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Medical Expenditures Attributable to Injuries — United States, 2000

In the United States, injuries (i.e., unintentional and intentional) are the leading cause of death among persons aged <35 years and the fourth leading cause of death among persons of all ages (*1*). Injuries create a substantial burden on society in terms of medical resources used for treating and rehabilitating injured persons, productivity losses caused by morbidity and premature mortality, and pain and suffering of injured persons and their caregivers. To estimate annual injury-attributable medical expenditures in the United States, CDC analyzed data on injury prevalence and costs from the 2000 Medical Expenditure Panel Survey (MEPS) (*2*) and the National Health Accounts (NHA) (*3*). This report summarizes the results of that analysis, which indicated that injury-attributable medical expenditures cost as much as $117 billion in 2000, approximately 10% of total U.S. medical expenditures. This finding underscores the need for innovative and effective interventions to prevent injuries.

MEPS is a nationally representative survey of the U.S. civilian, noninstitutionalized population that quantifies insurance costs and out-of-pocket spending for all medical services, including inpatient hospitalizations, emergency department visits, ambulatory care, prescription drugs, home health care, mental health care, dental visits, and medical devices. Each MEPS panel is a sample population from the previous year's National Health Interview Survey respondents. MEPS also includes data on the sociodemographic characteristics of respondents and self-reported medical conditions, defined on the basis of *International Classification of Diseases, Ninth Revision, Clinical Modifications* (ICD-9-CM) codes (*4*). A total of 25,096 respondents completed the survey. For each condition coded, respondents were asked, "Was the condition due to an accident/injury?" and whether it involved "a motor vehicle, gun, some other weapon, poisoning/poisonous substance, fire/burn, drowning/near drowning, sports injury, fall, or something else." Only self-reported injuries that were coded with ICD-9-CM classifications 800–957 and 959–994 were included in the analysis. These codes represent damage to the human body caused by acute exposure to energy (i.e., mechanical, thermal, electrical, chemical, or radiant) or by sudden lack of essential agents (e.g., heat or oxygen) and are consistent with the injury definition used by the International Collaborative Effort on Injury Statistics (*5*).

A four-part regression model commonly applied to medical-expenditure data was used to estimate the percentage of total injury-attributable medical expenditures. This model accounted for the skewed distribution of expenditures among persons and differences in the distribution of expenditures among those with and without inpatient admissions during the year. Each part included a dichotomous independent variable to indicate whether a participant reported injury treatment in 2000, thereby allowing for estimating the marginal impact of injuries on total annual medical expenditures. All regression models controlled for sex, race/ethnicity, region,

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household income, education, pregnancy status, and marital status. A more complete estimate of injury-attributable expenditures was obtained by applying age- and sex-specific MEPS estimates of the percentage of injury-attributable medical expenditures in 2000 to medical-spending data provided by NHA, which includes the U.S.-based military and institutionalized populations. NHA measures spending for health care in the United States by type of service delivered and source of funding for those services.

In 2000, a total of 16.3% of persons (44.7 million) in the United States reported requiring treatment for at least one injury (Table). The percentage was higher for males (17.3%) than for females (15.4%). By age group, the percentage of persons reporting treatment for an injury ranged from 11.9% for persons aged <10 years to 17.9% for persons aged 10–19 years. Among persons aged ≤45 years, a greater percentage of males reported treatment for an injury; among persons aged >45 years, a greater percentage of females reported treatment for an injury.

In 2000, injury-attributable medical expenditures accounted for 10.3% of total medical expenditures and were higher for males (12.5%) than females (9.2%). By age group, the percentage of total injury-attributable medical expenditures ranged from 6.8% for persons aged 20–29 years to 16.6% for persons aged 10–19 years. Males had a higher percentage of injury-attributable medical expenditures than females for all age groups, except persons aged 45–64 years.

In 2000, on the basis of MEPS estimates, $64.7 billion was spent treating injuries among the U.S. population. When MEPS percentages were applied to annual medical-spending data provided by NHA, injury-attributable medical expenditures nearly doubled to $117.2 billion. Injury-attributable medical expenditures were higher for males ($59.8 billion) than females ($57.4 billion). By age group, NHA expenditures ranged from $5.0 billion for persons aged 20–29 years to $37.9 billion for persons aged 45–64 years. The greatest injury-attributable medical expenditures ($23.3 billion) were for women aged 45–64 years. Expenditures per capita for women were greater than for men in the same age group (Table).

Approximately 30% of injured persons sampled reported injuries involving falls (21.2%) and motor vehicles (9.0%). These self-reported injuries accounted for approximately 51% of total injury-attributable medical expenditures, with falls accounting for 33% and motor vehicles for 18%. The remaining 70% of injured persons sampled reported one of the other categories as the cause of injury, with the majority reporting "something else."

TABLE. Percentage and number* of persons reporting treatment for an injury and percentage and amount of medical expenditures attributable to injuries, by selected characteristics — United States, 2000

Characteristic	Persons reporting treatment for an injury† (%)	Persons reporting treatment for an injury† No.§	Medical expenditures attributable to injuries† %	Injury-attributable medical expenditures ($) MEPS¶	NHA**	Per capita, NHA
Total	**(16.3)**	**44.7**	**10.3**	**64.7**	**117.2**	**427**
Sex						
Male	(17.3)	23.1	12.5	33.2	59.8	448
Female	(15.4)	21.6	9.2	31.8	57.4	409
Age group (yrs)						
<10	(11.9)	4.8	7.8	3.1	5.7	141
10–19	(17.9)	7.2	16.6	7.4	13.4	333
20–29	(15.8)	5.7	6.8	2.7	5.0	137
30–44	(17.8)	11.3	12.2	14.6	26.5	417
45–64	(16.7)	10.2	10.6	20.9	37.9	621
≥65	(16.7)	5.5	8.7	16.0	29.0	881
Sex by age group						
Male						
<10	(13.7)	2.8	9.4	1.6	3.0	145
10–19	(20.7)	4.3	26.3	5.1	9.2	445
20–29	(18.0)	3.2	7.9	1.0	1.7	98
30–44	(20.0)	6.2	15.3	7.5	13.6	438
45–64	(15.5)	4.6	7.9	7.6	13.7	463
≥65	(14.2)	2.0	11.8	9.6	17.4	1,233
Female						
<10	(9.9)	1.9	6.7	1.3	2.3	118
10–19	(15.0)	3.0	11.9	3.0	5.4	272
20–29	(13.6)	2.5	4.8	1.4	2.5	139
30–44	(15.7)	5.1	9.4	6.7	12.1	373
45–64	(17.9)	5.7	12.5	12.9	23.3	732
≥65	(18.5)	3.5	6.7	7.1	12.9	680

* In millions.
† On the basis of Medical Expenditure Panel Survey (MEPS) estimates.
§ Results were weighted to be nationally representative.
¶ In billions. MEPS estimate of U.S. medical expenditures in 2000 is restricted to the civilian, noninstitutionalized population.
** In billions. National Health Accounts estimates include the U.S.-based military and institutionalized populations and are calculated by multiplying the NHA estimate of U.S. medical expenditures in 2000 by the percentage of medical expenditures attributable to injuries estimated by MEPS.

Reported by: *EA Finkelstein, PhD, IC Fiebelkorn, Research Triangle Institute International, Research Triangle Park, North Carolina. PS Corso, PhD, SC Binder, MD, National Center for Injury Prevention and Control, CDC.*

Editorial Note: The findings in this report indicate that the percentage of total medical expenditures attributable to injuries (10.3%) is similar to previous estimates of medical costs of injuries (10.4%) and to percentages of expenditures for other leading public health concerns, such as overweight and obesity (9.1%) and smoking (6.5%–14.4%) (*6*–*8*). However, the true economic burden of injuries is likely greater than the estimates described in this report because these estimates do not include the value of life lost to premature mortality, loss of patient and caregiver time, nonmedical expenditures (e.g., wheelchair ramps), insurance costs, property damage, litigation, decreased quality of life, and diminished functional capacity. Long-term–noninjury health consequences (e.g., mental health–care costs) are another important component not quantified in these estimates.

The majority of injuries can be prevented. For example, multifaceted intervention programs, including balance training, vision correction, reducing medications to the fewest number and lowest doses, and environmental changes, can reduce the risk for falls and fall injuries substantially among older adults (*9*). Interventions to prevent motor-vehicle crashes are similarly available (*10*).

The findings in this report are subject to at least two limitations. First, the lack of specificity in MEPS about the underlying cause and intent of injury provides little information to guide injury-prevention programs; injury data are not distinguished by intentionality (e.g., self-inflicted). Second, because it relies on self-reported data, MEPS does not include medical expenditures for the majority of fatal injuries. NHA includes costs for all medical expenditures in the United States. However, NHA injury-attributable expenditure estimates assume that the percentage of total expenditures attributable to injuries is the same for both the institutionalized and noninstitutionalized populations and for the civilian and noncivilian populations. However, severely injured patients might constitute a substantial proportion of the institutionalized population (e.g., residents of nursing homes), and persons in the military might be more prone to injuries than civilians.

Injuries impose a substantial economic burden on society. Effective interventions (e.g., increased use of child-restraint systems, smoke alarm installation programs, and programs to prevent falls among older adults) to decrease both unintentional and intentional injuries might substantially reduce this economic burden.

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Declining Prevalence of No Known Major Risk Factors for Heart Disease and Stroke Among Adults — United States, 1991–2001

Despite declines in recent years, heart disease and stroke remain the first and third leading causes of death in the United States, respectively. Of all U.S. deaths in 2001, heart disease accounted for 29.0% and stroke for 6.8% (*1*). The major risk factors for both conditions are high blood pressure, high cholesterol, diabetes, smoking, and obesity, all of which have been targeted by national prevention programs. In addition, the prevalence of multiple major risk factors has been a matter of increasing concern. However, few studies of national and state-level data have examined the prevalence of no known major risk factors among adults and how that prevalence has changed during the preceding 10 years (*2*). To assess changes in prevalence of no known risk factors for heart disease and stroke during 1991–2001, CDC analyzed data from the Behavioral Risk Factor Surveillance System (BRFSS). This report summarizes the results of that analysis, which indicate that prevalence of no known major risk factors is decreasing among men and women in nearly all states, racial/ethnic populations, age groups, and education levels. In addition, the prevalence of individual major risk factors is increasing. These findings underscore the potential for an increased burden of heart disease and stroke on the health-care system. To prevent the debilitating outcomes of heart disease and stroke among the aging U.S. population, increased prevention efforts and treatment interventions are needed.

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized, U.S. civilian population aged ≥18 years. Data for this analysis are from the core surveys conducted during 1991 and 2001 in 47 states and the District of Columbia (DC). Median response rates were 70.8% (range: 37.7% [Florida]–83.7% [North Dakota]) in 1991 and 51.1% (range: 33.3% [New Jersey]–70.8% [Hawaii and Montana]) in 2001. Respondents were asked whether they had ever had their blood cholesterol checked and, if so, whether they had been told by a health-care professional that their blood cholesterol was high. Respondents also were asked whether they had ever been told by a health-care professional that they had diabetes or been told by a health-care professional that they had high blood pressure. Respondents were classified as smokers if they had smoked ≥100 cigarettes in their lifetime and currently smoked every day or some days. Self-reported data on height and weight were used to calculate body mass index (BMI). Obesity was defined as a BMI >30 kg/m^2. Data were weighted to account for age, race/ethnicity, sex distribution, and rate of nonresponse in each state. Analyses were conducted by using SUDAAN to account for the complex sampling design and to calculate variance estimates. Differences in percentages were assessed by chi square, with a significant difference determined as $p<0.05$. The results were age-adjusted to the U.S. 2000 standard population to allow for comparisons over time and among states.

During 1991–2001, the prevalence of reported high blood pressure, high cholesterol, diabetes, and obesity among U.S. adults increased, whereas the prevalence of smoking remained nearly the same (Table 1). The prevalence of no known risk factors was lower in 2001 than in 1991 for men and women of all ages, racial/ethnic populations, and education levels (Table 2). The lower prevalence was statistically significant for all racial/ethnic populations except Asians/Pacific Islanders and American Indians/Alaska Natives, whose sample sizes in 1991 were too small for meaningful analysis. Men had a greater decline in prevalence of no known risk factors than women (6.6% versus 4.9%). The age-standardized prevalence

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(dis-'pach) 1 : a written message, particularly an official communication, sent with speed; see also *MMWR*.

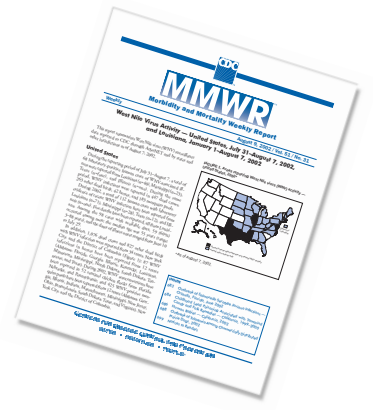

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TABLE 1. Number and percentage* of U.S. adults with major risk factors for heart disease and stroke, by risk factor — Behavioral Risk Factor Surveillance System, United States, 1991 and 2001

Risk factor	1991 (N = 55,815) No.	(%)	2001 (N = 140,305) No.	(%)	% difference 1991–2001	(95% CI†)	% relative change§
High blood pressure	14,824	(23.9)	42,742	(26.7)	2.8	(2.2–3.5)	11.9
High cholesterol level	15,035	(24.9)	43,625	(28.5)	3.5	(2.9–4.2)	14.2
Diabetes	3,626	(5.6)	12,628	(8.1)	2.6	(2.2–3.0)	46.5
Smoking	11,741	(21.4)	29,570	(21.3)	-0.1	(-0.8–0.6)	-0.5
Obesity	7,628	(13.5)	31,369	(22.3)	8.8	(8.2–9.3)	64.7
One or more risk factors	32,507	(58.2)	89,739	(64.0)	5.7	(4.9–6.5)	9.8
No risk factors	23,308	(41.8)	50,566	(36.0)	-5.7	(-6.5– -4.9)	-13.7

* Percentages are weighted to state population estimates and age-adjusted to the 2000 U.S. standard population.
† Confidence interval.
§ Calculated by dividing the percentage difference between 1991 and 2001 by the percentage in 1991.

TABLE 2. Number and percentage* of U.S. adults with no major risk factors for heart disease and stroke, by demographic characteristics — Behavioral Risk Factor Surveillance System, United States, 1991 and 2001

Characteristic	1991 No.	(%)	2001 No.	(%)	% difference 1991–2001	(95% CI†)	% relative change§
Age group (yrs)							
18–34	13,064	(56.3)	26,673	(50.3)	-6.0%	(-7.7– -4.4)	-10.7
35–49	17,331	(43.1)	45,549	(37.2)	-5.9%	(-7.3– -4.4)	-13.6
50–64	12,309	(28.0)	36,875	(24.9)	-3.1%	(-4.5– -1.6)	-10.9
≥65	13,111	29.1)	31,208	(21.0)	-8.1%	(-9.6– -6.6)	-27.9
Race/Ethnicity							
White, non-Hispanic	47,438	(42.2)	112,777	(36.5)	-5.7%	(-6.6– -4.9)	-13.6
Black, non-Hispanic	4,431	(34.3)	10,840	(28.8)	-5.4%	(-7.9– -3.0)	-15.9
Hispanic	2,255	(43.4)	7,458	(37.1)	-6.3%	(-10.0– -2.6)	-14.5
Asian/Pacific Islander	533	(52.0)	3,019	(46.6)	-5.5%	(-13.6–2.7)	-10.5
American Indian/ Alaska Native	505	(33.2)	1,842	(26.6)	-6.6%	(-14.7–1.6)	-19.8
Other	653	(41.5)	4,369	(33.3)	-8.1%	(-15.6–0.4)	-19.6
Sex							
Women	32,819	(43.1)	82,289	(38.3)	-4.9%	(-5.9–3.9)	-11.3
Men	22,996	(40.5)	58,016	(33.9)	-6.6%	(-7.8–5.4)	-16.3
Education							
<High school/GED¶	8,426	(29.6)	14,487	(23.3)	-6.4%	(-9.1–3.6)	-21.4
High school/GED	17,552	(36.8)	41,820	(29.7)	-7.1%	(-8.5–5.7)	-19.4
Some college	14,453	(41.7)	38,018	(34.3)	-7.4%	(-8.9–5.9)	-17.7
College graduate	15,384	(51.1)	45,980	(45.9)	-5.1%	(-6.5–3.7)	-10.0

* Percentages are weighted to state population estimates and age-adjusted (except those by age group) to the 2000 U.S. standard population.
† Confidence interval.
§ Calculated by dividing the percentage difference between 1991 and 2001 by the percentage in 1991.
¶ General education diploma.

of having no risk factors decreased from 42% in 1991 to 36% in 2001. This decrease occurred in all geographical areas (range: 0.8% [Wisconsin]–12.5% [New Mexico]) except Hawaii, where prevalence increased 0.4% (Table 3). These decreases were statistically significant in 35 states and DC and not significant in 11 states (Table 3).

Reported by: *N Paynter, MPH, CH Denny, PhD, KJ Greenlund, PhD, JB Croft, PhD, GA Mensah, MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

Editorial Note: During 1991–2001, the prevalence of no known major risk factors for heart disease and stroke declined, suggesting that a decreased percentage of U.S. adults have no recognized risk factors for heart disease and stroke. As a result, the national burden of heart disease and stroke is expected to increase.

The findings in this report are subject to at least three limitations. First, BRFSS data are based on self-reports and are subject to recall and social desirability biases. Second, increases in certain self-reported risk factors might be attributed to increased screening. Although increased screening might account for higher prevalence of high cholesterol, it probably does not account for increases in high blood pressure and diabetes; national examination surveys observed the same trends, and such trends are expected with the increase in obesity (*3,4*). Finally, whether the lower response rate in 2001 might have influenced the results is unknown. Prevalence of risk factors in 2001 might be overestimated if healthier persons were less likely to respond to telephone surveys. However, the trends observed in the telephone surveys also have been reported for the U.S. population that participated in national examination surveys during a similar study period (*3,4*).

CDC, in collaboration with its partners, supports prevention programs to increase awareness and reduce the burden of high blood pressure, high blood cholesterol, smoking, diabetes, and obesity. National guidelines provide information on detecting, treating, and controlling these risk factors (*5–9*). Physicians are encouraged to seek opportunities in the clini-

TABLE 3. Number and percentage* of U.S. adults with no major risk factors for heart disease and stroke, by area — Behavioral Risk Factor Surveillance System, United States, 1991–2001

Area	1991 No.	1991 (%)	2001 No.	2001 (%)	% difference 1991 to 2001	(95% CI†)	% relative change§
Alabama	1,249	(39.6)	2,052	(29.9)	-9.7	(-13.2– -6.2)	-24.5
Alaska	849	(38.3)	1,940	(34.5)	-3.7	(-9.3– -1.8)	-9.7
Arizona	915	(43.2)	2,274	(38.9)	-4.3	(-9.8– -1.2)	-9.9
Arkansas	770	(37.8)	2,077	(33.1)	-4.7	(-9.3– -0.2)	-12.5
California	1,941	(44.5)	3,144	(40.0)	-4.5	(-7.7– -1.3)	-10.1
Colorado	1,197	(44.2)	1,453	(41.4)	-2.8	(-6.7– -1.1)	-6.4
Connecticut	1,215	(42.9)	5,890	(38.9)	-4.0	(-7.4– -0.5)	-9.2
Delaware	943	(37.4)	2,680	(35.9)	-1.5	(-5.4– -2.5)	-3.9
District of Columbia	957	(41.8)	1,466	(37.8)	-4.0	(-8.6– -0.7)	-9.5
Florida	1,564	(45.7)	3,447	(36.5)	-9.2	(-13.1– -5.3)	-20.1
Georgia	1,122	(45.7)	3,301	(34.3)	-11.4	(-15.2– -7.6)	-24.9
Hawaii	1,298	(41.3)	3,367	(41.7)	0.4	(-3.4–4.3)	1.0
Idaho	1,101	(43.1)	3,251	(39.1)	-3.9	(-8.4–0.6)	-9.1
Illinois	1,177	(38.8)	1,555	(36.1)	-2.8	(-6.9–1.3)	-7.1
Indiana	1,288	(37.6)	2,915	(32.1)	-5.5	(-9.0– -2.0)	-14.7
Iowa	926	(42.8)	2,618	(37.9)	-4.9	(-8.9– -0.9)	-11.4
Kentucky	1,143	(34.9)	5,200	(28.9)	-6.0	(-10.0– -2.1)	-17.3
Louisiana	994	(39.6)	3,437	(33.5)	-6.0	(-10.1– -2.0)	-15.2
Maine	810	(39.7)	1,847	(36.7)	-3.0	(-7.4–1.3)	-7.7
Maryland	1,112	(45.4)	3,440	(36.0)	-9.4	(-13.3– -5.5)	-20.7
Massachusetts	935	(42.9)	6,509	(41.0)	-1.9	(-5.5–1.7)	-4.4
Michigan	1,601	(34.2)	2,923	(33.2)	-1.0	(-4.2–2.2)	-2.9
Minnesota	2,346	(42.8)	3,043	(38.9)	-3.9	(-6.8– -1.1)	-9.2
Mississippi	890	(34.0)	2,078	(30.6)	-3.4	(-7.4–0.5)	-10.1
Missouri	982	(39.7)	2,954	(33.4)	-6.3	(-10.8– -1.8)	-15.8
Montana	752	(43.3)	2,344	(41.2)	-2.0	(-6.8–2.7)	-4.7
Nebraska	839	(42.0)	2,469	(39.5)	-2.5	(-7.0–2.1)	-5.9
New Hampshire	1,029	(41.5)	3,065	(36.0)	-5.5	(-9.2– -1.7)	-13.2
New Jersey	1,043	(46.1)	4,502	(38.2)	-7.9	(-12.1– -3.7)	-17.2
New Mexico	674	(52.0)	2,512	(39.5)	-12.5	(-17.2– -7.8)	-24.0
New York	1,204	(40.5)	2,866	(36.0)	-4.5	(-8.3– -0.7)	-11.1
North Carolina	1,249	(41.5)	4,636	(34.4)	-7.1	(-11.2– -2.9)	-17.1
North Dakota	1,175	(43.7)	1,791	(36.1)	-7.5	(-12.3– -2.8)	-17.2
Ohio	801	(42.4)	2,419	(32.1)	-10.3	(-15.2– -5.4)	-24.4
Oklahoma	951	(39.3)	3,075	(31.7)	-7.5	(-11.7– -3.3)	-19.2
Oregon	2,241	(45.4)	1,806	(38.8)	-6.6	(-9.7– -3.5)	-14.5
Pennsylvania	1,558	(38.4)	2,755	(33.1)	-5.3	(-8.5– -2.0)	-13.8
Rhode Island	1,239	(41.1)	3,165	(34.9)	-6.2	(-9.8– -2.5)	-15.0
South Carolina	1,226	(37.7)	2,381	(33.3)	-4.5	(-8.5– -0.4)	-11.9
South Dakota	1,091	(43.3)	3,614	(37.1)	-6.3	(-10.1– -2.4)	-14.4
Tennessee	1,695	(36.8)	1,957	(31.9)	-4.9	(-8.2– -1.6)	-13.2
Texas	919	(43.1)	4,235	(34.0)	-9.2	(-13.0– -5.3)	-21.2
Utah	1,057	(47.6)	2,529	(42.5)	-5.1	(-9.0– -1.2)	-10.7
Vermont	1,009	(41.2)	3,295	(39.3)	-1.9	(-5.7–2.0)	-4.6
Virginia	972	(43.5)	2,202	(38.1)	-5.4	(-9.8– -1.1)	-12.4
Washington	1,375	(43.5)	3,022	(40.8)	-2.7	(-6.3–0.8)	-6.3
West Virginia	1,556	(36.2)	2,309	(27.8)	-8.3	(-12.0– -4.7)	-23.1
Wisconsin	835	(38.6)	2,495	(37.8)	-0.8	(-5.2–3.6)	-2.0
Total	**55,815**	**(41.8)**	**140,305**	**(36.0)**	**-5.7**	**(-6.5– -4.9)**	**-13.7**

* Percentages are weighted to state population estimates and age-adjusted to the 2000 U.S. standard population; data for 1991 for Kansas, Nevada, Wyoming, Guam, Puerto Rico, and the U.S. Virgin Islands were not available.
† Confidence interval.
§ Calculated by dividing the percentage difference between 1991 and 2001 by the percentage in 1991.

cal setting to prevent, detect, and treat these conditions. The prevention of risk factors for heart disease and stroke should remain a national public health priority.

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Preliminary Assessment of the Effectiveness of the 2003–04 Inactivated Influenza Vaccine — Colorado, December 2003

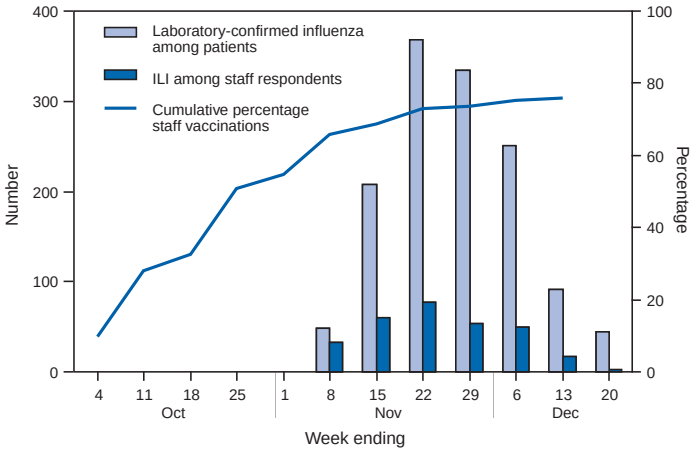
Influenza activity started earlier than usual in the United States this season, with widespread influenza activity* reported in 10 states by November 22, 2003 (*1*). The predominant influenza viruses (A/Fujian/411/2002 [H3N2]-like viruses) circulating this season differ antigenically from the 2003–04 influenza A (H3N2) vaccine strain (*2*). A retrospective cohort study was conducted among workers at a Colorado hospital to provide preliminary data on the effectiveness of trivalent inactivated influenza vaccine (TIV) against influenza-like illness (ILI). This report summarizes the results of that study, which indicated that TIV had no or low effectiveness against ILI. However, additional studies are needed to evaluate the effectiveness of the 2003–04 vaccine against laboratory-confirmed influenza and influenza-related complications, including hospitalization and death. Influenza vaccine continues to be recommended, particularly for persons at increased risk for influenza-related complications, their household contacts, and health-care personnel.

The Children's Hospital (TCH) is a 233-bed pediatric hospital located in Denver. During October–December 2003, TCH promoted employee influenza vaccination with TIV. In early November, the weekly number of positive influenza test results from patient specimens tested through the TCH laboratory began to increase (Figure). To evaluate the effectiveness of TIV against ILI, CDC, the Colorado Department of Public Health and Environment, and TCH conducted a retrospective cohort study among hospital staff during December 11–17. An anonymous survey was distributed to hospital workers by paper questionnaire at worksites and via e-mail messages. Respondents were asked whether they had received the influenza vaccine, had certain medical conditions associated with increased risk for influenza-related complications (*3*), had any illness with fever, cough, or sore throat on or after November 1, or had contact with any patients. Data also were collected on age group, sex, and occupation. Persons who had received vaccine were asked when they were vaccinated, and those who reported illness were asked for date of illness onset. The survey was distributed to approximately 3,100 TCH workers.

Responses were received from 1,886 (61%) of persons surveyed. Respondents who did not report influenza vaccination or illness status (3% and 1%, respectively) and those who were vaccinated but did not report a vaccination date (<1%) were excluded from the study. Of the 1,818 persons included in the study, 1,424 (78%) were vaccinated, including 1,009 (71%) vaccinated before November 1 and 415 (29%) vaccinated on or after November 1. ILI was defined as an illness with subjective fever (i.e., temperature not taken) plus cough or sore throat from November 1 through the questionnaire completion period (December 11–17). Overall, 289 (16%) respondents reported having ILI; 28 persons with ILI reported being tested for influenza, 13 (46%) of whom tested positive. Statistically significant factors associated with receiving vaccination included age group, occupation, and contact with patients (Table 1).

Two methods were used to estimate vaccine effectiveness to account for changes in vaccination status during the influenza outbreak period: a categorical analysis and a person-time analysis. For each method, two estimates of vaccine effectiveness were calculated to account for the unknown protection from vaccine among persons vaccinated <2 weeks before onset of illness, because peak antibody response after influenza vaccination takes approximately 2 weeks and the level of protection during the 1–13 days after vaccination is not known (*4,5*). In the first estimate, persons vaccinated <2 weeks before illness onset were counted as unvaccinated; in the second estimate, those vaccinated <2 weeks before illness onset were excluded from the analyses.

FIGURE. Number of cases of influenza-like illness (ILI)* among staff respondents, number of laboratory-confirmed influenza cases among patients, and percentage of staff vaccination, by date — The Children's Hospital, Denver, Colorado, weeks ending October 4–December 20, 2003



* Illness with subjective fever (i.e., temperature not taken) plus cough or sore throat beginning on or after November 1, 2003.

* Outbreaks of influenza or increases in influenza-like illness (ILI) cases and recent laboratory-confirmed influenza in at least half the regions of a state.

TABLE 1. Number and percentage of survey respondents, by vaccination status and selected characteristics — The Children's Hospital, Denver, Colorado, October–December 2003

	Vaccinated		Unvaccinated	
Characteristic	**No.**	**(%)**	**No.**	**(%)**
Age group (yrs)*				
18–49	1,070	(75)	322	(82)
50–64	331	(23)	69	(18)
≥65	18	(1)	1	(0)
Sex				
Men	263	(19)	89	(23)
Women	1,156	(81)	302	(77)
High-risk conditions				
Yes	204	(14)	46	(12)
No	1,204	(86)	342	(88)
Occupation*				
Physicians	186	(13)	22	(6)
Nurses	423	(30)	95	(24)
Other	805	(57)	277	(71)
Patient contact*				
Yes	974	(69)	227	(58)
No	439	(31)	165	(42)
Total	**1,424**	**(78)**	**394**	**(22)**

* $p<0.05$.

Categorical Analysis

Persons vaccinated on or after November 1 (the outbreak period) were excluded from the categorical analysis. ILI attack rates were compared between vaccinated and unvaccinated groups by using the Cochran-Mantel-Haenszel chi-square test to adjust for age group, patient contact, and high-risk conditions. Vaccine effectiveness against ILI was calculated as 1 – vaccinated attack rate / unvaccinated attack rate. Point estimates for vaccine effectiveness were 14% and 3%, respectively, with 95% confidence intervals for both estimates that included zero (Table 2).

Person-Time Analysis

To determine vaccination status in the person-time analysis, the exposure cohort time was calculated from the time of the outbreak, November 1, 2003, until onset of a self-reported illness or until the date of survey completion (December 11–17). In this analysis, persons reporting vaccination during the outbreak period contributed both vaccinated and unvaccinated time. Incidence rates (i.e., the number of cases divided by person-months) for ILI were estimated separately for vaccinated and unvaccinated person-times. Vaccine effectiveness against ILI was calculated as 1 – vaccinated incidence rate / unvaccinated incidence rate. A Cox proportional hazards model was used to estimate an incidence rate ratio adjusted for age group, patient contact, and high-risk conditions (*6*). Adjusted vaccine effectiveness for both estimates were not statistically significantly different from zero (Table 2).

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TABLE 2. Number of persons with influenza-like illness (ILI)* and inactivated influenza vaccine effectiveness (VE) estimates† among survey respondents, by analysis and vaccination status — The Children's Hospital, Denver, Colorado, November 1 – December 17, 2003

	Categorical analysis§				Person-time analysis¶			
	Analysis #1**		Analysis #2††		Analysis #1§§		Analysis #2¶¶	
Characteristic	Vaccinated before November 1	Unvaccinated	Vaccinated before November 1	Unvaccinated	Vaccinated	Unvaccinated	Vaccinated	Unvaccinated
Persons/person-months	1,000	402	1,000	393	1,457	947	1,457	703
ILI cases	149	68	149	59	179	109	179	75
ILI attack/incidence rate***	0.149	0.169	0.149	0.150	0.123	0.115	0.123	0.107
Risk ratio/incidence rate ratio†††	0.87 (0.67–1.14)		0.99 (0.75–1.30)		1.07 (0.84–1.35)		1.15 (0.88–1.51)	
Crude VE	0.13 (-0.14–0.33)		0.01 (-0.30–0.25)		-0.07 (-0.35–0.16)		-0.15 (-0.51–0.12)	
Adjusted VE	0.14 (-0.12–0.34)		0.03 (-0.28–0.27)		-0.10 (-0.41–0.14)		-0.15 (-0.52–0.13)	

* Illness with subjective fever (i.e., temperature not taken) plus cough or sore throat beginning on or after November 1, 2003.
† Crude estimates and estimate adjusted for high-risk conditions (e.g., diabetes, heart conditions, immunocompromised conditions, and pregnancy), patient contact, and age group.
§ Excludes 415 persons vaccinated after November 1, the beginning of the outbreak period.
¶ Person-months counted from November 1 to onset of ILI or date of survey completion and person-time divided into vaccinated and unvaccinated time.
** Classifies as unvaccinated nine persons vaccinated <14 days before onset of ILI.
†† Excludes nine persons vaccinated <14 days before onset of ILI.
§§ Classifies 13 days after vaccination as unvaccinated person-time.
¶¶ Excludes 13 days of person-time after vaccination.
*** Attack rate is for categorical analysis, and incidence rate is for person-time analysis.
††† Risk ratio is for categorical analysis, and incidence rate ratio is for person-time analysis.

Reported by: *S Dolan, MS, AC Nyquist, MD, D Ondrejka, PhD, J Todd, MD, The Children's Hospital, Denver; K Gershman, MD, Colorado Dept of Public Health and Environment. J Alexander, MD, C Bridges, MD, J Copeland, MS, F David, MS, G Euler, DrPH, P Gargiullo, PhD, K Kenyan, MPH , Z Moore, MD, J Seward, MBBS, Epidemiology Surveillance Div, National Immunization Program; N Jain, MD, EIS Officer, CDC.*

Editorial Note: The preliminary findings presented in this report demonstrated no or very low effectiveness of TIV against ILI. However, these findings do not provide a basis for assessing the effectiveness of TIV against more severe illness outcomes or against influenza B or influenza A (H1N1), nor do they assess the effectiveness of live attenuated influenza vaccine (LAIV). Despite a suboptimal antigenic match, TIV can still provide protection against influenza complications. In a study conducted among patients aged ≥65 years, TIV was effective in preventing 61% of influenza-related deaths when the vaccine and circulating strains were well matched and 35% when they were not well matched (*7*).

Estimates of vaccine effectiveness generally are lower against ILI than against laboratory-confirmed influenza. During the 1998–99 season, when the vaccine and circulating strains were well matched, TIV effectiveness among healthy adults was 86% against laboratory-confirmed influenza and 34% against ILI; during the 1997–98 season, when the vaccine and circulating strains were not well matched, TIV effectiveness was 50% against laboratory-confirmed influenza and zero against ILI (*8*). Further studies are under way or planned to estimate the effectiveness of the 2003–04 influenza vaccine against laboratory-confirmed influenza and influenza-related complications.

The person-time analysis included all persons in the cohort regardless of when they were vaccinated. These estimates probably are more precise than those obtained in the categorical analysis. Some negative effectiveness estimates (i.e., estimates lower than zero) were obtained in this analysis; because vaccine effectiveness cannot be lower than zero, such estimates should be considered zero. These results suggest that the study had unknown or uncorrected disparities between the vaccinated and unvaccinated groups in terms of risk for disease or other factors.

The findings in this report are subject to at least five limitations. First, study participants were not selected at random to receive influenza vaccination, and persons with greater patient exposure and possibly greater exposure to influenza viruses were more likely to be vaccinated. Second, a greater percentage of persons aged ≥50 years and persons with one or more conditions associated with increased risk for influenza-related complications were vaccinated. Third, other biases, including participation in the study and reporting illness based on vaccination, might have occurred. Such biases and other differences between the vaccinated and unvaccinated groups are very likely to have occurred, given the disparities noted. For example, persons who were vaccinated and became ill might have been more likely to complete the questionnaire, biasing the study to indicate lower effectiveness. Fourth, influenza vaccination and illnesses were self-reported. Finally, the sample size might not have been large enough to detect vaccine effectiveness against ILI, particularly because a large proportion of the respondents were vaccinated. Many of these limitations can be avoided by using a prospective cohort study design with laboratory-confirmed disease as an outcome. Conducting annual prospective studies would provide consistent and comparable vaccine effectiveness data to assist with public health decision making.

This study does not provide data that permits an assessment of the effectiveness of TIV against laboratory-confirmed influenza and its complications. Additional studies to provide such data are under way. Because TIV was effective against laboratory-confirmed influenza and influenza-related complications in previous years in which it was not effective against ILI (*8,9*), and because influenza B and influenza A (H1N1) viruses might cause serious illness later this season, influenza vaccine continues to be recommended for persons at increased risk for influenza-related complications, their household contacts, and health-care personnel (Box).

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BOX. Influenza impact and prevention

- Influenza causes an average of 114,000 hospitalizations and 36,000 deaths annually in the United States.
- Influenza vaccination is the primary means to prevent influenza and its complications.
- Annual influenza vaccine is recommended for persons at increased risk for influenza-related complications and their contacts, including
  - — Persons aged ≥50 years
  - — Children aged 6–23 months
  - — Persons of any age with chronic medical conditions, (e.g., asthma, diabetes, heart disease, kidney failure, or weakened immune system)
  - — Women in the second or third trimester of pregnancy during the influenza season
  - — Residents of nursing homes and other chronic-care facilities
  - — Children on chronic aspirin therapy
  - — Household contacts of persons at high risk, including children aged <2 years
  - — Health-care workers.

Update: Influenza Activity — United States, January 4–10, 2004

The number of states reporting widespread influenza activity* continued to decrease during the reporting week of January 4–10, 2004†. Health departments in 20 states and New York City reported widespread influenza activity. A total of 24 states reported regional activity, three states reported local activity, and sporadic activity was reported by two states, the District of Columbia, Guam, and Puerto Rico (Figure 1). The percentage of outpatient visits for influenza-like illness (ILI)§ continued to decrease in all surveillance regions during the week ending January 10, with an overall national percentage of 2.8%. This percentage is above the national baseline¶ of 2.5%. The percentage of specimens testing positive for influenza also decreased; however, the percentage of deaths attributed to pneumonia and influenza (P&I) continued to increase.

Laboratory Surveillance

During the week ending January 10, World Health Organization (WHO) laboratories reported testing 2,670 specimens for influenza viruses, of which 319 (11.9%) were positive. Of these, 52 were influenza A (H3N2) viruses, 261 were influenza A viruses that were not subtyped, and six were influenza B viruses.

Since September 28, 2003, WHO and National Respiratory and Enteric Virus Surveillance System laboratories have tested 69,052 specimens for influenza viruses, of which 18,535 (26.8%) were positive. Of these, 18,422 (99.4%) were influ-

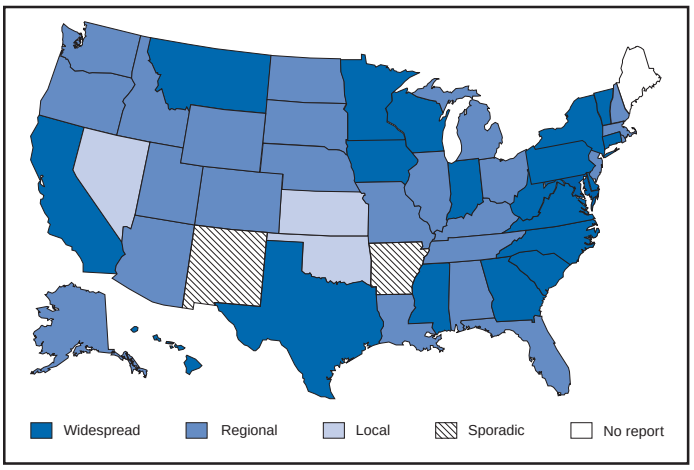
* Levels of activity are 1) *no activity*, 2) *sporadic*—small numbers of laboratory-confirmed influenza cases or a single influenza outbreak reported but no increase in cases of ILI, 3) *local*—outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of a state, 4) *regional*—outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least two but less than half the regions of a state, and 5) *widespread*—outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of a state.

† Provisional data reported as of January 14.

§ Temperature of >100.0° F (>37.8° C) and cough and/or sore throat in the absence of a known cause other than influenza.

¶ Calculated as the mean percentage of visits for ILI during noninfluenza weeks, plus two standard deviations. Wide variability in regional data precludes calculating region-specific baselines and makes it inappropriate to apply the national baseline to regional data.

FIGURE 1. States in which estimated influenza activity levels have been reported by state epidemiologists, by level of activity* — United States, January 4–10, 2004



*Levels of activity are 1) *no activity*, 2) *sporadic*—small numbers of laboratory-confirmed influenza cases or a single influenza outbreak reported but no increase in cases of influenza-like illness (ILI), 3) *local*—outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of a state, 4) *regional*—outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least two but less than half the regions of a state, and 5) *widespread*—outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of a state.

enza A viruses, and 113 (0.6%) were influenza B viruses. Of the 18,422 influenza A viruses, 4,418 (24.0%) have been subtyped; 4,417 (99.9%) were influenza A (H3N2) viruses, and one (0.1%) was an influenza A (H1) virus.

Antigenic Characterization

Of the 518 influenza viruses collected by U.S. laboratories since October 1, 2003, and characterized antigenically by CDC, 511 were influenza A (H3N2) viruses, two were influenza A (H1) viruses, and five were influenza B viruses. The hemagglutinin proteins of the influenza A (H1) viruses were similar antigenically to the hemagglutinin of the vaccine strain A/New Caledonia/20/99. Of the 511 influenza A (H3N2) isolates that have been characterized, 98 (19.2%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 413 (80.8%) were similar to a drift variant, A/Fujian/411/2002 (H3N2)**. Four influenza B viruses characterized were similar antigenically to B/Sichuan/379/99, and one was similar antigenically to B/Hong Kong/330/2001.

** Although vaccine effectiveness against A/Fujian/411/2002-like viruses might be less than that against A/Panama/2007/99-like viruses, the current U.S. vaccine probably offers some cross-protective immunity against the A/Fujian/411/2002-like viruses and reduces the severity of disease.

P&I Mortality Surveillance

During the week ending January 10, P&I accounted for 10.2% of all deaths reported through the 122 Cities Mortality Reporting System. This percentage is again above the epidemic threshold†† of 8.1% for that reporting week (Figure 2).

ILI Surveillance

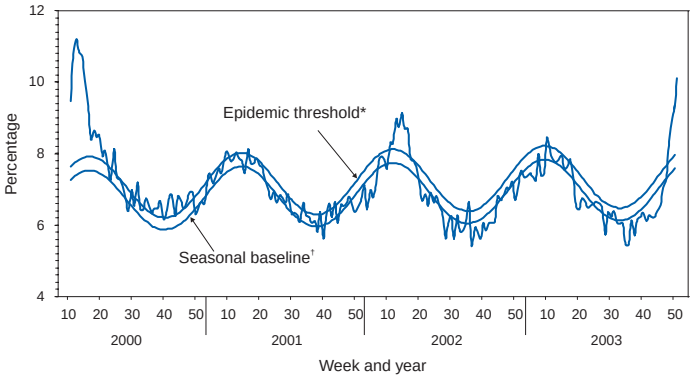
The percentage of patient visits§§ to approximately 1,000 U.S. sentinel providers nationwide for ILI decreased from 5.5% for the week ending January 3 to 2.8% for the week ending January 10, but remained above the national baseline of 2.5% (Figure 3). The percentage of patient visits for ILI continued to decrease in all nine surveillance regions¶¶ during the week ending January 10. Visits for ILI ranged from 3.4% in the Pacific region to 1.9% in the Mountain and West North Central regions.

†† The expected baseline proportion of P&I deaths reported by the 122 Cities Mortality Reporting System is projected by using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from P&I during the preceding 5 years; the epidemic threshold is 1.645 standard deviations above the seasonal baseline percentage.

§§ National and regional percentages of patient visits for ILI are weighted on the basis of state population.

¶¶ *New England*=Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Mid-Atlantic*=New Jersey, New York City, Pennsylvania, and Upstate New York; *East North Central*=Illinois, Indiana, Michigan, Ohio, and Wisconsin; *West North Central*=Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota; *South Atlantic*=Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia; *East South Central*=Alabama, Kentucky, Mississippi, and Tennessee; *West South Central*=Arkansas, Louisiana, Oklahoma, and Texas; *Mountain*=Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; and *Pacific*=Alaska, California, Hawaii, Oregon, and Washington.

FIGURE 2. Percentage of deaths attributed to pneumonia and influenza (P&I) reported by 122 Cities Mortality Reporting System, by week and year — United States, 2000–2004



* The epidemic threshold is 1.645 standard deviations above the seasonal baseline percentage.

† The seasonal baseline is projected by using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from P&I during the preceding 5 years.

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QuickGuide

Recommended Childhood and Adolescent Immunization Schedule — United States, January–June 2004

Weekly January 16, 2004 / Vol. 53 / No. 1

Each year, CDC's Advisory Committee on Immunization Practices (ACIP) reviews the recommended childhood and adolescent immunization schedule to ensure that it is current with changes in manufacturers' vaccine formulations and reflects revised recommendations for the use of licensed vaccines, including those newly licensed. The recommended childhood and adolescent immunization schedule for January–June 2004 (Figure), recommendations, and format have been approved by ACIP, the American Academy of Family Physicians, and the American Academy of Pediatrics.

Catch-Up Childhood and Adolescent Immunization Schedule

A catch-up immunization schedule for children and adolescents who start late or who are >1 month behind was introduced in 2003 (*1*) and remains the same (Table). Minimum ages and minimum intervals between doses are provided for each of the routinely recommended childhood and adolescent vaccines. The schedule is divided into two age groups: children aged 4 months–6 years and children/adolescents aged 7–18 years.

Hepatitis B Vaccine

The schedule indicates a change in the recommendation for the minimum age for the last dose in the hepatitis B vaccination schedule. The last dose in the vaccination series should not be administered before age 24 weeks (updating the previous recommendation not to administer the last dose before age 6 months).

Adolescent Tetanus and Diphtheria Toxoids (Td) Vaccine

The range of recommended ages for the adolescent Td vaccine dose has been updated to emphasize a preference for vaccinating at ages 11–12 years with ages 13–18 years to serve as a catch-up interval.

The Recommended Childhood and Adolescent Immunization Schedule and the Catch-up Childhood and Adolescent Immunization Schedule have been adopted by the Advisory Committee on Immunization Practices, the Academy of Pediatrics, and the Academy of Family Physicians. The standard *MMWR* footnote format has been modified for joint publication of this harmonized schedule.

Suggested citation: Centers for Disease Control and Prevention. Recommended Childhood and Adolescent Immunization Schedule—United States, 2004. MMWR 2004;53:Q1–4.

Clarification Regarding Certain Final Doses

Clarification was added to the footnotes regarding the timing of the final vaccine doses in the series for diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine, *Haemophilus influenzae* type b (Hib) conjugate vaccine, and pneumococcal conjugate vaccine (PCV). The final dose in the DTaP series should be given at age ≥4 years. The final doses in the Hib and PCV series should be given at age ≥12 months.

Influenza Vaccine

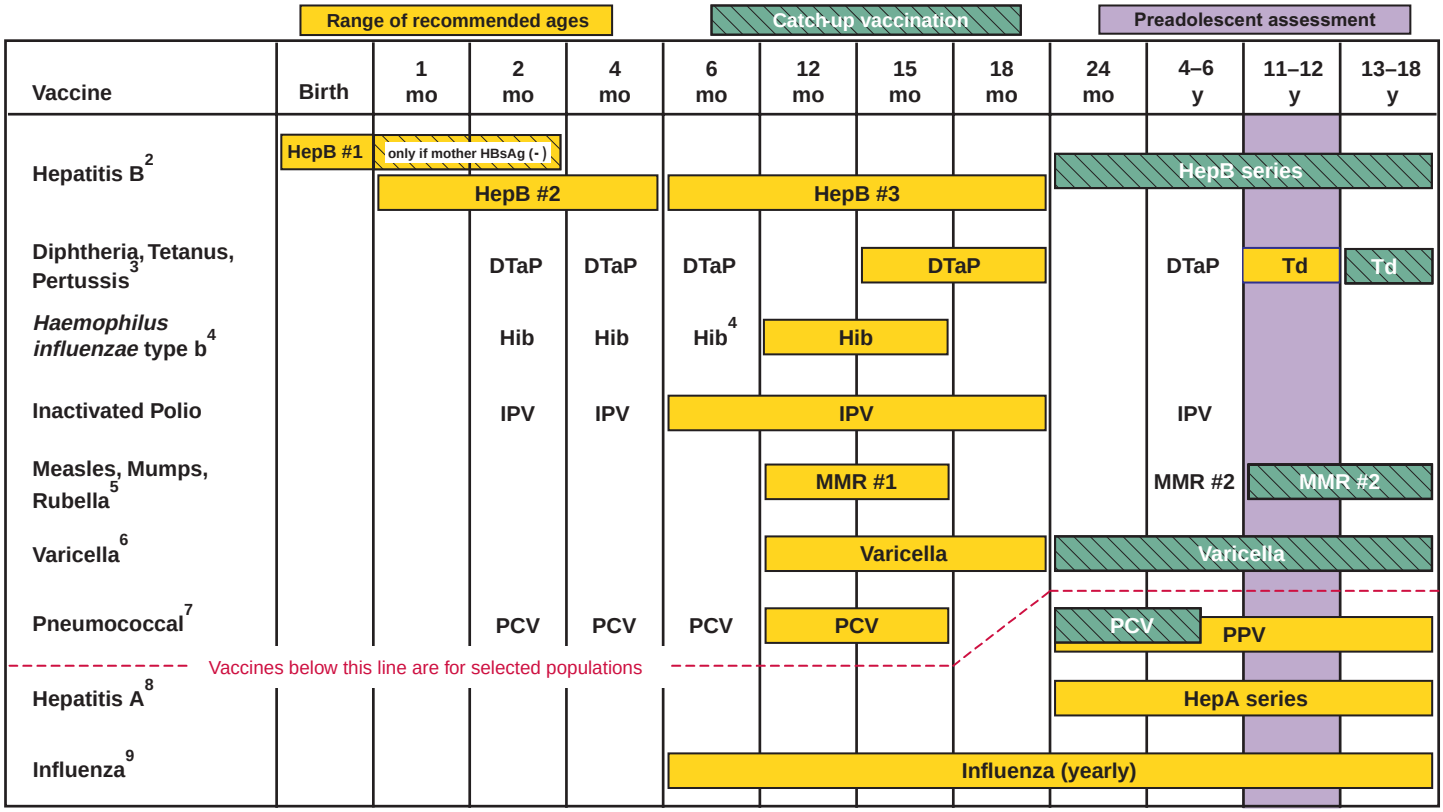
Healthy children aged 6–23 months are encouraged to receive influenza vaccine when feasible during the 2003–2004 influenza season. Children in this age group are at substantially increased risk for influenza-related hospitalizations (*2*). ACIP has indicated further that beginning in fall 2004, children aged 6–23 months will be recommended to receive annual influenza vaccine. An updated childhood and adolescent immunization schedule for July–December 2004 will be released to reflect this change.

An intranasally administered, live, attenuated influenza vaccine (LAIV) was approved for use in the United States in June 2003. For healthy persons aged 5–49 years, LAIV is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV) (*3*).

Vaccine Information Statements

The National Childhood Vaccine Injury Act requires that all health-care providers give parents or patients copies of Vaccine Information Statements before administering each dose of the vaccines listed in the schedule. Additional information is available from state health departments and at http://www.cdc.gov/nip/publications/vis. Detailed recommendations for using vaccines are available from the manufacturers' package inserts, ACIP statements on specific vaccines, and the *2003 Red Book* (*4*). ACIP statements for each recommended childhood vaccine can be viewed, downloaded, and printed from

FIGURE. Recommended childhood and adolescent immunization schedule[1] — United States, January–June 2004



1. Indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2003, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible. ▨ Indicates age groups that warrant special effort to administer those vaccines not given previously. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance on how to obtain and complete a VAERS form is available at http://www.vaers.org or by telephone, 800-822-7967.

2. **Hepatitis B vaccine (HepB).** All infants should receive the first dose of HepB vaccine soon after birth and before hospital discharge; the first dose also may be given by age 2 months if the infant's mother is HBsAg-negative. Only monovalent HepB vaccine can be used for the birth dose. Monovalent or combination vaccine containing HepB may be used to complete the series; 4 doses of vaccine may be administered when a birth dose is given. The second dose should be given at least 4 weeks after the first dose except for combination vaccines, which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 24 weeks. Infants born to HBsAg-positive mothers should receive HepB vaccine and 0.5 mL hepatitis B immune globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1–2 months. The last dose in the vaccination series should not be administered before age 24 weeks. These infants should be tested for HBsAg and anti-HBs at age 9–15 months. Infants born to mothers whose HBsAg status is unknown should receive the first dose of the HepB vaccine series within 12 hours of birth. Maternal blood should be drawn as soon as possible to determine the mother's HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week). The second dose is recommended at age 1–2 months. The last dose in the vaccination series should not be administered before age 24 weeks.

3. **Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).** The fourth dose of DTaP may be administered at age 12 months provided that 6 months have elapsed since the third dose and the child is unlikely to return at age 15–18 months. The final dose in the series should be given at age ≥4 years. **Tetanus and diphtheria toxoids (Td)** is recommended at age 11–12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.

4. ***Haemophilus influenzae* type b (Hib) conjugate vaccine.** Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary vaccination in infants at ages 2, 4, or 6 months but can be used as boosters after any Hib vaccine. The final dose in the series should be given at age ≥12 months.

5. **Measles, mumps, and rubella vaccine (MMR).** The second dose of MMR is recommended routinely at age 4–6 years but may be administered during any visit provided that at least 4 weeks have elapsed since the first dose and that both doses are administered beginning at or after age 12 months. Those who have not received the second dose previously should complete the schedule by the visit at age 11–12 years.

6. **Varicella vaccine (VAR).** Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children (i.e., those who lack a reliable history of chickenpox). Susceptible persons aged ≥13 years should receive 2 doses given at least 4 weeks apart.

7. **Pneumococcal vaccine.** The heptavalent **pneumococcal conjugate vaccine (PCV)** is recommended for all children aged 2–23 months and for certain children aged 24–59 months. The final dose in the series should be given at age ≥12 months. **Pneumococcal polysaccharide vaccine (PPV)** is recommended in addition to PCV for certain high-risk groups. See *MMWR* 2000;49(No. RR-9):1–35.

8. **Hepatitis A vaccine.** Hepatitis A vaccine is recommended for children and adolescents in selected states and regions, and for certain high-risk groups. Consult local public health authority and *MMWR* 1999;48(No. RR-12):1–37. Children and adolescents in these states, regions, and high-risk groups who have not been vaccinated against hepatitis A can begin the hepatitis A vaccination series during any visit. The two doses in the series should be administered at least 6 months apart.

9. **Influenza vaccine.** Influenza vaccine is recommended annually for children aged ≥6 months with certain risk factors (including but not limited to asthma, cardiac disease, sickle cell disease, HIV, and diabetes), and household members of persons in groups at high risk (see *MMWR* 2003;52[No. RR-8]:1–36), and can be administered to all others wishing to obtain immunity. In addition, healthy children aged 6–23 months are encouraged to receive influenza vaccine if feasible because children in this age group are at substantially increased risk for influenza-related hospitalizations. For healthy persons aged 5–49 years, the intranasally administered live-attenuated influenza vaccine (LAIV) is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV). See *MMWR* 2003;52(No. RR-13):1–8. Children receiving TIV should be administered a dosage appropriate for their age (0.25 mL if 6–35 months or 0.5 mL if ≥3 years). Children aged ≤8 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).

Additional information about vaccines, including precautions and contraindications for vaccination and vaccine shortages, is available at http://www.cdc.gov/nip or from the National Immunization information hotline, telephone 800-232-2522 (English) or 800-232-0233 (Spanish). Approved by the **Advisory Committee on Immunization Practices** (http://www.cdc.gov/nip/acip), the **American Academy of Pediatrics** (http://www.aap.org), and the **American Academy of Family Physicians** (http://www.aafp.org).

TABLE. Catch-up immunization schedule for children and adolescents who start late or who are >1 month behind

Catch-up schedule for children aged 4 months–6 years

Dose 1 (minimum age)	Minimum interval between doses			
	Dose 1 to dose 2	Dose 2 to dose 3	Dose 3 to dose 4	Dose 4 to dose 5
DTaP (6 wk)	**4 wk**	**4 wk**	**6 mo**	**6 mo**[1]
IPV (6 wk)	**4 wk**	**4 wk**	**4 wk**[2]	
HepB[3] **(birth)**	**4 wk**	**8 wk** (and 16 wk after 1st dose)		
MMR (12 mo)	**4 wk**[4]			
VAR (12 mo)				
Hib[5] **(6 wk)**	**4 wk:** if 1st dose given at age <12 mo **8 wk (as final dose):** if 1st dose given at age 12–14 mo **No further doses needed:** if 1st dose given at age ≥15 mo	**4 wk**[6]**:** if current age <12 mo **8 wk (as final dose)**[6]**:** if current age ≥12 mo and 2nd dose given at age <15 mo **No further doses needed:** if previous dose given at age ≥15 mo	**8 wk (as final dose):** this dose only necessary for children aged 12 mo–5 y who received 3 doses before age 12 mo	
PCV[7] **(6 wk)**	**4 wk:** if 1st dose given at age <12 mo and current age <24 mo **8 wk (as final dose):** if 1st dose given at age ≥12 mo or current age 24–59 mo **No further doses needed:** for healthy children if 1st dose given at age ≥24 mo	**4 wk:** if current age <12 mo **8 wk (as final dose):** if current age ≥12 mo **No further doses needed:** for healthy children if previous dose given at age ≥24 mo	**8 wk (as final dose):** this dose only necessary for children aged 12 mo–5 y who received 3 doses before age 12 mo	

Catch-up schedule for children aged 7–18 years

Minimum interval between doses			
Dose 1 to dose 2		Dose 2 to dose 3	Dose 3 to booster dose
Td:	**4 wk**	**Td:** **6 mo**	**Td**[8]**:** **6 mo:** if 1st dose given at age <12 mo and current age <11 y **5 y:** if 1st dose given at age ≥12 mo and 3rd dose given at age <7 y and current age ≥11 y **10 y:** if 3rd dose given at age ≥7 y
IPV[9]**:**	**4 wk**	**IPV**[9]**:** **4 wk**	**IPV**[2, 9]
HepB:	**4 wk**	**HepB:** **8 wk** (and 16 wk after 1st dose)	
MMR:	**4 wk**		
VAR[10]**:**	**4 wk**		

Note: A vaccine series does not require restarting, regardless of the time that has elapsed between doses.

1. **Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP):** The fifth dose is not necessary if the fourth dose was given after the fourth birthday.
2. **Inactivated polio vaccine (IPV):** For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if third dose was given at age ≥4 years. If both OPV and IPV were given as part of a series, a total of 4 doses should be given, regardless of the child's current age.
3. **Hepatitis B vaccine (HepB):** All children and adolescents who have not been vaccinated against hepatitis B should begin the hepatitis B vaccination series during any visit. Providers should make special efforts to immunize children who were born in, or whose parents were born in, areas of the world where hepatitis B virus infection is moderately or highly endemic.
4. **Measles, mumps, and rubella vaccine (MMR):** The second dose of MMR is recommended routinely at age 4–6 years, but may be given earlier if desired.
5. ***Haemophilus influenzae* type b (Hib) conjugate vaccine:** Vaccine generally is not recommended for children aged ≥5 years.
6. **Hib:** If current age is <12 months and the first 2 doses were PRP-OMP (PedvaxHIB® or ComVax® [Merck]), the third (and final) dose should be given at age 12–15 months and at least 8 weeks after the second dose.
7. **Pneumococcal conjugate vaccine (PCV):** Vaccine generally is not recommended for children aged ≥5 years.
8. **Tetanus and diphtheria toxoids (Td):** For children aged 7–10 years, the interval between the third and booster dose is determined by the age when the first dose was given. For adolescents aged 11–18 years, the interval is determined by the age when the third dose was given.
9. **IPV:** Vaccine generally is not recommended for persons aged ≥18 years.
10. **Varicella vaccine (VAR):** Give 2-dose series to all susceptible adolescents aged ≥13 years.

Reporting adverse reactions. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance on completing a VAERS form is available at http://www.vaers.org or at telephone, 800-822-7967. **Disease reporting.** Suspected cases of vaccine-preventable diseases should be reported to state or local health departments. Additional information about vaccines, including precautions and contraindications for vaccination and vaccine shortages, is available at http://www.cdc.gov/nip or at the National Immunization information hotline, telephone 800-232-2522 (English) or 800-232-0233 (Spanish).

CDC's National Immunization Program website at http://www.cdc.gov/nip/publications/acip-list.htm; instructions on the use of the Vaccine Information Statements are available at http://www.cdc.gov/nip/publications/vis/vis-instructions.pdf. In addition, guidance on how to obtain and complete a Vaccine Adverse Event Reporting System (VAERS) form is available at http://www.vaers.org or by telephone, 800-822-7967.

References

1. CDC. Recommended childhood and adolescent immunization schedule. MMWR 2003;52:Q1–4.
2. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2003;52(No. RR-8).
3. CDC. Using live, attenuated influenza vaccine for prevention and control of influenza: supplemental recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2003;52(No. RR-13).
4. American Academy of Pediatrics. Active and passive immunization. In: Pickering LK, ed. 2003 Red Book: Report of the Committee on Infectious Diseases, 26th ed. Elk Grove Village, Illinois: American Academy of Pediatrics, 2003.

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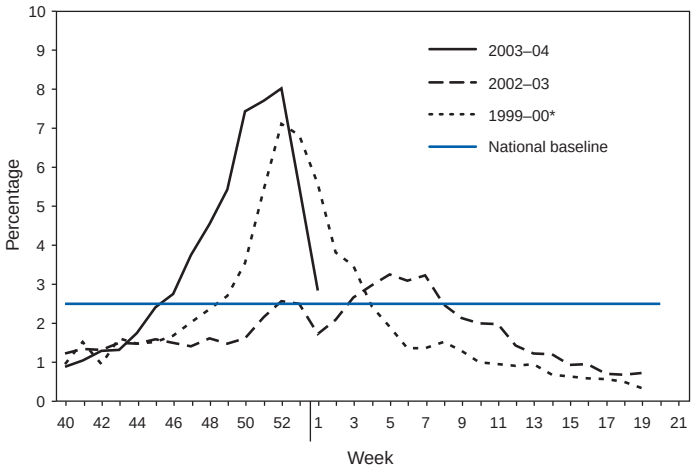
FIGURE 3. Percentage of visits for influenza-like illness reported by Sentinel Provider Surveillance Network, by week — United States, 1999–00, 2002–03, and 2003–04 influenza seasons



*The 1999–00 season was selected for comparison because it was the most recent influenza A (H3N2) season of moderate severity.

Activity Reported by State and Territorial Epidemiologists

During the week ending January 10, influenza activity was reported as widespread in 20 states (California, Connecticut, Delaware, Georgia, Hawaii, Indiana, Iowa, Maryland, Minnesota, Mississippi, Montana, New York, North Carolina, Pennsylvania, South Carolina, Texas, Vermont, Virginia, West Virginia, and Wisconsin) and New York City. Regional activity was reported in 24 states (Alabama, Alaska, Arizona, Colorado, Florida, Idaho, Illinois, Kentucky, Louisiana, Massachusetts, Michigan, Missouri, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Oregon, Rhode Island, South Dakota, Tennessee, Utah, Washington, and Wyoming). Local activity was reported in three states (Kansas, Nevada, and Oklahoma). Sporadic activity was reported in two states (Arkansas and New Mexico), the District of Columbia, Guam, and Puerto Rico. Maine did not report.

Weekly updates on influenza activity will be published in *MMWR* during the influenza season. Additional information about influenza activity is available from CDC at http://www.cdc.gov/flu.

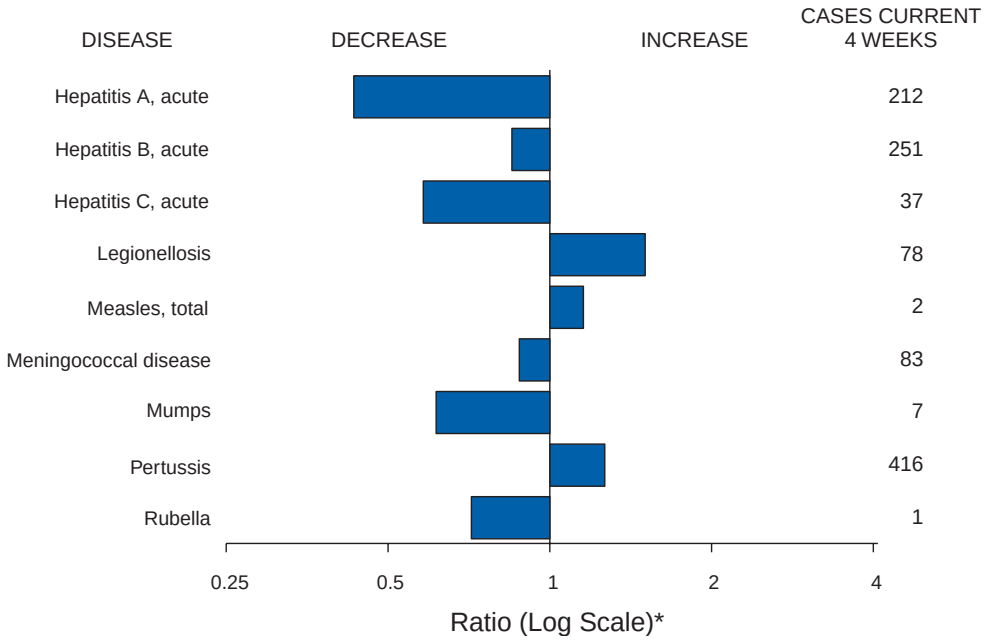
Notice to Readers

Neonatal Vaccination Workshop

The U.S. Department of Health and Human Services (DHHS) is sponsoring the First International Neonatal Vaccination Workshop during March 2–4, 2004, in McLean, Virginia. The workshop will explore strategies to protect neonates from bacterial, viral, and parasitic agents. Sessions will focus on the immune responses of the neonate to vaccine antigens, review clinical experience with vaccines administered to neonates, consider expanded use of vaccines in the neonate from industry and regulatory perspectives, and weigh alternative strategies to protect neonates (e.g., maternal immunization).

The workshop is coordinated by the National Vaccine Advisory Committee's Future Vaccines Subcommittee, CDC, the U.S. Food and Drug Administration, the National Institutes of Health, and the Task Force for Child Survival and Development and is supported by a grant from the DHHS National Vaccine Program Office. Additional information about the workshop, including submission of abstracts, registration, and hotel accommodations, is available from the Task Force for Child Survival and Development, telephone 404-592-1425, e-mail neonatal@cdc.gov, and from CDC at http://www.cdc.gov/nip/events/neonatal_wkshop.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals January 10, 2004, with historical data



* 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 January 10, 2004 (1st Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	-	-
Botulism:	-	-	HIV infection, pediatric†§	-	22
foodborne	-	1	Measles, total	1¶	-
infant	-	1	Mumps	1	1
other (wound & unspecified)	-	-	Plague	-	-
Brucellosis†	-	-	Poliomyelitis, paralytic	-	-
Chancroid	-	-	Psittacosis†	-	-
Cholera	-	-	Q fever†	-	1
Cyclosporiasis†	-	-	Rabies, human	-	-
Diphtheria	-	-	Rubella	-	-
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	-
human granulocytic (HGE)†	1	-	SARS-associated coronavirus disease†**	-	-
human monocytic (HME)†	-	-	Smallpox† ††	-	NA
human, other and unspecified	-	-	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† ††	-	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† ††	-	NA
eastern equine†	-	-	Streptococcal toxic-shock syndrome†	3	2
Powassan†	-	-	Tetanus	-	-
St. Louis†	-	-	Toxic-shock syndrome	3	1
western equine†	-	-	Trichinosis	-	-
Hansen disease (leprosy)†	-	-	Tularemia†	-	-
Hantavirus pulmonary syndrome†	-	-	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 monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update November 30, 2003.
¶ Of one case reported, one was indigenous, and zero 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 January 10, 2004, and January 4, 2003 (1st 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	-	3,016	7,028	9,859	14	7	30	16	-	-
NEW ENGLAND	-	64	146	594	-	-	1	4	-	-
Maine	-	-	-	4	N	N	-	-	-	-
N.H.	-	1	-	14	-	-	-	-	-	-
Vt.	-	-	23	10	-	-	1	1	-	-
Mass.	-	1	-	184	-	-	-	3	-	-
R.I.	-	5	123	44	-	-	-	-	-	-
Conn.	-	57	-	338	N	N	-	-	-	-
MID. ATLANTIC	-	905	1,251	1,031	-	-	2	3	-	-
Upstate N.Y.	-	51	115	23	N	N	2	-	-	-
N.Y. City	-	430	560	392	-	-	-	2	-	-
N.J.	-	72	215	230	-	-	-	-	-	-
Pa.	-	352	361	386	N	N	-	1	-	-
E.N. CENTRAL	-	278	1,113	2,544	-	-	3	5	-	-
Ohio	-	61	22	772	-	-	2	-	-	-
Ind.	-	42	239	305	N	N	-	-	-	-
Ill.	-	81	298	1,058	-	-	-	1	-	-
Mich.	-	89	515	154	-	-	1	-	-	-
Wis.	-	5	39	255	-	-	-	4	-	-
W.N. CENTRAL	-	36	202	643	-	-	-	3	-	-
Minn.	-	-	-	161	N	N	-	-	-	-
Iowa	-	13	-	30	N	N	-	1	-	-
Mo.	-	22	171	271	-	-	-	1	-	-
N. Dak.	-	-	7	2	N	N	-	-	-	-
S. Dak.	-	1	24	23	-	-	-	1	-	-
Nebr.¶	-	-	-	33	-	-	-	-	-	-
Kans.	-	-	-	123	N	N	-	-	-	-
S. ATLANTIC	-	643	1,707	1,442	-	-	15	1	-	-
Del.	-	-	47	44	N	N	-	-	-	-
Md.	-	12	313	113	-	-	1	-	-	-
D.C.	-	157	-	83	-	-	-	-	-	-
Va.	-	137	548	189	-	-	-	-	-	-
W. Va.	-	-	44	32	N	N	-	-	-	-
N.C.	-	3	529	337	N	N	7	-	-	-
S.C.¶	-	35	-	36	-	-	-	-	-	-
Ga.	-	155	9	195	-	-	5	-	-	-
Fla.	-	144	217	413	N	N	2	1	-	-
E.S. CENTRAL	-	17	774	593	N	N	2	-	-	-
Ky.	-	5	-	86	N	N	-	-	-	-
Tenn.	-	-	396	94	N	N	2	-	-	-
Ala.	-	12	184	139	-	-	-	-	-	-
Miss.	-	-	194	274	N	N	-	-	-	-
W.S. CENTRAL	-	572	878	1,064	-	-	-	-	-	-
Ark.	-	-	92	72	-	-	-	-	-	-
La.	-	-	-	37	N	N	-	-	-	-
Okla.	-	1	232	45	N	N	-	-	-	-
Tex.	-	571	554	910	-	-	-	-	-	-
MOUNTAIN	-	120	359	689	-	7	-	-	-	-
Mont.	-	6	-	34	N	N	-	-	-	-
Idaho	-	-	26	48	N	N	-	-	-	-
Wyo.	-	1	-	13	-	-	-	-	-	-
Colo.	-	22	1	168	N	N	-	-	-	-
N. Mex.	-	-	20	29	-	-	-	-	-	-
Ariz.	-	78	312	273	-	6	-	-	-	-
Utah	-	6	-	24	-	-	-	-	-	-
Nev.	-	7	-	100	-	1	-	-	-	-
PACIFIC	-	381	598	1,259	14	-	7	-	-	-
Wash.	-	31	158	123	N	N	-	-	-	-
Oreg.	-	35	-	191	-	-	-	-	-	-
Calif.	-	312	423	876	14	-	7	-	-	-
Alaska	-	3	6	2	-	-	-	-	-	-
Hawaii	-	-	11	67	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	6	N	N	N	N	-	-
V.I.	-	-	-	3	-	-	-	-	-	-
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. 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 monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update November 30, 2003.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2004, and January 4, 2003 (1st 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	9	14	-	3	1	-	128	188	2,692	4,358
NEW ENGLAND	-	1	-	-	-	-	11	12	19	211
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	4
Vt.	-	-	-	-	-	-	1	1	-	-
Mass.	-	1	-	-	-	-	10	11	-	47
R.I.	-	-	-	-	-	-	-	-	19	18
Conn.	-	-	-	-	-	-	-	-	-	142
MID. ATLANTIC	1	4	-	-	-	-	19	41	418	540
Upstate N.Y.	-	-	-	-	-	-	4	1	40	14
N.Y. City	-	-	-	-	-	-	-	17	192	166
N.J.	-	2	-	-	-	-	6	11	90	168
Pa.	1	2	-	-	-	-	9	12	96	192
E.N. CENTRAL	3	8	-	-	1	-	27	39	343	1,363
Ohio	2	1	-	-	1	-	21	19	5	430
Ind.	-	-	-	-	-	-	-	-	75	127
Ill.	-	-	-	-	-	-	-	10	110	571
Mich.	1	2	-	-	-	-	6	4	138	144
Wis.	-	5	-	-	-	-	-	6	15	91
W.N. CENTRAL	-	1	-	-	-	-	6	18	101	279
Minn.	-	-	-	-	-	-	2	-	-	58
Iowa	-	-	-	-	-	-	4	9	-	7
Mo.	-	1	-	-	-	-	-	7	96	148
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	5	-
Nebr.	-	-	-	-	-	-	-	-	-	8
Kans.	-	-	-	-	-	-	-	2	-	58
S. ATLANTIC	1	-	-	2	-	-	45	33	810	700
Del.	-	-	N	N	N	N	-	2	19	20
Md.	-	-	-	-	-	-	1	4	143	97
D.C.	-	-	-	-	-	-	-	-	-	55
Va.	-	-	-	-	-	-	-	-	222	74
W. Va.	-	-	-	-	-	-	-	-	19	10
N.C.	-	-	-	2	-	-	N	N	284	129
S.C.	-	-	-	-	-	-	-	-	-	42
Ga.	-	-	-	-	-	-	24	19	10	73
Fla.	1	-	-	-	-	-	20	8	113	200
E.S. CENTRAL	-	-	-	-	-	-	2	4	416	357
Ky.	-	-	-	-	-	-	N	N	-	61
Tenn.	-	-	-	-	-	-	2	2	203	61
Ala.	-	-	-	-	-	-	-	2	117	91
Miss.	-	-	-	-	-	-	-	-	96	144
W.S. CENTRAL	-	-	-	1	-	-	-	-	319	438
Ark.	-	-	-	-	-	-	-	-	46	35
La.	-	-	-	-	-	-	-	-	-	11
Okla.	-	-	-	-	-	-	-	-	105	15
Tex.	-	-	-	1	-	-	-	-	168	377
MOUNTAIN	-	-	-	-	-	-	1	8	99	194
Mont.	-	-	-	-	-	-	-	-	-	3
Idaho	-	-	-	-	-	-	-	-	1	4
Wyo.	-	-	-	-	-	-	-	2	-	-
Colo.	-	-	-	-	-	-	-	5	-	60
N. Mex.	-	-	-	-	-	-	-	-	4	28
Ariz.	-	-	N	N	N	N	-	-	94	76
Utah	-	-	-	-	-	-	1	-	-	2
Nev.	-	-	-	-	-	-	-	1	-	21
PACIFIC	4	-	-	-	-	-	17	33	167	276
Wash.	-	-	-	-	-	-	-	-	37	21
Oreg.	1	-	-	-	-	-	2	1	-	19
Calif.	3	-	-	-	-	-	15	29	129	224
Alaska	-	-	-	-	-	-	-	2	-	-
Hawaii	-	-	-	-	-	-	-	1	1	12
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	1	-	-
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 January 10, 2004, and January 4, 2003 (1st 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	23	13	-	-	-	-	3	2	56	56
NEW ENGLAND	1	3	-	-	-	-	-	-	8	2
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	1	-	-	-	-	-	-	-	-	-
Mass.	-	1	-	-	-	-	-	-	7	2
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	2	-	-	-	-	-	-	1	-
MID. ATLANTIC	7	2	-	-	-	-	-	1	11	11
Upstate N.Y.	3	-	-	-	-	-	-	-	1	-
N.Y. City	-	1	-	-	-	-	-	1	-	6
N.J.	-	1	-	-	-	-	-	-	3	3
Pa.	4	-	-	-	-	-	-	-	7	2
E.N. CENTRAL	5	2	-	-	-	-	2	-	5	11
Ohio	3	-	-	-	-	-	1	-	1	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	2	-	-	-	-	-	-	2	4
Mich.	2	-	-	-	-	-	1	-	2	5
Wis.	-	-	-	-	-	-	-	-	-	2
W.N. CENTRAL	-	-	-	-	-	-	-	-	2	3
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	2	2
Mo.	-	-	-	-	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-
Kans.	-	-	-	-	-	-	-	-	-	-
S. ATLANTIC	9	2	-	-	-	-	1	-	22	21
Del.	-	-	-	-	-	-	-	-	-	-
Md.	2	2	-	-	-	-	-	-	3	6
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	-	-	-	-	-	-
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	5	-	-	-	-	-	1	-	11	2
Fla.	2	-	-	-	-	-	-	-	8	13
E.S. CENTRAL	1	2	-	-	-	-	-	1	-	2
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	1	-	-	-	-	-	-	-	-	-
Ala.	-	2	-	-	-	-	-	1	-	1
Miss.	-	-	-	-	-	-	-	-	-	1
W.S. CENTRAL	-	1	-	-	-	-	-	-	-	4
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	1	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	-	-	-	-	-	4
MOUNTAIN	-	1	-	-	-	-	-	-	1	-
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	1	-
Colo.	-	1	-	-	-	-	-	-	-	-
N. Mex.	-	-	-	-	-	-	-	-	-	-
Ariz.	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-	-	-
PACIFIC	-	-	-	-	-	-	-	-	7	2
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	-	-	-	-	-	-	-	-	2
Calif.	-	-	-	-	-	-	-	-	7	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
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 January 10, 2004, and January 4, 2003 (1st 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	38	104	7	38	17	13	4	4	60	75
NEW ENGLAND	1	6	-	-	-	1	-	1	1	7
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	1	-	-	-	-	-	-	-	1
Mass.	1	5	-	-	-	1	-	1	1	6
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	U	U	-	-	-	-	-	-
MID. ATLANTIC	1	8	-	-	2	3	1	1	54	53
Upstate N.Y.	1	-	-	-	-	-	-	-	28	-
N.Y. City	-	3	-	-	-	1	-	-	-	-
N.J.	-	4	-	-	1	-	1	-	9	31
Pa.	-	1	-	-	1	2	-	1	17	22
E.N. CENTRAL	2	12	2	3	9	2	1	1	-	3
Ohio	1	6	-	-	5	1	1	1	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	-	-	2	-	-	-	-	-	-
Mich.	1	1	2	1	4	1	-	-	-	-
Wis.	-	5	-	-	-	-	-	-	U	3
W.N. CENTRAL	-	2	-	-	-	1	-	-	-	1
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-
Mo.	-	2	-	-	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-
Kans.	-	-	-	-	-	1	-	-	-	-
S. ATLANTIC	29	69	4	1	6	2	2	-	1	9
Del.	-	-	-	-	-	-	N	N	-	3
Md.	-	1	1	-	1	1	-	-	1	6
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	3	-	1	-	-	-
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	21	63	-	1	-	1	1	-	-	-
Fla.	8	5	3	-	2	-	-	-	-	-
E.S. CENTRAL	-	2	-	3	-	-	-	1	-	-
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	-	2	-	-	-	-	-	-
Ala.	-	-	-	-	-	-	-	1	-	-
Miss.	-	2	-	1	-	-	-	-	-	-
W.S. CENTRAL	-	-	-	30	-	4	-	-	-	1
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	2	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	28	-	4	-	-	-	1
MOUNTAIN	1	3	-	-	-	-	-	-	-	1
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	1	-	-	-	-	-	-	-	-	-
Colo.	-	1	-	-	-	-	-	-	-	-
N. Mex.	-	1	-	-	-	-	-	-	-	-
Ariz.	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	1	-	-	-	-	-	-	-	1
PACIFIC	4	2	1	1	-	-	-	-	4	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	2	1	-	N	N	-	-	-	-
Calif.	4	-	-	-	-	-	-	-	4	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	2	-	-	-	-	-	-	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

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 January 10, 2004, and January 4, 2003 (1st 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	8	8	30	20	34	90	28	37	4	2
NEW ENGLAND	-	1	1	1	4	26	2	3	-	-
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	8	-	2	-	-
Mass.	-	1	1	1	4	17	2	1	-	-
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	1	-	-	-	-
MID. ATLANTIC	1	2	2	5	8	6	8	13	-	-
Upstate N.Y.	-	-	2	-	2	-	8	8	-	-
N.Y. City	-	1	-	2	-	-	-	1	-	-
N.J.	-	1	-	1	-	2	-	3	-	-
Pa.	1	-	-	2	6	4	-	1	-	-
E.N. CENTRAL	-	3	9	3	8	10	-	-	-	-
Ohio	-	1	6	2	5	6	-	-	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	1	-	-	-	-	-	-	-	-
Mich.	-	-	3	1	3	-	-	-	-	-
Wis.	-	1	-	-	-	4	-	-	-	-
W.N. CENTRAL	-	1	1	3	4	3	1	7	-	-
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	1	1	1	4	-	1	-	-	-
Mo.	-	-	-	2	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	1	-	-
Kans.	-	-	-	-	-	3	-	6	-	-
S. ATLANTIC	7	-	7	1	1	14	15	13	3	2
Del.	-	-	-	-	-	-	-	-	-	-
Md.	2	-	1	1	1	1	-	4	2	2
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	1	-	-	-
N.C.	-	-	-	-	-	-	14	6	-	-
S.C.	-	-	-	-	-	-	-	2	-	-
Ga.	1	-	-	-	-	13	-	-	1	-
Fla.	4	-	6	-	-	-	-	1	-	-
E.S. CENTRAL	-	-	2	2	2	-	-	-	1	-
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	2	-	2	-	-	-	1	-
Ala.	-	-	-	2	-	-	-	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	-	1	-	4	-	-	-	-	-	-
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	2	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	1	-	2	-	-	-	-	-	-
MOUNTAIN	-	-	-	-	-	7	2	1	-	-
Mont.	-	-	-	-	-	-	-	1	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	4	-	-	-	-
N. Mex.	-	-	-	-	-	-	-	-	-	-
Ariz.	-	-	-	-	-	2	2	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	1	-	-	-	-
PACIFIC	-	-	8	1	7	24	-	-	-	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	-	-	1	7	2	-	-	-	-
Calif.	-	-	8	-	-	22	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	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

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 January 10, 2004, and January 4, 2003 (1st 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	218	339	84	297	110	65	73	21	1	3
NEW ENGLAND	3	12	-	1	1	7	-	3	-	-
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	N	N
Vt.	1	-	-	-	-	1	-	1	-	-
Mass.	2	12	-	1	1	4	N	N	N	N
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	2	-	2	U	U
MID. ATLANTIC	14	49	6	31	8	15	3	1	1	-
Upstate N.Y.	3	-	2	-	3	-	1	-	1	-
N.Y. City	-	15	-	11	-	2	U	U	U	U
N.J.	5	17	2	15	1	3	N	N	N	N
Pa.	6	17	2	5	4	10	2	1	-	-
E.N. CENTRAL	24	61	5	18	22	17	11	-	-	2
Ohio	16	19	3	2	13	5	11	-	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	27	-	12	-	5	-	-	-	-
Mich.	8	3	2	1	9	2	N	N	N	N
Wis.	-	12	-	3	-	5	N	N	-	2
W.N. CENTRAL	3	9	-	13	-	5	-	8	-	-
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	3	3	-	-	N	N	N	N	N	N
Mo.	-	3	-	11	-	4	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	1	-	-	-	1	-	-	-	-
Nebr.	-	-	-	2	-	-	-	-	N	N
Kans.	-	2	-	-	-	-	-	8	N	N
S. ATLANTIC	121	104	59	159	47	3	57	6	-	-
Del.	-	-	-	10	-	-	-	-	N	N
Md.	11	8	2	18	3	1	-	-	-	-
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	N	N	N	N
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	18	22	10	-	-	-	N	N	U	U
S.C.	-	-	-	-	-	-	-	-	N	N
Ga.	33	26	16	74	36	1	39	3	N	N
Fla.	59	48	31	57	8	1	18	3	N	N
E.S. CENTRAL	11	17	1	16	10	1	2	-	-	-
Ky.	-	-	-	1	-	-	-	-	N	N
Tenn.	11	4	1	2	10	1	2	-	N	N
Ala.	-	7	-	9	-	-	-	-	N	N
Miss.	-	6	-	4	-	-	-	-	-	-
W.S. CENTRAL	1	35	4	27	-	12	-	3	-	1
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	5	-	1	-	-	-	3	-	-
Okla.	1	-	4	-	-	-	N	N	-	-
Tex.	-	30	-	26	-	12	N	N	-	1
MOUNTAIN	1	10	-	6	4	4	-	-	-	-
Mont.	-	1	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	N	N	N	N
Wyo.	-	-	-	1	1	-	-	-	-	-
Colo.	-	3	-	-	-	-	-	-	-	-
N. Mex.	-	2	-	5	3	2	-	-	-	-
Ariz.	-	-	-	-	-	2	-	-	N	N
Utah	1	-	-	-	-	-	-	-	-	-
Nev.	-	4	-	-	-	-	-	-	-	-
PACIFIC	40	42	9	26	18	1	-	-	-	-
Wash.	-	-	-	-	-	-	-	-	N	N
Oreg.	-	-	-	-	N	N	N	N	N	N
Calif.	35	40	8	25	16	-	N	N	N	N
Alaska	1	-	-	-	-	-	-	-	N	N
Hawaii	4	2	1	1	2	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	N	N	N	N	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

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 January 10, 2004, and January 4, 2003 (1st 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	54	89	1	9	41	62	1	1	130	138
NEW ENGLAND	-	2	-	-	1	1	-	-	17	21
Maine	-	-	-	-	-	-	-	-	-	15
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	17	2
Mass.	-	1	-	-	-	-	-	-	-	4
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	1	-	-	1	1	-	-	-	-
MID. ATLANTIC	3	9	-	3	-	7	-	1	1	-
Upstate N.Y.	-	-	-	-	-	-	-	-	-	-
N.Y. City	1	5	-	1	-	7	-	1	-	-
N.J.	2	2	-	2	-	-	-	-	-	-
Pa.	-	2	-	-	-	-	-	-	1	-
E.N. CENTRAL	9	19	1	2	31	1	1	-	70	58
Ohio	4	2	-	-	-	1	1	-	34	33
Ind.	2	1	-	1	1	-	-	-	-	-
Ill.	-	13	-	1	30	-	-	-	-	-
Mich.	3	3	1	-	-	-	-	-	36	22
Wis.	-	-	-	-	-	-	-	-	-	3
W.N. CENTRAL	-	9	-	-	-	4	-	-	-	-
Minn.	-	1	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	N	N
Mo.	-	3	-	-	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	1	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-
Kans.	-	5	-	-	-	3	-	-	-	-
S. ATLANTIC	25	19	-	4	-	3	-	-	37	38
Del.	1	-	-	-	-	-	-	-	-	-
Md.	5	1	-	2	-	-	-	-	-	-
D.C.	-	1	-	-	-	-	-	-	-	-
Va.	1	2	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	37	38
N.C.	1	2	-	-	-	-	-	-	-	-
S.C.	-	2	-	2	-	-	-	-	-	-
Ga.	-	1	-	-	-	3	-	-	-	-
Fla.	17	10	-	-	-	-	-	-	-	-
E.S. CENTRAL	3	3	-	-	1	3	-	-	-	-
Ky.	-	1	-	-	-	-	-	-	-	-
Tenn.	3	2	-	-	-	-	-	-	-	-
Ala.	-	-	-	-	1	3	-	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	10	6	-	-	-	36	-	-	-	21
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	-	-	-	-	-
Okla.	1	-	-	-	-	-	-	-	-	-
Tex.	9	6	-	-	-	36	-	-	-	21
MOUNTAIN	1	2	-	-	1	1	-	-	5	-
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	1	-	-	3	-
Colo.	-	-	-	-	-	-	-	-	-	-
N. Mex.	-	1	-	-	-	-	-	-	-	-
Ariz.	1	-	-	-	-	-	-	-	-	-
Utah	-	1	-	-	1	-	-	-	2	-
Nev.	-	-	-	-	-	-	-	-	-	-
PACIFIC	3	20	-	-	7	6	-	-	-	-
Wash.	-	-	-	-	-	1	-	-	-	-
Oreg.	-	1	-	-	-	-	-	-	-	-
Calif.	3	19	-	-	5	5	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	2	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
V.I.	-	1	-	-	-	-	-	-	-	-
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 III. Deaths in 122 U.S. cities,* week ending January 10, 2004 (1st Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	547	423	86	24	7	7	87
Boston, Mass.	U	U	U	U	U	U	U
Bridgeport, Conn.	46	35	8	3	-	-	3
Cambridge, Mass.	28	24	4	-	-	-	3
Fall River, Mass.	41	37	4	-	-	-	9
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	38	32	6	-	-	-	8
Lynn, Mass.	10	8	-	2	-	-	1
New Bedford, Mass.	35	29	5	1	-	-	3
New Haven, Conn.	55	37	13	3	1	1	13
Providence, R.I.	84	61	17	3	2	1	15
Somerville, Mass.	6	3	2	1	-	-	1
Springfield, Mass.	68	48	9	6	-	5	8
Waterbury, Conn.	42	35	6	-	1	-	6
Worcester, Mass.	94	74	12	5	3	-	17
MID. ATLANTIC	2,264	1,605	423	135	53	46	202
Albany, N.Y.	68	48	12	3	2	3	7
Allentown, Pa.	20	19	1	-	-	-	2
Buffalo, N.Y.	101	72	22	4	1	2	16
Camden, N.J.	U	U	U	U	U	U	U
Elizabeth, N.J.	25	19	3	1	1	1	-
Erie, Pa.	76	68	6	2	-	-	7
Jersey City, N.J.	57	38	14	3	1	1	-
New York City, N.Y.	1,006	712	199	63	17	13	59
Newark, N.J.	59	27	12	11	5	4	8
Paterson, N.J.	43	28	9	2	3	1	8
Philadelphia, Pa.	250	113	83	22	16	16	16
Pittsburgh, Pa.§	38	27	5	5	-	1	3
Reading, Pa.	38	36	1	1	-	-	6
Rochester, N.Y.	150	123	16	7	3	1	20
Schenectady, N.Y.	29	23	5	1	-	-	5
Scranton, Pa.	53	49	4	-	-	-	7
Syracuse, N.Y.	181	144	22	9	4	2	34
Trenton, N.J.	29	24	3	1	-	1	-
Utica, N.Y.	20	17	3	-	-	-	2
Yonkers, N.Y.	21	18	3	-	-	-	2
E.N. CENTRAL	2,966	2,108	575	160	62	60	311
Akron, Ohio	94	65	20	3	2	4	23
Canton, Ohio	61	52	7	2	-	-	16
Chicago, Ill.	356	211	87	36	13	8	35
Cincinnati, Ohio	129	84	30	5	4	6	18
Cleveland, Ohio	323	246	57	12	4	4	13
Columbus, Ohio	306	223	59	13	8	3	36
Dayton, Ohio	214	159	35	11	5	4	20
Detroit, Mich.	234	121	67	28	11	7	17
Evansville, Ind.	79	60	16	2	-	1	8
Fort Wayne, Ind.	108	80	18	4	3	3	10
Gary, Ind.	U	U	U	U	U	U	U
Grand Rapids, Mich.	104	78	17	8	-	1	18
Indianapolis, Ind.	258	181	57	10	4	6	26
Lansing, Mich.	44	31	10	-	-	3	6
Milwaukee, Wis.	160	125	24	7	1	3	25
Peoria, Ill.	55	43	6	-	2	4	7
Rockford, Ill.	86	62	15	8	-	1	8
South Bend, Ind.	125	94	24	3	3	1	9
Toledo, Ohio	135	112	15	7	1	-	8
Youngstown, Ohio	95	81	11	1	1	1	8
W.N. CENTRAL	656	459	118	42	17	20	74
Des Moines, Iowa	102	74	18	6	-	4	17
Duluth, Minn.	46	36	9	1	-	-	9
Kansas City, Kans.	20	6	4	7	3	-	1
Kansas City, Mo.	55	46	8	1	-	-	8
Lincoln, Nebr.	83	61	13	2	4	3	7
Minneapolis, Minn.	67	46	9	6	3	3	6
Omaha, Nebr.	141	99	27	7	4	4	16
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	71	49	15	4	1	2	4
Wichita, Kans.	71	42	15	8	2	4	6
S. ATLANTIC	1,596	1,047	343	122	45	38	147
Atlanta, Ga.	131	85	26	16	2	2	5
Baltimore, Md.	249	147	56	33	7	6	32
Charlotte, N.C.	211	152	31	12	9	7	33
Jacksonville, Fla.	185	127	44	3	7	4	16
Miami, Fla.	U	U	U	U	U	U	U
Norfolk, Va.	96	58	26	7	1	4	12
Richmond, Va.	93	56	25	5	3	3	5
Savannah, Ga.	96	59	25	9	1	2	13
St. Petersburg, Fla.	75	57	12	3	1	2	8
Tampa, Fla.	241	175	43	17	3	3	17
Washington, D.C.	200	114	55	15	11	5	4
Wilmington, Del.	19	17	-	2	-	-	2
E.S. CENTRAL	1,056	709	222	90	19	16	110
Birmingham, Ala.	199	125	41	19	7	7	35
Chattanooga, Tenn.	119	82	25	7	2	3	11
Knoxville, Tenn.	152	106	34	11	1	-	5
Lexington, Ky.	77	52	19	4	1	1	5
Memphis, Tenn.	126	86	17	17	4	2	9
Mobile, Ala.	75	50	17	5	2	1	5
Montgomery, Ala.	94	59	25	10	-	-	13
Nashville, Tenn.	214	149	44	17	2	2	27
W.S. CENTRAL	1,560	1,016	338	109	46	51	121
Austin, Tex.	120	82	24	8	-	6	15
Baton Rouge, La.	U	U	U	U	U	U	U
Corpus Christi, Tex.	64	51	6	3	3	1	7
Dallas, Tex.	266	167	62	20	9	8	27
El Paso, Tex.	136	94	26	13	2	1	6
Ft. Worth, Tex.	165	120	28	9	6	2	17
Houston, Tex.	477	287	112	36	22	20	25
Little Rock, Ark.	104	60	32	7	2	3	5
New Orleans, La.	42	26	12	4	-	-	-
San Antonio, Tex.	U	U	U	U	U	U	U
Shreveport, La.	33	25	7	1	-	-	6
Tulsa, Okla.	153	104	29	8	2	10	13
MOUNTAIN	1,100	759	220	83	24	14	85
Albuquerque, N.M.	167	120	32	11	3	1	11
Boise, Idaho	47	36	8	1	1	1	2
Colo. Springs, Colo.	71	51	12	5	1	2	4
Denver, Colo.	104	66	21	8	5	4	11
Las Vegas, Nev.	268	176	65	20	6	1	21
Ogden, Utah	40	32	6	2	-	-	5
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	45	32	4	7	2	-	4
Salt Lake City, Utah	162	104	33	17	5	3	14
Tucson, Ariz.	196	142	39	12	1	2	13
PACIFIC	2,845	2,078	493	166	71	31	345
Berkeley, Calif.	23	14	5	3	-	1	3
Fresno, Calif.	212	152	38	15	6	1	18
Glendale, Calif.	83	67	12	1	2	1	12
Honolulu, Hawaii	121	94	17	2	1	7	9
Long Beach, Calif.	106	68	26	9	3	-	23
Los Angeles, Calif.	1,489	1,114	241	88	35	11	175
Pasadena, Calif.	U	U	U	U	U	U	U
Portland, Oreg.	47	36	7	4	-	-	-
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	264	194	52	10	6	2	41
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	169	115	33	8	9	4	18
Santa Cruz, Calif.	12	8	2	1	1	-	1
Seattle, Wash.	117	78	22	11	4	2	17
Spokane, Wash.	81	54	19	4	2	2	10
Tacoma, Wash.	121	84	19	10	2	-	18
TOTAL	14,590¶	10,204	2,818	931	344	283	1,482

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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