137	172
Md.	120	95	14	6	55	98	11	15	590	570
D.C.	15	9	1	-	8	13	-	1	6	5
Va.	200	136	16	7	40	73	14	9	120	71
W. Va.	33	25	20	1	6	15	3	6	21	17
N.C.	138	110	10	11	29	30	16	15	92	77
S.C.	62	127	6	24	3	7	1	2	8	6
Ga.	510	509	15	10	36	30	16	26	9	10
Fla.	366	469	51	58	99	117	20	23	49	32
E.S. CENTRAL	341	344	81	62	71	86	20	24	41	51
Ky.	48	53	23	10	30	35	4	5	13	11
Tenn.	165	146	34	15	29	28	10	7	16	13
Ala.	56	74	4	5	11	18	4	10	3	8
Miss.	72	71	20	32	1	5	2	2	9	19
W.S. CENTRAL	200	816	102	136	49	53	26	40	34	86
Ark.	58	64	2	3	-	2	2	1	8	-
La.	47	97	58	89	4	1	3	2	4	6
Okla.	46	46	3	2	4	6	-	2	-	-
Tex.	49	609	39	42	41	44	21	35	22	80
MOUNTAIN	348	446	40	40	67	50	22	29	28	12
Mont.	2	13	2	1	2	4	-	2	-	-
Idaho	10	7	-	1	7	3	1	2	6	3
Wyo.	7	27	2	-	5	2	-	-	3	2
Colo.	43	62	8	9	17	9	11	9	3	-
N. Mex.	11	31	7	-	3	2	-	2	1	1
Ariz.	187	203	5	7	11	9	-	9	6	1
Utah	33	38	4	-	18	15	2	2	9	2
Nev.	55	65	12	22	4	6	8	3	-	3
PACIFIC	504	647	59	52	56	54	93	87	74	75
Wash.	40	59	19	17	10	8	8	5	10	3
Oreg.	90	85	13	10	N	N	5	4	27	13
Calif.	354	480	23	23	46	46	76	74	35	56
Alaska	14	4	-	-	-	-	-	-	2	3
Hawaii	6	19	4	2	-	-	4	4	N	N
Guam	-	9	-	3	-	-	-	-	-	-
P.R.	44	96	-	-	1	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2004, and September 27, 2003 (39th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	949	976	1,016	1,261	10,377	6,227	4,240	5,399	1,049	654
NEW ENGLAND	57	50	51	58	1,143	844	491	460	18	7
Maine	5	2	8	5	2	12	36	53	-	-
N.H.	5	6	4	3	55	74	22	20	-	-
Vt.	4	1	2	2	61	56	24	28	-	-
Mass.	27	24	30	36	991	643	212	163	15	7
R.I.	3	2	1	2	22	16	28	56	1	-
Conn.	13	15	6	10	12	43	169	140	2	-
MID. ATLANTIC	221	262	128	153	2,119	701	435	704	69	37
Upstate N.Y.	35	44	29	35	1,500	314	401	322	2	-
N.Y. City	99	137	23	37	92	95	5	6	19	12
N.J.	47	51	30	19	172	107	-	62	23	16
Pa.	40	30	46	62	355	185	29	314	25	9
E.N. CENTRAL	88	87	141	199	2,252	623	131	139	23	18
Ohio	26	15	55	47	434	192	64	46	13	8
Ind.	14	2	22	38	108	49	10	21	4	1
Ill.	20	37	12	53	318	67	40	21	2	5
Mich.	18	23	41	36	185	85	15	39	4	4
Wis.	10	10	11	25	1,207	230	2	12	-	-
W.N. CENTRAL	52	40	74	95	1,344	311	392	550	94	56
Minn.	18	20	21	22	230	120	68	27	-	1
Iowa	3	5	13	18	97	83	90	91	-	2
Mo.	17	5	21	38	233	63	38	31	77	45
N. Dak.	3	1	2	1	670	6	49	47	-	-
S. Dak.	1	2	2	1	20	3	10	115	4	4
Nebr.	3	-	4	6	25	7	53	91	12	3
Kans.	7	7	11	9	69	29	84	148	1	1
S. ATLANTIC	255	243	183	225	505	485	1,464	2,093	502	369
Del.	6	2	4	8	8	7	9	43	4	1
Md.	52	59	10	24	92	66	157	275	59	84
D.C.	11	9	4	5	3	1	-	-	-	-
Va.	36	29	15	20	152	84	376	412	23	25
W. Va.	1	4	5	4	17	14	52	70	4	5
N.C.	17	19	26	30	67	99	486	617	332	172
S.C.	9	3	11	20	42	94	117	181	16	18
Ga.	51	53	20	25	30	28	265	307	46	56
Fla.	72	65	88	89	94	92	2	188	18	8
E.S. CENTRAL	27	24	50	63	225	125	117	175	151	105
Ky.	4	6	9	15	54	41	20	30	2	1
Tenn.	7	4	14	15	134	59	34	95	84	56
Ala.	11	7	14	17	25	16	53	49	36	19
Miss.	5	7	13	16	12	9	10	1	29	29
W.S. CENTRAL	84	102	92	141	510	546	898	945	165	54
Ark.	7	4	14	13	55	40	43	25	86	-
La.	4	4	30	34	10	9	-	2	5	-
Okla.	7	4	8	14	33	65	89	161	70	40
Tex.	66	90	40	80	412	432	766	757	4	14
MOUNTAIN	37	31	53	66	1,043	737	172	150	22	7
Mont.	-	-	3	3	39	5	21	20	3	1
Idaho	1	1	6	6	30	63	7	14	4	2
Wyo.	-	1	3	2	25	123	5	6	4	2
Colo.	13	16	12	18	513	253	40	34	1	2
N. Mex.	2	1	6	8	123	53	4	5	2	-
Ariz.	10	7	12	21	165	118	84	57	2	-
Utah	6	4	4	-	132	95	8	10	6	-
Nev.	5	1	7	8	16	27	3	4	-	-
PACIFIC	128	137	244	261	1,236	1,855	140	183	5	1
Wash.	16	21	26	26	547	535	-	-	-	-
Oreg.	16	9	51	43	330	382	6	6	3	-
Calif.	93	102	159	177	333	927	126	169	2	1
Alaska	-	-	3	4	8	2	8	8	-	-
Hawaii	3	5	5	11	18	9	-	-	-	-
Guam	-	1	-	-	-	1	-	-	-	-
P.R.	-	1	5	9	4	2	46	61	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2004, and September 27, 2003 (39th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	29,738	31,659	8,506	17,558	3,719	4,539	1,689	1,540	507	522
NEW ENGLAND	1,614	1,639	224	252	152	396	26	75	54	6
Maine	70	102	2	6	8	23	2	-	3	-
N.H.	112	116	7	6	16	27	-	-	N	N
Vt.	43	54	2	6	8	18	7	6	1	3
Mass.	934	962	145	173	103	177	N	N	43	N
R.I.	91	103	13	13	17	11	17	10	7	3
Conn.	364	302	55	48	-	140	-	59	U	U
MID. ATLANTIC	4,251	3,761	897	1,860	587	793	106	100	85	77
Upstate N.Y.	946	864	361	331	193	300	44	54	59	57
N.Y. City	960	1,031	288	316	79	114	U	U	U	U
N.J.	678	640	168	304	137	151	-	-	6	2
Pa.	1,667	1,226	80	909	178	228	62	46	20	18
E.N. CENTRAL	3,831	4,363	771	1,480	718	1,081	374	338	125	226
Ohio	1,015	1,078	133	252	191	254	263	219	61	77
Ind.	456	435	173	124	84	105	111	119	30	22
Ill.	1,072	1,505	251	797	154	274	-	-	-	86
Mich.	680	617	97	200	247	311	N	N	N	N
Wis.	608	728	117	107	42	137	N	N	34	41
W.N. CENTRAL	1,858	1,834	334	587	248	276	14	11	75	58
Minn.	458	405	50	79	123	134	-	-	50	41
Iowa	375	277	61	54	N	N	N	N	N	N
Mo.	505	690	132	290	55	61	9	7	10	2
N. Dak.	36	27	3	6	11	13	-	3	2	4
S. Dak.	80	91	9	13	12	20	5	1	-	-
Nebr.	121	120	22	75	12	23	-	-	5	5
Kans.	283	224	57	70	35	25	N	N	8	6
S. ATLANTIC	8,152	7,639	2,107	5,389	796	758	896	837	40	16
Del.	81	81	6	155	3	6	4	1	N	N
Md.	629	649	113	503	130	186	-	14	29	-
D.C.	46	32	29	62	8	7	5	-	3	6
Va.	928	770	123	313	62	90	N	N	N	N
W. Va.	172	107	5	-	20	31	89	58	8	10
N.C.	1,188	958	242	815	100	92	N	N	U	U
S.C.	701	503	274	377	37	36	67	119	N	N
Ga.	1,460	1,476	536	965	256	148	264	186	N	N
Fla.	2,947	3,063	779	2,199	180	162	467	459	N	N
E.S. CENTRAL	1,943	2,168	606	712	177	161	112	109	2	-
Ky.	270	318	53	92	51	39	24	15	N	N
Tenn.	495	565	304	245	126	122	87	94	N	N
Ala.	547	527	204	228	-	-	-	-	N	N
Miss.	631	758	45	147	-	-	1	-	2	-
W.S. CENTRAL	2,390	4,739	1,777	4,454	214	219	49	61	90	83
Ark.	428	584	57	87	16	6	7	19	8	5
La.	540	677	220	375	2	1	42	42	18	17
Okla.	313	350	363	648	53	70	N	N	35	41
Tex.	1,109	3,128	1,137	3,344	143	142	N	N	29	20
MOUNTAIN	1,833	1,650	608	881	414	374	30	5	36	56
Mont.	172	81	4	2	-	1	-	-	-	-
Idaho	130	134	12	24	8	18	N	N	N	N
Wyo.	43	69	4	6	7	2	9	4	-	-
Colo.	447	383	126	209	117	107	-	-	33	43
N. Mex.	200	205	90	182	68	90	5	-	-	9
Ariz.	546	481	298	367	176	127	N	N	N	N
Utah	169	163	33	36	36	27	14	1	3	4
Nev.	126	134	41	55	2	2	2	-	-	-
PACIFIC	3,866	3,866	1,182	1,943	413	481	82	4	-	-
Wash.	424	419	87	131	53	41	-	-	N	N
Oreg.	337	345	55	184	N	N	N	N	N	N
Calif.	2,797	2,892	993	1,585	281	344	N	N	N	N
Alaska	43	54	5	7	-	-	-	-	N	N
Hawaii	265	156	42	36	79	96	82	4	-	-
Guam	-	37	-	30	-	-	-	-	-	-
P.R.	171	500	7	24	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2004, and September 27, 2003 (39th Week)*

Reporting area	Syphilis: Primary & secondary		Syphilis: Congenital		Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	5,475	5,228	257	333	7,823	9,327	218	286	13,606	11,875
NEW ENGLAND	152	156	4	-	277	309	19	23	591	2,353
Maine	2	6	-	-	-	18	-	-	180	642
N.H.	4	15	3	-	12	11	-	2	-	-
Vt.	-	-	-	-	-	8	-	-	411	518
Mass.	97	101	-	-	177	153	13	13	-	132
R.I.	20	16	-	-	26	41	1	2	-	5
Conn.	29	18	1	-	62	78	5	6	-	1,056
MID. ATLANTIC	724	625	35	52	1,555	1,642	47	68	71	28
Upstate N.Y.	75	31	2	8	192	216	9	11	-	-
N.Y. City	433	348	11	29	787	846	14	33	-	-
N.J.	118	126	21	15	326	325	13	20	-	-
Pa.	98	120	1	-	250	255	11	4	71	28
E.N. CENTRAL	614	702	49	57	871	842	16	31	4,206	4,016
Ohio	164	160	1	3	149	150	5	2	1,061	954
Ind.	43	34	8	11	91	95	-	4	-	-
Ill.	246	295	11	18	381	395	-	15	-	-
Mich.	140	198	29	25	186	155	9	10	2,753	2,429
Wis.	21	15	-	-	64	47	2	-	392	633
W.N. CENTRAL	123	117	3	4	324	345	8	6	129	42
Minn.	15	36	1	-	133	138	4	2	-	-
Iowa	5	8	-	-	23	21	-	2	N	N
Mo.	78	44	1	4	79	92	2	1	5	-
N. Dak.	-	2	-	-	3	-	-	-	81	42
S. Dak.	-	1	-	-	8	16	-	-	43	-
Nebr.	5	5	-	-	27	15	2	1	-	-
Kans.	20	21	1	-	51	63	-	-	-	-
S. ATLANTIC	1,419	1,382	38	66	1,487	1,826	38	41	1,796	1,680
Del.	7	4	1	-	-	-	-	-	4	22
Md.	272	237	6	10	183	174	11	9	-	-
D.C.	62	38	1	-	65	-	-	-	20	22
Va.	74	67	2	1	184	183	5	13	479	471
W. Va.	2	2	-	-	15	12	-	-	1,044	970
N.C.	139	122	8	16	224	231	6	7	N	N
S.C.	95	81	6	7	145	122	-	-	249	195
Ga.	223	366	1	13	11	392	6	5	-	-
Fla.	545	465	13	19	660	712	10	7	-	-
E.S. CENTRAL	305	238	17	11	421	492	7	5	-	-
Ky.	34	29	1	1	84	88	3	-	-	-
Tenn.	99	96	8	2	156	167	4	2	-	-
Ala.	131	91	6	6	148	159	-	3	-	-
Miss.	41	22	2	2	33	78	-	-	-	-
W.S. CENTRAL	892	679	40	59	722	1,403	14	28	4,955	3,332
Ark.	34	40	-	2	87	69	-	-	-	-
La.	201	107	-	1	-	-	-	-	45	10
Okla.	19	50	2	1	119	111	1	1	-	-
Tex.	638	482	38	55	516	1,223	13	27	4,910	3,322
MOUNTAIN	276	242	43	28	359	332	6	6	1,858	424
Mont.	-	-	-	-	4	5	-	-	-	-
Idaho	15	4	2	2	4	5	-	1	-	-
Wyo.	1	-	-	-	2	3	-	-	27	40
Colo.	27	27	-	3	80	73	1	3	1,427	-
N. Mex.	46	48	1	5	18	37	-	-	76	1
Ariz.	153	148	40	18	161	158	2	2	-	-
Utah	6	5	-	-	30	29	1	-	328	383
Nev.	28	10	-	-	60	22	2	-	-	-
PACIFIC	970	1,087	28	56	1,807	2,136	63	78	-	-
Wash.	105	58	-	-	166	186	6	3	-	-
Oreg.	21	35	-	-	64	83	2	3	-	-
Calif.	840	987	28	55	1,472	1,738	49	71	-	-
Alaska	-	1	-	-	28	46	-	-	-	-
Hawaii	4	6	-	1	77	83	6	1	-	-
Guam	-	1	-	-	-	41	-	-	-	104
P.R.	112	153	5	13	60	86	-	-	217	436
V.I.	4	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending October 2, 2004 (39th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
NEW ENGLAND	503	349	104	34	10	6	49
Boston, Mass.	154	105	36	9	3	1	21
Bridgeport, Conn.	54	38	13	3	-	-	9
Cambridge, Mass.	7	4	2	1	-	-	-
Fall River, Mass.	12	10	2	-	-	-	2
Hartford, Conn.	55	42	7	4	2	-	4
Lowell, Mass.	24	16	3	2	-	3	1
Lynn, Mass.	10	6	3	1	-	-	-
New Bedford, Mass.	24	12	9	3	-	-	2
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	49	33	11	1	3	1	-
Somerville, Mass.	4	4	-	-	-	-	-
Springfield, Mass.	32	22	7	1	1	1	1
Waterbury, Conn.	25	18	4	3	-	-	4
Worcester, Mass.	53	39	7	6	1	-	5
MID. ATLANTIC	2,069	1,405	433	142	51	37	102
Albany, N.Y.	50	28	18	1	1	2	1
Allentown, Pa.	19	16	3	-	-	-	-
Buffalo, N.Y.	61	40	11	6	2	2	2
Camden, N.J.	24	14	5	2	1	2	2
Elizabeth, N.J.	11	7	3	1	-	-	-
Erie, Pa.	34	27	6	-	1	-	-
Jersey City, N.J.	30	18	9	2	-	1	-
New York City, N.Y.	981	674	206	69	17	14	47
Newark, N.J.	42	21	13	4	2	2	2
Paterson, N.J.	U	U	U	U	U	U	U
Philadelphia, Pa.	424	257	104	36	18	9	15
Pittsburgh, Pa.§	26	20	5	1	-	-	2
Reading, Pa.	21	18	2	1	-	-	2
Rochester, N.Y.	136	105	18	8	4	1	12
Schenectady, N.Y.	14	13	1	-	-	-	2
Scranton, Pa.	21	17	3	1	-	-	-
Syracuse, N.Y.	92	73	12	3	1	3	8
Trenton, N.J.	41	25	8	5	3	-	3
Utica, N.Y.	21	15	3	1	1	1	2
Yonkers, N.Y.	21	17	3	1	-	-	2
E.N. CENTRAL	1,881	1,270	397	124	48	41	106
Akron, Ohio	54	32	12	5	2	3	3
Canton, Ohio	36	23	8	4	1	-	2
Chicago, Ill.	292	190	59	17	16	10	19
Cincinnati, Ohio	55	35	11	4	2	3	1
Cleveland, Ohio	184	146	31	5	1	1	6
Columbus, Ohio	195	138	38	9	8	2	17
Dayton, Ohio	143	114	19	6	2	2	6
Detroit, Mich.	182	94	60	16	6	6	14
Evansville, Ind.	44	30	10	4	-	-	-
Fort Wayne, Ind.	59	41	11	2	4	1	6
Gary, Ind.	14	7	4	3	-	-	-
Grand Rapids, Mich.	34	26	5	2	-	1	3
Indianapolis, Ind.	181	104	52	15	4	6	11
Lansing, Mich.	43	27	7	9	-	-	2
Milwaukee, Wis.	112	70	23	14	-	5	6
Peoria, Ill.	56	43	8	2	1	1	2
Rockford, Ill.	44	31	11	2	-	-	1
South Bend, Ind.	29	22	5	2	-	-	-
Toledo, Ohio	83	63	18	2	-	-	4
Youngstown, Ohio	41	34	5	1	1	-	3
W.N. CENTRAL	694	457	155	46	16	20	41
Des Moines, Iowa	176	124	32	11	5	4	13
Duluth, Minn.	42	32	7	3	-	-	1
Kansas City, Kans.	44	32	12	-	-	-	6
Kansas City, Mo.	71	48	17	3	-	3	3
Lincoln, Nebr.	U	U	U	U	U	U	U
Minneapolis, Minn.	58	29	17	7	2	3	4
Omaha, Nebr.	82	54	22	2	1	3	6
St. Louis, Mo.	90	42	26	14	4	4	2
St. Paul, Minn.	51	40	5	3	1	2	4
Wichita, Kans.	80	56	17	3	3	1	2
S. ATLANTIC	1,010	625	246	88	31	20	56
Atlanta, Ga.	158	85	43	22	7	1	7
Baltimore, Md.	173	93	57	14	7	2	17
Charlotte, N.C.	98	67	21	7	1	2	9
Jacksonville, Fla.	164	115	32	11	4	2	5
Miami, Fla.	U	U	U	U	U	U	U
Norfolk, Va.	54	31	13	4	3	3	2
Richmond, Va.	57	31	16	8	1	1	4
Savannah, Ga.	51	32	11	5	2	1	3
St. Petersburg, Fla.	42	34	5	2	1	-	1
Tampa, Fla.	95	68	16	7	1	3	4
Washington, D.C.	100	56	28	7	4	5	1
Wilmington, Del.	18	13	4	1	-	-	3
E.S. CENTRAL	868	540	224	73	17	14	70
Birmingham, Ala.	190	121	43	17	4	5	15
Chattanooga, Tenn.	46	32	9	4	-	1	4
Knoxville, Tenn.	117	75	32	8	-	2	2
Lexington, Ky.	103	69	23	9	2	-	5
Memphis, Tenn.	170	99	49	16	5	1	20
Mobile, Ala.	91	57	27	3	3	1	8
Montgomery, Ala.	36	23	8	4	-	1	6
Nashville, Tenn.	115	64	33	12	3	3	10
W.S. CENTRAL	1,446	908	344	107	51	35	79
Austin, Tex.	81	60	12	6	2	1	8
Baton Rouge, La.	43	30	8	3	2	-	-
Corpus Christi, Tex.	59	34	18	4	1	2	4
Dallas, Tex.	170	96	46	15	12	1	7
El Paso, Tex.	82	60	17	2	1	2	7
Ft. Worth, Tex.	118	77	26	8	4	3	2
Houston, Tex.	400	229	102	39	19	11	35
Little Rock, Ark.	56	37	13	2	1	3	4
New Orleans, La.	47	31	13	2	-	-	-
San Antonio, Tex.	244	157	60	15	6	6	9
Shreveport, La.	24	16	3	2	1	2	-
Tulsa, Okla.	122	81	26	9	2	4	3
MOUNTAIN	946	651	189	61	24	20	59
Albuquerque, N.M.	135	92	35	3	5	-	11
Boise, Idaho	43	38	4	1	-	-	7
Colo. Springs, Colo.	61	43	11	4	1	2	3
Denver, Colo.	102	71	17	5	2	7	2
Las Vegas, Nev.	239	146	56	23	7	6	6
Ogden, Utah	31	25	5	1	-	-	5
Phoenix, Ariz.	95	64	20	8	2	1	9
Pueblo, Colo.	20	17	3	-	-	-	4
Salt Lake City, Utah	110	81	16	8	3	2	9
Tucson, Ariz.	110	74	22	8	4	2	3
PACIFIC	1,563	1,067	338	96	30	32	140
Berkeley, Calif.	12	10	1	-	1	-	2
Fresno, Calif.	108	76	20	8	2	2	5
Glendale, Calif.	19	16	2	1	-	-	3
Honolulu, Hawaii	65	47	17	1	-	-	8
Long Beach, Calif.	54	33	14	6	1	-	6
Los Angeles, Calif.	312	206	69	25	9	3	31
Pasadena, Calif.	12	7	4	1	-	-	-
Portland, Oreg.	123	80	30	7	3	3	11
Sacramento, Calif.	192	140	31	13	1	7	14
San Diego, Calif.	134	88	29	10	2	5	11
San Francisco, Calif.	99	64	27	5	2	1	11
San Jose, Calif.	170	125	36	5	1	3	21
Santa Cruz, Calif.	25	20	2	3	-	-	2
Seattle, Wash.	93	56	28	4	3	2	7
Spokane, Wash.	64	40	15	4	2	3	5
Tacoma, Wash.	81	59	13	3	3	3	3
TOTAL	10,980¶	7,272	2,430	771	278	225	702

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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☆U.S. Government Printing Office: 2005-733-116/00049 Region IV ISSN: 0149-2195