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National Diabetes Awareness Month — November 2003

November is National Diabetes Awareness Month. During November, 59 state and territorial diabetes prevention and control programs, the National Institutes of Health, the American Diabetes Association, community-based organizations, other partners, and CDC will highlight activities that increase awareness about diabetes. An estimated 17 million persons in the United States have diabetes. Heart disease and stroke are the leading causes of diabetes-related deaths. Adults with diabetes have a two to four times higher risk for stroke, and their death rate from heart disease is two to four times higher than adults without diabetes (*1*). During 1990–2000, the prevalence of diagnosed diabetes, including gestational diabetes, increased 49% among U.S. adults (*2*).

Each week in November, *MMWR* will publish reports related to diabetes. In addition, CDC has prepared two reports, "Helping the Student with Diabetes Succeed: A Guide for School Personnel" (available at http://www.ndep.nih.gov/diabetes/pubs/youth_schoolguide.pdf) and "Public Health Approaches in Diabetes Prevention and Control," which describes population-based diabetes prevention and control interventions (*3*). Additional information about diabetes is available from CDC at http://www.cdc.gov/diabetes.

References

1. CDC. National diabetes fact sheet: national estimates and general information on diabetes in the United States. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2002.
2. Mokdad AH, Bowman BA, Ford ES, et al. The continuing epidemics of obesity and diabetes in the United States. JAMA 2001;286:1195–200.
3. Jack L Jr, Narayan KMV, Satterfield D, Lanza A. Public health approaches in diabetes prevention and control. J Public Health Manag Pract 2003;9(suppl):1–80.

Self-Reported Heart Disease and Stroke Among Adults With and Without Diabetes — United States, 1999–2001

Heart disease and stroke are the first and third leading causes of death among U.S. adults (*1*). Adults with diabetes have a twofold to fourfold greater risk for dying from cardiovascular diseases than adults without diabetes (*1*). In addition, although the annual incidence of deaths attributed to cardiovascular diseases declined substantially among U.S. adults during 1970–1994, it decreased less among those with diabetes (*2*). To compare the prevalence of heart disease and stroke among adults with and without diabetes, CDC analyzed data from the 1999–2001 National Health Interview Surveys (NHIS). This report summarizes the results of that analysis, which indicate that the age-adjusted prevalence of heart disease and stroke is approximately two to three times greater among adults with diabetes than among adults without diabetes. Increased efforts are needed to prevent diabetes and reduce the prevalence of cardiovascular disease risk factors (e.g., hypertension

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and high cholesterol) in the United States, particularly among adults with diabetes.

NHIS is a stratified, multistage probability sample survey representing the U.S. civilian, noninstitutionalized population. In this analysis, only data for respondents aged ≥35 years were analyzed because of the low prevalence of cardiovascular disease among young adults and children. For 1999, 2000, and 2001, response rates were 69.6%, 72.1%, and 73.8%, respectively. Respondents were classified as having diabetes if they answered "yes" to the question, "Have you ever been told by a doctor or health professional that you have diabetes or sugar diabetes?" Women who had diabetes only during pregnancy were classified as not having diabetes. Respondents were classified as having a cardiovascular condition if they reported having a medical history of at least one of the following: coronary heart disease (CHD) including angina pectoris and myocardial infarction; stroke; or another type of heart condition (other than CHD, angina pectoris, and myocardial infarction). The prevalence of each condition was determined for the overall U.S. population with and without diabetes and for specific demographic characteristics (i.e., age, sex, race/ethnicity, and education level). Logistic regression analysis was used to estimate the demographically adjusted probability of having heart disease or stroke diagnosed. Because no substantial difference was observed between the age-adjusted and adjusted prevalences for all demographic characteristics, only the age-adjusted prevalences of heart disease and stroke are presented for each population. Prevalence ratios were calculated by dividing the prevalence of heart disease or stroke among adults with diabetes by the prevalence among adults without diabetes. Chi square analysis was used to test for statistical significance, and SUDAAN was used to calculate confidence intervals (CIs). Data were weighted to reflect the age, sex, and racial/ethnic distribution of the adult U.S. population.

During 1999–2001, adults with diabetes were significantly more likely than adults without diabetes to report a history of CHD (24.5% versus 6.6%), stroke (9.3% versus 2.6%), other heart condition (17.8% versus 8.1%), and at least one of these conditions (37.2% versus 13.9) (Table). After data were adjusted for age, adults with diabetes were 3.2 (95% CI = 2.9–3.4) times more likely than those without diabetes to report a history of CHD, 2.9 (95% CI = 2.5–3.2) times more likely to report a history of stroke, and 1.9 (95% CI = 1.8–2.1) times more likely to report another heart condition (Figure). These differences were greatest among adults aged 35–64 years with diabetes, who were 5.1 times more likely to report a history of CHD, 4.9 times more likely to report a history of stroke, 2.4 times more likely to report another heart condition, and 3.1 times more likely to report at least one of these

TABLE. Prevalence of heart disease and stroke among adults aged ≥35 years with and without diabetes, by condition, age group, sex, race/ethnicity, and education level — United States, 1999–2001*

Condition	Diabetes %	Diabetes (95% CI†)	No diabetes %	No diabetes (95% CI)	Prevalence ratio %	Prevalence ratio (95% CI)
Coronary heart disease						
Age group (yrs)						
35–64	18.4	(16.8–20.1)	3.6	(3.4–3.8)	5.1	(4.6–5.7)
65–74	31.2	(28.5–34.0)	14.3	(13.3–15.2)	2.2	(1.9–2.4)
≥75	35.3	(32.1–38.5)	20.6	(19.5–21.6)	1.7	(1.5–1.9)
Total	**24.5**	**(23.2–25.8)**	**6.6**	**(6.4–6.9)**	**3.7**	**(3.5–4.0)**
Sex						
Male	25.7	(23.6–27.7)	9.2	(8.8–9.6)	2.8	(2.5–3.0)
Female	18.5	(16.8–20.3)	5.3	(5.0–5.5)	3.5	(3.1–3.9)
Race/Ethnicity						
White, non-Hispanic	24.0	(22.3–25.8)	7.2	(6.9–7.5)	3.3	(3.1–3.6)
Black, non-Hispanic	19.8	(16.8–22.8)	6.5	(5.8–7.2)	3.0	(2.5–3.6)
Hispanic	15.3	(12.5–18.1)	5.7	(5.0–6.4)	2.7	(2.1–3.3)
Education level						
<High school	24.7	(21.8–27.5)	9.0	(8.5–9.6)	2.7	(2.4–3.1)
High school	21.2	(18.9–23.5)	6.9	(6.4–7.3)	3.1	(2.7–3.5)
>High school	21.4	(19.3–23.5)	6.6	(6.2–6.9)	3.2	(2.9–3.6)
Stroke						
Age group (yrs)						
35–64	5.9	(4.9–6.9)	1.2	(1.1–1.4)	4.9	(4.0–5.9)
65–74	11.6	(9.7–13.6)	5.5	(4.9–6.1)	2.1	(1.7–2.5)
≥75	17.0	(14.6–19.5)	9.7	(8.9–10.5)	1.8	(1.5–2.0)
Total	**9.3**	**(8.4–10.1)**	**2.6**	**(2.5–2.8)**	**3.6**	**(3.2–4.0)**
Sex						
Male	8.1	(6.8–9.4)	3.0	(2.8–3.3)	2.7	(2.2–3.2)
Female	7.8	(6.8–8.8)	2.6	(2.5–2.8)	3.0	(2.6–3.4)
Race/Ethnicity						
White, non-Hispanic	7.5	(6.5–8.5)	2.7	(2.5–2.8)	2.8	(2.4–3.2)
Black, non-Hispanic	10.6	(8.5–12.8)	4.1	(3.5–4.6)	2.6	(1.9–3.2)
Hispanic	7.5	(5.9–9.2)	2.3	(1.7–2.8)	3.3	(2.2–4.3)
Education level						
<High school	10.1	(8.1–12.1)	3.9	(3.5–4.3)	2.6	(2.0–3.2)
High school	7.0	(5.7–8.2)	2.9	(2.7–3.2)	2.4	(1.9–2.9)
>High school	7.2	(5.9–8.4)	2.2	(2.0–2.4)	3.3	(2.6–3.9)
Other heart conditions						
Age group (yrs)						
35–64	14.3	(12.8–15.7)	5.9	(5.6–6.1)	2.4	(2.2–2.7)
65–74	22.5	(20.2–24.9)	13.4	(12.5–14.3)	1.7	(1.5–1.9)
≥75	22.7	(19.9–25.5)	18.8	(17.7–19.8)	1.2	(1.0–1.4)
Total	**17.8**	**(16.6–18.9)**	**8.1**	**(7.8–8.3)**	**2.2**	**(2.0–2.4)**
Sex						
Male	16.3	(14.7–18.0)	8.1	(7.8–8.5)	2.0	(1.8–2.2)
Female	16.3	(14.6–18.0)	8.7	(8.3–9.0)	1.9	(1.7–2.1)
Race/Ethnicity						
White, non-Hispanic	18.4	(16.8–20.1)	8.9	(8.6–9.2)	2.1	(1.9–2.3)
Black, non-Hispanic	14.4	(11.9–16.9)	6.9	(6.2–7.5)	2.1	(1.7–2.5)
Hispanic	9.4	(7.2–11.5)	4.9	(4.2–5.6)	1.9	(1.4–2.4)
Education level						
<High school	17.3	(14.9–19.7)	8.7	(8.1–9.3)	2.0	(1.7–2.3)
High school	16.5	(14.4–18.7)	7.7	(7.3–8.1)	2.1	(1.8–2.4)
>High school	15.7	(13.9–17.5)	8.8	(8.4–9.2)	1.8	(1.6–2.0)
At least one condition						
Age group (yrs)						
35–64	28.8	(26.9–30.8)	9.2	(8.8–9.5)	3.1	(2.9–3.4)
65–74	45.7	(42.9–48.5)	25.6	(24.4–26.7)	1.8	(1.6–1.9)
≥75	53.5	(50.2–56.8)	37.2	(36.0–38.4)	1.4	(1.3–1.5)
Total	**37.2**	**(35.7–38.7)**	**13.9**	**(13.6–14.3)**	**2.7**	**(2.6–2.8)**
Sex						
Male	35.6	(33.4–37.8)	15.9	(15.4–16.4)	2.2	(2.1–2.4)
Female	32.3	(30.1–34.4)	13.7	(13.3–14.1)	2.4	(2.2–2.5)
Race/Ethnicity						
White, non-Hispanic	36.3	(34.2–38.3)	15.2	(14.8–15.5)	2.4	(2.2–2.5)
Black, non-Hispanic	33.1	(29.7–36.4)	14.1	(13.1–15.0)	2.3	(2.1–2.6)
Hispanic	23.4	(20.3–26.6)	10.3	(9.4–11.2)	2.3	(1.9–2.6)
Education level						
<High school	36.7	(33.8–39.7)	17.1	(16.3–17.8)	2.1	(1.9–2.3)
High school	34.2	(31.5–36.8)	14.1	(13.6–14.7)	2.4	(2.2–2.6)
>High school	32.3	(29.9–34.7)	14.1	(13.7–14.6)	2.3	(2.1–2.5)

* Sex, race/ethnicity, and education level were age-adjusted according to the 2000 U.S. population.
† Confidence interval.

conditions than adults of similar age without diabetes (Table). Overall, adults aged ≥35 years with diabetes were 2.3 (95% CI = 2.2–2.4) times more likely to report having at least one condition, 3.3 (95% CI = 2.9–3.7) times more to report at least two conditions, and 5.3 (95% CI = 3.6–7.1) times more likely to report at least three conditions (Figure).

Among adults with and without diabetes, the prevalence of any cardiovascular condition increased with age ($p<0.05$), the prevalence of CHD was higher among men than women ($p<0.05$), non-Hispanic whites had the highest prevalence of CHD and other heart conditions, and non-Hispanic blacks had the highest prevalence of stroke (Table). Among those with diabetes, no significant correlation was observed between education level and prevalence of heart disease or stroke. However, among those without diabetes, the prevalence of CHD and stroke was associated inversely with education level ($p<0.05$).

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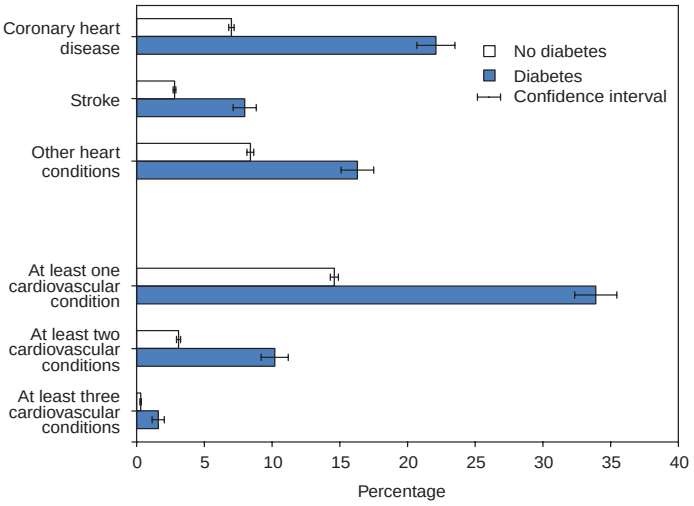
Editorial Note: The findings in this report indicate that the age-adjusted prevalence of reported heart disease and stroke is approximately two to three times greater among persons with diabetes than among persons without diabetes. These results are consistent with mortality data, which indicate that cardiovascular disease death rates are two to four times higher for adults with diabetes than for adults without diabetes.

Antihypertensive treatment, aspirin use, lipid-lowering medication, and promotion of healthy lifestyles reduce the risk for heart disease and stroke in persons with and without diabetes (*3,4*). However, a substantial proportion of persons with diabetes have uncontrolled blood pressure and dyslipidemia and do not take aspirin (*5*).

FIGURE. Age-adjusted prevalence of heart disease and stroke among adults aged ≥35 years with and without diabetes — United States, 1999–2001



Persons with diabetes and those with heart disease also are both more likely than those without diabetes to have other risk factors associated with ill health (e.g., overweight/obesity, physical inactivity, and poor diet).

In 2001, the National Diabetes Education Program (NDEP), cosponsored by CDC and the National Institutes of Health, started the "Be Smart About Your Heart: Control the ABCs of Diabetes" campaign to educate persons with diabetes about their high risk for heart disease and stroke and what they can do to lower that risk. Information about the campaign is available from NDEP at http://ndep.nih.gov/campaigns/BeSmart/BeSmart_index.htm. In addition, CDC and the Health Resources and Service Administration established the National Diabetes Collaborative, a partnership of public and private agencies, to increase access to and improve the quality of diabetes care in approximately 395 health centers.

The findings of this survey identified various demographic characteristics associated with an increased prevalence of heart disease and stroke among adults with and without diabetes. For both populations, prevalences were higher among men than among women. Non-Hispanic blacks were more likely than non-Hispanic whites or Hispanics to report having had a stroke, probably because of the high prevalence of hypertension among blacks (*6*).

Prevention of diabetes can decrease the prevalence of heart disease and stroke. Improved diet, weight loss, and increased physical activity can prevent or delay the onset of diabetes among adults with impaired glucose tolerance (*7*). In 2003, the U.S. Department of Health and Human Services initiated the "Steps to a HealthierUS" program to reduce the prevalence of diabetes, overweight, obesity, and asthma and address physical inactivity, poor nutrition, and tobacco use.

The findings in this report are subject to at least five limitations. First, NHIS data on history of diabetes, heart disease, and stroke are based on self-reports. However, rates of these conditions based on self-reports have been shown to be highly accurate and only slightly higher than those based on physician reports (*8*); such rates have a high validity among adults with diagnosed diabetes (*9*). Second, because approximately one third of U.S. adults have undiagnosed diabetes (*10*), the results might underestimate the difference in heart disease or stroke prevalence between adults with and without diabetes. Third, because NHIS excludes institutionalized persons, a population at high risk for illness, the results might underestimate the prevalence of heart disease and stroke. Fourth, differences in prevalence of heart disease and stroke between persons with and without diabetes in part might be due to differences in how the groups were screened for those conditions. Finally, because only survivors of heart disease and stroke were studied, the prevalence estimates might not reflect the true burden of disease in the U.S. population or in any of the demographic groups studied.

Heart diseases and stroke impose a substantially greater burden on persons with diabetes than on persons without diabetes. To reduce the incidence of heart disease and stroke, a concerted effort is needed among health-care providers, public health officials, members of community-based organizations, patients, and their families.

References

1. Barrett-Connor E, Wingard DL. Heart disease and diabetes. In: Diabetes in America. Bethesda, Maryland: National Institutes of Health, 1995:429–56; NIH publication no. 95-1468.
2. Thomas RJ, Palumbo PJ, Melton LJ, et al. Trends in the mortality burden associated with diabetes mellitus: a population-based study in Rochester, Minnesota, 1970–1994. Arch Intern Med 2003;163:445–51.
3. Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. The seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC VII). JAMA 2003;289:2560–72.
4. Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. Executive summary of the third report of the National Cholesterol Education Program (NCEP). JAMA 2001;285:2486–97.
5. Rolka DB, Fagot-Campagna A, Venkat Narayan KM. Aspirin use among adults with diabetes: estimates from the Third National Health and Nutrition Examination Survey. Diabetes Care 2001;24:197–201.
6. Kittner SJ, White LR, Losonczy KG, et al. Black-white differences in stroke incidence in a national sample: the contribution of hypertension and diabetes mellitus. JAMA 1990;264:1267–70.
7. Diabetes Prevention Program Research Group. The Diabetes Prevention Program: reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. N Engl J Med 2002;346:393–403.
8. Bergmann MM, Byers T, Freedman DS, Mokdad A. Validity of self-reported diagnoses leading to hospitalization: a comparison of self-reports with hospital records in a prospective study of American adults. Am J Epidemiol 1998;147:969–77.

a•ware: *adj*

(ə-'wâr) 1 : marked by comprehension, cognizance, and perception; see also *MMWR*.

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9. Edwards WS, Winn DM, Kurlantzick V, et al. Evaluation of National Health Interview Survey diagnostic reporting. Hyattsville, Maryland: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Health Statistics, 1994. Vital Health Stat 1994;2:1–116.
10. Harris MI, Flegal KM, Cowie CC, et al. Prevalence of diabetes, impaired fasting glucose, and impaired glucose tolerance in U.S. adults. Diabetes Care 1998;21:518–24.

Tobacco, Alcohol, and Other Drug Use Among High School Students in Bureau of Indian Affairs–Funded Schools — United States, 2001

In the United States, use of alcohol and other drugs is associated with the three leading causes of death and disability (i.e., unintentional injuries, primarily from motor vehicle crashes; suicide; and homicide) among American Indian/Alaska Native (AI/AN) persons aged 15–24 years (*1*), and tobacco use is associated with the two leading causes of death (i.e., heart disease and cancer) (*1,2*) among AI/AN adults. This report presents data about the prevalence of tobacco, alcohol, and other drug use among high school students at schools funded by the Bureau of Indian Affairs (BIA). The findings indicate that a substantial number of these students engage in behaviors that put them at risk for premature death and disability and underscore the need for expanded health education and counseling programs and policies in AI communities and BIA-funded schools.

The Youth Risk Behavior Surveillance System measures the prevalence of health-risk behaviors among adolescents through representative school-based surveys conducted at the national, state, and local levels and among certain populations. In 2001, BIA conducted the Youth Risk Behavior Survey (YRBS) among students in grades 9–12 attending schools funded by BIA. BIA-funded schools (i.e., day schools, boarding schools, and dormitories) are located on 63 reservations in 23 states. These schools are operated either by BIA or by AI tribes or tribal organizations under contract or grant with BIA. BIA funds 185 schools with approximately 50,000 students in kindergarten and grades 1–12, including approximately 8,500 high school students.

Principals in participating schools sent information about YRBS to parents, including a permission form. The survey was administered by using standard YRBS procedures (*3*). Students voluntarily completed an anonymous, self-administered questionnaire that included questions about tobacco, alcohol, and other drug use (i.e., marijuana, inhalant, cocaine, and methamphetamine use). For each substance, lifetime use was defined as ever having used the substance, and current use was defined as having used the substance on ≥1 day during the 30 days preceding the survey. Current frequent cigarette use was defined as having smoked on ≥20 of the 30 days preceding the survey. Among current smokers, tried to quit smoking was defined as trying to quit during the 12 months preceding the survey. Episodic heavy drinking was defined as drinking at least five alcohol drinks on at least one occasion on ≥1 day during the 30 days preceding the survey.

For this survey, BIA attempted a census of high school students; all BIA-funded high schools and all students in grades 9–12 attending those schools were eligible to participate. However, four small BIA-funded schools with <10 students in grades 9–12 were excluded because of concerns related to student privacy. Questionnaires were completed by 5,654 (66.4%) of 8,511 eligible students from 66 (91.7%) of 72 eligible schools. The overall response rate was 60.8%. Data were weighted to provide national estimates of AI high school students attending BIA-funded schools.

The majority of students reported lifetime (87.7%) and current (56.5%) cigarette use, and 24.4% reported current frequent cigarette use (Table 1). More students in grade 12 reported lifetime, current, and frequent cigarette use than students in grade 9. Among current smokers, more than two thirds (67.4%) reported attempting to quit smoking during the 12 months preceding the survey, with more females than males reporting a quit attempt. Approximately one in five students reported current use of smokeless tobacco (20.2%) and cigars (18.9%). More males than females reported current smokeless tobacco and cigar use.

Lifetime alcohol use was reported by 80.7% of students, current alcohol use by 48.8%, and episodic heavy drinking by 38.4%. Current alcohol use and episodic heavy drinking were more common among males than females (Table 2). Rates of lifetime alcohol use, current alcohol use, and episodic heavy drinking increased with grade level.

More than three fourths (77.0%) of students reported lifetime marijuana use, and approximately half (49.7%) reported current marijuana use. Approximately one fifth of students reported lifetime cocaine (21.3%) and methamphetamine (20.2%) use. Lifetime marijuana, cocaine, and methamphetamine use increased by grade; however, current marijuana and inhalant use were more common among students in grade 9 than grade 12.

Reported by: *L Shaughnessy, MA, Office of Indian Education Programs, Bur of Indian Affairs. S Everett Jones, PhD, Div of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

TABLE 1. Percentage of high school students at schools funded by the Bureau of Indian Affairs (BIA) who reported tobacco use, by sex and grade — BIA Youth Risk Behavior Survey, United States, 2001

Characteristic	% lifetime cigarette use*	% current cigarette use†	% current frequent cigarette use§	% tried to quit smoking cigarettes¶	% current smokeless tobacco use**	% current cigar use††
Sex						
Female	89.2	56.7	23.3	70.8	14.5	12.4
Male	86.1	56.3	25.5	63.5	26.1	25.4
Grade						
9	84.9	52.7	21.8	67.2	20.1	17.7
10	88.7	54.9	23.5	68.0	22.1	18.1
11	88.1	58.5	25.7	69.6	19.6	20.3
12	90.4	63.5	28.9	64.3	18.7	20.3
Total	**87.7**	**56.5**	**24.4**	**67.4**	**20.2**	**18.9**

* Ever tried cigarette smoking, even one or two puffs.
† Smoked cigarettes on ≥1 of the 30 days preceding the survey.
§ Smoked cigarettes on ≥20 of the 30 days preceding the survey.
¶ Among current smokers, tried to quit smoking during the 12 months preceding the survey.
** Used chewing tobacco or snuff on ≥1 of the 30 days preceding the survey.
†† Smoked cigars, cigarillos, or little cigars on ≥1 of the 30 days preceding the survey.

TABLE 2. Percentage of high school students at schools funded by the Bureau of Indian Affairs (BIA) who reported alcohol and other drug use, by sex and grade — BIA Youth Risk Behavior Survey, United States, 2001

Characteristic	% lifetime alcohol use*	% current alcohol use†	% episodic heavy drinking§	% lifetime marijuana use¶	% current marijuana use**	% current inhalant use††	% lifetime cocaine use§§	% lifetime metham-phetamine use¶¶
Sex								
Female	82.9	46.8	36.6	77.2	47.7	4.9	21.6	21.4
Male	78.3	50.9	40.3	76.8	51.6	5.1	21.1	19.0
Grade								
9	75.0	45.4	36.0	73.6	51.5	6.3	18.2	18.0
10	80.5	48.1	39.0	75.7	49.2	4.7	20.2	19.7
11	84.4	51.5	39.1	79.5	50.0	4.4	23.3	19.6
12	86.9	52.8	41.7	81.8	46.4	3.5	26.5	25.4
Total	**80.7**	**48.8**	**38.4**	**77.0**	**49.7**	**5.0**	**21.3**	**20.2**

* Ever had one or more drinks of alcohol.
† Drank alcohol on ≥1 of the 30 days preceding the survey.
§ Drank five or more drinks of alcohol on one occasion on ≥1 of the 30 days preceding the survey.
¶ Ever used marijuana.
** Used marijuana on ≥1 of the 30 days preceding the survey.
†† Sniffed glue or breathed the contents of aerosol spray cans or inhaled any paints or sprays to become intoxicated on ≥1 of the 30 days preceding the survey.
§§ Ever tried any form of cocaine (e.g., powder, "crack," or "freebase").
¶¶ Ever used methamphetamines (also called "speed," "crystal," "crank," or "ice").

Editorial Note: The findings in this report indicate that a substantial number of high school students at BIA-funded schools engage in behaviors that put them at risk for premature death and disability. The rates of cigarette smoking; smokeless tobacco use; and marijuana, cocaine, and methamphetamine use are substantially higher among BIA students than among high school students nationwide; rates of current cigar, alcohol, and inhalant use are similar among BIA students and students nationwide (*3*).

The findings in this report are subject to at least two limitations. First, these data represent only AI students attending BIA-funded schools with ≥10 students enrolled in grades 9–12 and therefore are not representative of all AI high school students. Second, because behaviors were self-reported, the extent of underreporting or overreporting of behaviors cannot be determined; however, the survey questions have demonstrated good test-retest reliability among non-AI high school students (*4*).

BIA efforts to reduce adolescent health-risk behaviors include training school staff to implement school health programs and establishing outdoor adventure–based counseling. Funds received through the Safe and Drug Free Schools and

Communities Act* are distributed to all BIA-funded schools. Since 1997, BIA and CDC have supported character education, teacher training, and school-based programs to prevent cigarette, alcohol, and other drug use. BIA also has established a therapeutic model program in three BIA-funded boarding schools to develop schoolwide systems of behavior supports and interventions to reduce high-risk behaviors and improve students' academic performance.

The BIA YRBS can be used to track progress in reducing tobacco, alcohol, and other drug use among high school students who attend BIA-funded schools. If these survey efforts are maintained, BIA and AI tribes and villages served by BIA-funded schools will have data to monitor the effectiveness of tobacco-, alcohol-, and other drug-use prevention and counseling programs for young persons.

References

1. CDC. Web-based Injury Statistics Query and Reporting System (WISQARS). Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, National Center for Injury Prevention and Control, 2001. Available at http://www.cdc.gov/ncipc/wisqars.
2. Young TK. The Health of Native Americans: Toward a Biocultural Epidemiology. New York, New York: Oxford University Press, 1994.
3. CDC. Youth Risk Behavior Surveillance—United States, 2001. In: CDC Surveillance Summaries (June 28). MMWR 2002;51(No. SS-4).
4. Brener ND, Kann L, McManus T, Kinchen SA, Sundberg EC, Ross JG. Reliability of the 1999 Youth Risk Behavior Survey Questionnaire. J Adolesc Health 2002;31:336–42.

*Title IV (20 U.S.C. 7101 *et seq.*) as amended by Public Law 107-110 (January 8, 2002).

Receipt of Cardiac Rehabilitation Services Among Heart Attack Survivors — 19 States and the District of Columbia, 2001

Each year, approximately 650,000 persons have a first heart attack in the United States. Heart attack survivors are at increased risk for recurrent heart attacks, cardiovascular complications, and sudden cardiac death (*1*). A major component of risk-reduction strategies for these patients is cardiac rehabilitation consisting of nutritional counseling; management of lipid levels, hypertension, weight, and diabetes; smoking cessation; psychosocial interventions; and physical activity counseling and exercise training (*2*). Although cardiac rehabilitation has been associated with substantially improved survival rates (*3*), the majority of eligible patients do not participate in cardiac rehabilitation (*4*). This report summarizes data from the Behavioral Risk Factor Surveillance System (BRFSS) on the prevalence of self-reported participation in cardiac rehabilitation services among persons in 19 states* and the District of Columbia (DC) who have had a heart attack. The findings indicate that less than one third of these respondents have participated in cardiac rehabilitation. Including cardiac rehabilitation in all intervention plans for eligible patients with coronary heart disease remains a key strategy for reducing further disability.

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized U.S. civilian population aged ≥18 years. In 2001, a total of 65,253 persons in 19 states and DC responded to questions about history of heart attack and receipt of cardiac rehabilitation services after a heart attack (median response rate: 52%). Surveyed participants were asked, "Were you ever told by a doctor that you had a heart attack or myocardial infarction?" Those who answered "yes" also were asked, "After you left the hospital following your heart attack, did you go to any kind of outpatient rehabilitation? This is sometimes called 'cardiac rehab.'" Other data collected by BRFSS included sex, age, race/ethnicity, education, cardiovascular disease risk factors, and state of residence.

Data were weighted according to state population estimates. Estimates and standard errors were calculated by using SUDAAN to account for the complex sampling design. To ensure stability, estimates were not calculated if cell sizes were <50. Chi square analyses were used to test overall differences in unadjusted estimates by sex, race/ethnicity, age, and education level. Logistic regression analysis was used to examine the odds of risk factors and preventive actions by receipt of rehabilitation, adjusted for sex, age, and education level.

Approximately 4% of surveyed respondents reported having ever had a heart attack (Table 1). This percentage increased with age, was higher among men than women, varied among racial/ethnic groups, and was highest among those with less education. The percentage of respondents who reported having had a heart attack ranged from 2.9% in Utah to 6.4% in West Virginia. Overall, 29.5% of persons having had a heart attack reported having received cardiac rehabilitation services (Table 1). Men were more likely than women to report having received cardiac rehabilitation, as were persons aged 50–64 years compared with other age groups and those with more education compared with those with less. Numbers were too small for reliable estimates by race/ethnicity and state.

Persons who received cardiac rehabilitation were more likely than those who did not receive cardiac rehabilitation to report having high blood cholesterol levels ($p<0.01$); other

*Alabama, Arkansas, Colorado, Iowa, Minnesota, Mississippi, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, South Carolina, Tennessee, Utah, Virginia, Washington, West Virginia, and Wyoming.

TABLE 1. Number and percentage of persons reporting ever having a heart attack and receiving cardiac rehabilitation services, by selected characteristics — Behavioral Risk Factor Surveillance System, 19 states* and the District of Columbia, 2001

		Ever had a heart attack or myocardial infarction			Received cardiac rehabilitation		
Characteristic	**Sample size**	**No.**	**(%)†**	**(95% CI§)**	**No.**	**(%)†**	**(95% CI)**
Sex							
Men	26,451	1,503	(5.4)	(±0.1)	453	(33.5)	(±3.9)
Women	38,802	1,262	(3.0)	(±0.2)	267	(22.8)	(±4.2)
Age group (yrs)							
18–49	37,499	368	(1.0)	(±0.2)	82	(27.3)	(±8.0)
50–64	14,741	895	(6.9)	(±0.7)	254	(32.7)	(±5.7)
65–79	9,614	1,132	(11.3)	(±0.9)	306	(29.2)	(±3.8)
≥80	2,778	358	(13.5)	(±2.1)	76	(22.0)	(±8.1)
Race/Ethnicity¶							
White, non-Hispanic	53,262	2,317	(4.4)	(±0.2)	605	(28.4)	(±2.8)
Black, non-Hispanic	5,788	195	(3.7)	(±0.9)	**	**	**
Hispanic	2,379	57	(2.6)	(±1.1)	**	**	**
American Indian/ Alaska Native	1,181	79	(7.4)	(±4.3)	**	**	**
Other	2,643	117	(3.1)	(±0.9)	**	**	**
Education level††							
<High school	7,520	742	(8.9)	(±1.0)	156	(23.2)	(±6.1)
High school	20,881	966	(4.4)	(±0.4)	263	(27.7)	(±4.0)
Some college	18,357	615	(3.1)	(±0.3)	165	(32.0)	(±5.5)
College or more	18,341	433	(2.9)	(±0.4)	132	(38.4)	(±8.2)
State/Area							
Alabama	2,795	139	(4.7)	(±0.8)	**	**	**
Arkansas	2,928	139	(4.7)	(±0.8)	**	**	**
Colorado	2,032	70	(4.0)	(±1.0)	**	**	**
District of Columbia	1,888	**	**	**	**	**	**
Iowa	3,635	135	(3.4)	(±0.6)	**	**	**
Minnesota	3,965	140	(3.3)	(±0.6)	**	**	**
Mississippi	3,043	147	(4.7)	(±0.9)	**	**	**
Missouri	4,178	196	(4.1)	(±0.8)	**	**	**
Montana	3,338	157	(4.5)	(±0.9)	**	**	**
New York	3,899	120	(3.5)	(±0.7)	**	**	**
North Dakota	2,510	80	(3.1)	(±0.7)	**	**	**
Ohio	3,433	160	(4.8)	(±0.9)	**	**	**
Oklahoma	4,550	278	(5.4)	(±0.8)	**	**	**
South Carolina	3,201	138	(4.1)	(±0.7)	**	**	**
Tennessee	2,924	148	(5.8)	(±1.1)	**	**	**
Utah	3,656	101	(2.9)	(±0.7)	**	**	**
Virginia	2,939	107	(3.7)	(±0.8)	**	**	**
Washington	4,207	142	(3.4)	(±0.6)	**	**	**
West Virginia	3,093	218	(6.4)	(±0.9)	**	**	**
Wyoming	3,039	104	(3.1)	(±0.6)	**	**	**
Total	**65,253**	**2,765**	**(4.1)**	**(±0.2)**	**720**	**(29.5)**	**(±2.9)**

* Alabama, Arkansas, Colorado, Iowa, Minnesota, Mississippi, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, South Carolina, Tennessee, Utah, Virginia, Washington, West Virginia, and Wyoming.
† Percentages weighted according to state population estimates.
§ Confidence interval.
¶ Data missing for 621 respondents.
** Estimates not computed when N<50.
†† Data missing for 154 respondents.

reported risk factors (e.g., self-reported high blood pressure, diabetes, overweight, and smoking) and perceived health status did not differ significantly between the two groups (Table 2). Persons who received cardiac rehabilitation were more likely than those who did not receive such services to report engaging in physical activity during the 30 days preceding the survey ($p<0.05$) and to report having been counseled to reduce dietary fat and cholesterol intake ($p<0.05$), increase fruit and vegetable intake ($p<0.01$), and increase exercise ($p<0.01$). Persons who received cardiac rehabilitation were significantly more likely than those who did not receive cardiac rehabilitation to report exercising more ($p<0.05$). The majority of persons with a heart attack reported taking aspirin regularly; however, the prevalence of aspirin use was greater among those receiving cardiac rehabilitation services. After adjustments for sex, age, and education, persons receiving cardiac rehabilitation were more likely than persons not receiving these services to report 1) having been diagnosed with high blood cholesterol (odds ratio [OR] = 1.4; 95% confidence interval [CI] = 1.1–1.9; p = 0.02); 2) having been told to eat fewer high-fat/high-cholesterol foods (OR = 1.4; 95% CI = 1.1–1.9; p = 0.02), to eat more fruits and vegetables (OR = 1.74; 95% CI = 1.3–2.3; p = 0.0002), and to exercise more (OR = 1.6; 95% CI = 1.2–2.2; p = 0.001); and 3) taking aspirin regularly (OR = 2.2; 95% CI = 1.3–3.2; p = 0.004).

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Editorial Note: Cardiac rehabilitation is safe and beneficial when patients are evaluated and screened properly for these services (*2,3*) and has been shown to reduce recurrence of subsequent heart attacks and co-morbidities (*2*). However, consistent with previous studies (*3,4*), the findings in this report indicate that less than one third of respondents who have had a heart attack participated in cardiac rehabilitation.

Contraindications for cardiac rehabilitation include unstable angina, serious arrhythmias, congestive heart failure, previous cardiac arrest during exercise, extremely low activity level, and very high risk (*5*). Increased adherence to guidelines for

TABLE 2. Number and percentage of persons receiving and not receiving cardiac rehabilitation services, by risk factor/preventive action — Behavioral Risk Factor Surveillance System, 19 states* and the District of Columbia, 2001

	Received cardiac rehabilitation after heart attack (N = 720)			Did not receive cardiac rehabilitation after heart attack (N = 2,045)		
Risk factor/Preventive action	**No.**	**(%)†**	**(95% CI§)**	**No.**	**(%)†**	**(95% CI)**
Ever told have high blood cholesterol	480	(66.9)	(±5.7)	1,152	(57.4)	(±3.2)¶
Ever told have high blood pressure	450	(61.2)	(±6.1)	1,333	(64.7)	(±3.2)
Taking high blood pressure medication**	400	(86.9)	(±6.0)	1,164	(88.0)	(±2.6)
Ever told have diabetes	183	(22.6)	(±4.6)	541	(26.9)	(±3.0)
Smoking status††						
Current	152	(19.3)	(±4.2)	531	(24.5)	(±2.7)
Former	344	(44.6)	(±6.0)	816	(42.1)	(±3.3)
Never	222	(36.1)	(±6.7)	694	(33.4)	(±3.2)
Obesity status§§						
Overweight¶¶	520	(74.7)	(±5.2)	1,375	(70.3)	(±3.0)
*Obese****	*207*	*(31.6)*	*(±6.3)*	*626*	*(31.0)*	*(±3.0)*
Health status fair or poor	395	(56.9)	(±6.0)	1,163	(56.1)	(±3.3)
Any physical activity preceding 30 days†††	475	(65.2)	(±6.3)	1,156	(57.5)	(±3.2)§§§
Receipt of preventive counseling						
Told to eat fewer high-fat/ high-cholesterol foods	368	(54.7)	(±6.1)	919	(46.6)	(±3.3)§§§
Told to eat more fruits and vegetables	468	(68.6)	(±5.7)	1,094	(56.8)	(±3.2)¶
Told to exercise more	420	(63.2)	(±5.9)	968	(50.3)	(±3.3)¶
Reported behavior changes						
Eating fewer high-fat/high-cholesterol foods	550	(75.1)	(±5.7)	1,454	(69.9)	(±3.1)
Eating more fruits and vegetables	624	(85.4)	(±4.4)	1,655	(80.6)	(±2.6)
Exercising more	450	(60.5)	(±6.3)	1,091	(52.7)	(±3.3)§§§
Taking aspirin daily or every other day¶¶¶	583	(90.6)	(±4.3)	1,370	(80.5)	(±2.8)¶

* Alabama, Arkansas, Colorado, Iowa, Minnesota, Mississippi, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, South Carolina, Tennessee, Utah, Virginia, Washington, West Virginia, and Wyoming.
† Percentages weighted according to state population estimates.
§ Confidence interval.
¶ p<0.01, chi square test for difference between persons receiving and not receiving cardiac rehabilitation.
** Among persons with hypertension.
†† Data missing for six respondents.
§§ Data missing for 26 respondents.
¶¶ Body mass index (BMI) ≥25.
*** BMI ≥30.
††† Data missing for four respondents.
§§§ p<0.05, chi square test for difference between persons receiving and not receiving cardiac rehabilitation.
¶¶¶ Among persons with no known contraindications.

assessment of patient eligibility is needed for appropriate referral. In addition, sufficient time and personnel are needed for counseling of post–heart attack patients about lifestyle modifications that might reduce risk factors (*5*–*7*). Persons who cannot participate in cardiac rehabilitation because of physical limitations need periodic evaluation with continued counseling to help reduce recurrent heart problems and improve quality of life (*5*).

The findings in this report are subject to at least three limitations. First, because the study was limited to residents of 19 states and DC who had a heart attack and did not reside in long-term–care facilities, the findings might not be representative of the U.S. population. Second, because the severity of a respondent's disability after a heart attack was not ascertained, observed differences might be attributed to differences in disease severity. Finally, because self-reported health data are dependent on factors such as respondents' awareness of their conditions, recall bias, and the social desirability of certain responses, the findings might be biased.

The benefits of cardiac rehabilitation include greater exercise tolerance, fewer cardiac symptoms, lower blood fat levels, cessation of smoking, improved psychosocial well-being, and reduced risk for illness and death. To help patients obtain these benefits, public health efforts should encourage policies that result in increased insurance coverage for cardiac rehabilitation services. In addition, adherence to assessment and treatment guidelines might be enhanced by 1) updated guidelines for physicians, 2) updated assessment of patients to help in tracking participation, 3) a reminder system to improve compliance, and 4) appropriate education and counseling for patients in cardiac rehabilitation. Further research is needed to identify factors that improve participation and adherence to lifestyle modifications prescribed in cardiac rehabilitation.

References

1. American Heart Association. Heart Disease and Stroke Statistics—2003 Update. Dallas, Texas: American Heart Association, 2002.
2. Balady GJ, Ades, PA, Comoss P, et al. Core components of cardiac rehabilitation/secondary prevention programs: a statement for health care professionals from the American Heart Association and the American Association of Cardiovascular and Pulmonary Rehabilitation Writing Group. Circulation 2000;102:1069–71.
3. Whellan DH, Shaw LK, Bart BA, et al. Cardiac rehabilitation and survival in patients with left ventricular systolic dysfunction. Am Heart J 2001;142:160–6.

4. Blackburn G, Foody JM, Sprecher DL, et al. Cardiac rehabilitation participation patterns in a large tertiary care center: evidence for selection bias. J Cardiopulm Rehab 2000;20:189–95.
5. Pashkow FJ, Dafoe WA, eds. Clinical cardiac rehabilitation. A cardiologist's guide, 2nd ed. Baltimore, Maryland: Williams and Wilkins, 1999.
6. Ryan TJ, Antman EM, Brooks NH, et al. The management of patients with acute myocardial infarction—a report of the American College of Cardiology and the American Heart Association Task Force on Practice Guidelines (April 2000). Available at http://www.acc.org/clinical/guidelines/nov96/pcktamis.pdf.
7. Smith SC, Blair SN, Bonow RO, et al. AHA/ACC guidelines for preventing heart attack and death in patients with atherosclerotic cardiovascular disease: 2001 update: a statement for healthcare professionals from the American Heart Association and the American College of Cardiology. Circulation 2001;104:1577–9.

Probable Transfusion-Transmitted Malaria — Houston, Texas, 2003

Malaria transmitted by blood transfusion is rare in the United States, with an estimated incidence of <0.3 cases per million transfused blood units. The last reported case of transfusion-transmitted malaria occurred in January 1998 (*1*); during 1990–1998, a total of 12 cases were identified (*2*). This report summarizes a case of malaria in Houston, Texas, that was likely transmitted from a blood donor. Because no laboratory test exists in the United States to screen donated blood for malaria, this case highlights the importance of effective donor screening to help prevent transfusion-transmitted malaria.

In March 2003, a patient aged 69 years with a history of diabetic nephropathy and hypertension was admitted to a Houston-area hospital with malignant hypertension and acute renal failure. After 3 days, the patient was transfused with two units of packed red blood cells (PRBCs) for severe anemia. The patient reported having no other blood transfusions during the 12 months preceding hospitalization. The patient was started on hemodialysis and discharged; 17 days after the transfusion, the patient had fever and mental confusion, and 3 days later was admitted to the intensive care unit at a second Houston hospital. Blood cultures and cerebrospinal fluid testing did not reveal the presence of a bacterial pathogen. However, a blood smear demonstrated *Plasmodium falciparum* parasites. The patient was hospitalized for 21 days, treated successfully with intravenous quinidine and doxycycline, and discharged.

Epidemiologists from the Houston Department of Health and Human Services interviewed members of the patient's household to obtain risk factor information and to ascertain the source of exposure. The patient, who was retired and spent most hours indoors, had last traveled outside Houston in 1995 to visit Laredo, Texas, on the Mexican border.

The Texas Department of Health, in collaboration with CDC and the local blood collection center, conducted a donor traceback investigation of the two units of PRBCs used for the patient's transfusions. One donor was a woman, a U.S.-born Texas resident aged 47 years who had never traveled outside the United States. The other donor was a man, a native of Ghana aged 18 years whose March 2003 blood donation record stated he had arrived from Ghana 2 years earlier and had never had malaria. The investigation determined that the Ghanaian donor had immigrated to Houston in May 2002. He denied having any febrile illness during the 12 months preceding the blood donation. However, his mother recalled that her son had been treated for malaria in Ghana 2.5 years earlier.

No segments from the two donors' original blood collection bags were available for testing; however, both donors submitted blood specimens for malaria smears, DNA polymerase chain reaction (PCR) testing, and indirect immunofluorescence (IFA) testing for malarial antibodies 4–5 weeks after their blood donations. The blood smear examination, PCR test, and IFA test performed on the specimen from the U.S.-born donor all were negative. The blood smear examination and PCR performed on the specimen from the Ghanaian donor also were negative for the presence of malaria parasites or parasite DNA. However, the IFA test found elevated titers of antibodies to malaria (1:256 for *P. falciparum*, 1:64 for *P. malariae,* 1:64 for *P. ovale*, and 1:64 for *P. vivax*), indicating previous malaria infection at an indeterminate time.

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Editorial Note: In the case described in this report, the incubation period from transfusion to illness was consistent with previously reported cases of transfusion-transmitted *P. falciparum* malaria (*2*). The presence of malarial antibodies in samples taken from the Ghanaian donor 1 month after donation indicate previous infection; this infection might have been active at the time of blood donation. Donors who have been implicated as infection sources in transfusion-transmitted malaria cases usually have had undetectable levels of parasitemia; therefore, antibody detection has been the method of choice to identify infected donors in CDC investigations of transfusion-transmitted malaria cases. Malaria antibody testing is 95% sensitive and 99% specific. Because the donor emigrated from an area with endemic malaria, the predictive value positive for this test is high (*3*).

The majority of malaria cases in the United States are associated with previous travel to areas where malaria is endemic. Although mosquito-borne transmission of malaria has occurred occasionally in the United States, including in Texas, those cases occurred during summer months (*4*). In this case, factors including positive donor serology, absence of travel by the patient, low likelihood of local transmission in early spring, and an appropriate incubation period support transfusion as the likely mechanism for malaria transmission.

No available laboratory test is suitable for screening donated blood for malaria. Such a test would require 1) large-scale use design, 2) high sensitivity and specificity, and 3) ability to detect all four species of *Plasmodium* that affect humans. In the United States, prevention of transfusion-transmitted malaria largely depends on careful questioning of prospective donors to defer those at increased risk for malaria. The Food and Drug Administration (FDA) recommends deferring residents of malaria-endemic areas for 3 years after they emigrate from those areas and deferring persons who have had malaria for 3 years after they become asymptomatic; the American Association of Blood Banks has published standards consistent with FDA recommendations (Box). In this case, the donor from Ghana should have been deferred for both reasons.

BOX. Summary of guidelines of the Food and Drug Administration and American Association of Blood Banks for deferral of blood donors at increased risk for malaria

Defer blood donation for 1 year

- Travelers who are residents of nonmalarious areas who have been in a malarious area may be accepted as donors 1 year after their return to the nonmalarious area (irrespective of the use of chemoprophylaxis) if they have been free of malaria symptoms.

Defer blood donation for 3 years

- Immigrants or visitors from malarious areas may be accepted 3 years after departure from the area if they have been asymptomatic. Former residents of malarious areas who now live in the United States but who return to visit a malarious area may be accepted as donors 3 years after their most recent visit.
- Persons who have had a diagnosis of malaria should be deferred for 3 years after becoming asymptomatic.

Sources: Mungai M, Tegtmeier G, Chamberland M, Parise M. Transfusion-transmitted malaria in the United States from 1963 through 1999. N Engl J Med 2001;344:1973–8.

Zoon K. Recommendations for deferral of donors for malaria risk: letter to all registered blood establishments. Washington, DC: Food and Drug Administration, 1994.

American Association of Blood Banks. Standards for blood banks and transfusion services, 21st ed. Bethesda, Maryland: American Association of Blood Banks, 2002.

However, the donor did not tell the screener about having malaria during the previous 3 years, and the screener did not defer the donor for immigrating within 3 years from an area with endemic malaria.

During 1963–1999, approximately two thirds of the 93 transfusion-transmitted malaria cases in the United States could have been prevented if the implicated donors had been deferred according to established guidelines (*2*). To facilitate the donor screening process, CDC is developing an Internet-based map to help screeners identify areas with endemic malaria. Instances of transfusion-related transmission of malaria should be carefully reviewed to determine whether improvements to the donor screening process are needed.

The case described in this report underscores the importance of close cooperation between managers of blood collection centers and state and federal public health officials whenever transfusion-related illness occurs. Such cooperation can facilitate traceback investigations and ensure prompt care of both donors and recipients, helping to strengthen the screening process, making blood transfusion as safe as possible, and ensuring an adequate supply of a lifesaving resource.

References

1. CDC. Transfusion-transmitted malaria—Missouri and Pennsylvania, 1996–1998. MMWR 1999;48:253–6.
2. Mungai M, Tegtmeier G, Chamberland M, Parise M. Transfusion-transmitted malaria in the United States from 1963 through 1999. N Engl J Med 2001;344:1973–8.
3. Sulzer AJ, Wilson M, Hall EC. Indirect fluorescent-antibody tests for parasitic diseases. V. An evaluation of a thick-smear antigen in the IFA test for malaria antibodies. Am J Trop Med Hyg 1969;18:199–205.
4. Associateship for Disease Control and Prevention. Epidemiology in Texas: 1994 Annual Report. Austin, Texas: Texas Department of Health, Associateship for Disease Control and Prevention, 1994.

Progress Toward Poliomyelitis Eradication — Ethiopia, Somalia, and Sudan, January 2002–August 2003

Since the World Health Assembly of the World Health Organization (WHO) resolved in 1988 to eradicate poliomyelitis worldwide, the estimated number of polio cases has declined >99%, and the number of countries from which reports of polio were received has declined from 125 to seven. Ethiopia and Sudan have not reported wild poliovirus (WPV) cases in >1 year, and Somalia is approaching 1 year without evidence of WPV transmission. This report summarizes progress made in these countries during January 2002–August 2003 and describes remaining challenges to polio eradication (*1*). To maintain this progress, continued funding and improved access to children, particularly in the greater Mogadishu area in Somalia, are required.

Routine Vaccination

In Ethiopia, reported national routine vaccination coverage of children aged <1 year with 3 doses of oral poliovirus vaccine (OPV3) was 50% in 2001 and 51% in 2002. In Somalia, which has not had a functioning national government since 1991, international nongovernmental organizations supported by WHO, the United Nations Children's Fund (UNICEF), and other United Nations agencies deliver vaccination services. Estimated OPV3 coverage increased in Somalia from 33% in 2001 to 40% in 2002. In the government-controlled areas of Sudan, reported OPV3 coverage was 71% in 2001 and 64% in 2002. OPV3 coverage in southern Sudan, which is affected by civil conflict, has been estimated by WHO-UNICEF to have been <20% in 2001 and 2002.

Supplementary Immunization Activities

During 2002–2003, all three countries conducted house-to-house supplementary immunization activities (SIAs). These included at least two rounds of National Immunization Days (NIDs)* in all countries and additional Sub-National Immunization Days (SNIDs)† that targeted areas and populations at high risk.

* Nationwide mass campaigns during a short period (days to weeks) in which 2 doses of OPV are administered to all children (usually aged <5 years), regardless of previous vaccination history, with an interval of 4–6 weeks between doses.
† Mass campaigns similar to NIDs but in a smaller area.

In Ethiopia during 2002, two rounds of SNIDs were conducted in March and April and two rounds of NIDs in October and December, in which approximately 3.3 million and 14.0 million children were vaccinated, respectively. In Ethiopia, vaccination activities were undertaken in the Somali Region several weeks earlier than the rest of the country in synchronization with SNIDs in neighboring Somalia. In 2003, because of a lack of resources, planned SNIDs were cancelled, and NIDs have been reduced to SNIDs targeting approximately 2.5 million children.

In Somalia, SIAs continued despite ongoing conflict, although with limited access to children in the Mogadishu area. Four rounds of SNIDs were conducted in 2002, reaching approximately 600,000 children in each of the first two rounds and approximately 1.0 million children in each of the other two rounds. Two rounds of NIDs were conducted in March and April 2002, reaching approximately 1.3 million children in each round. Two rounds of NIDs were held in 2003, reaching approximately 1.3 million children in February and approximately 1.4 million children in March, and one round of SNIDs was conducted in May 2003, reaching approximately 98,000 children.

In Sudan during 2003, SIAs reached more children than ever before, particularly in the south, where approximately 500,000 more children were vaccinated than in 2002. In the

government-controlled areas of Sudan, four rounds of SNIDs were held in 2002, reaching approximately 5.6–5.8 million children in each round. During March–April 2003, two rounds of SNIDs were conducted, reaching approximately 1.1 million children in each round. SNIDs targeting approximately 2.8 million children are planned for November and December 2003. In southern Sudan, NIDs were held in February, March, and April 2002, reaching approximately 1.2 million children; SNIDs were conducted in October and November 2002, reaching approximately 700,000 children and 1.1 million children, respectively. NIDs conducted during March–April 2003 reached approximately 1.7 million children.

Acute Flaccid Paralysis Surveillance

The quality of public health surveillance for cases of acute flaccid paralysis (AFP) is evaluated by two key indicators established by WHO: annual reporting rate (target: nonpolio AFP rate of >1 per 100,000 population aged <15 years) and completeness of specimen collection (target: two adequate stool specimens from >80% of persons with AFP) (Table). During 2002–2003, Ethiopia, Somalia, and Sudan continued to exceed the target for the nonpolio AFP rate. During 2002–2003 in Ethiopia, the nonpolio AFP rate decreased from 1.9 to 1.1. This decline was attributable to all suspected AFP cases being investigated by WHO surveillance medical officers to ensure that stool specimens are collected only from true AFP cases (Table).

During 2002–2003, adequacy of stool specimen collection improved substantially; the proportion of persons with AFP with two adequate stool specimens increased from 69% to 82% in Ethiopia and from 67% to 77% in Somalia. Sudan achieved the target with 90% in 2002 and 2003.

AFP cases in which paralytic polio could not be excluded reliably because of a lack of adequate stool specimens were classified as polio-compatible. During 2001–2002, the number of reported polio-compatible cases decreased in Ethiopia (from 47 to 36), Somalia (from 10 to four), and Sudan (from 12 to one). As of August 2003, three polio-compatible cases had been reported in Ethiopia, four in Somalia, and one in Sudan.

WPV Incidence

During January–August 2003, no WPV cases were reported in Ethiopia, Somalia, or Sudan. The most recently reported cases in Ethiopia and Sudan occurred in January and April 2001, respectively; in both countries, poliovirus type 1 was isolated. During 2002, three virologically confirmed WPV type 3 cases were identified in the Mogadishu area of Somalia, the most recent case occurring in October (Figure).

All stool specimens are processed by WHO-accredited poliovirus laboratories. In 2002, the National Polio Laboratory at the Ethiopian Health and Nutrition Research Institute processed 1,078 specimens. Specimens from Somalia and southern Sudan are sent to the Kenya Medical Research Institute, which during 2002 processed 216 specimens for Somalia and 175 for southern Sudan. The Sudan national polio lab processed 645 specimens from cases in government-controlled areas in 2002.

The proportion of specimens with nonpolio enterovirus (NPEV) isolated is used as a combined indicator of quality of specimen transport and sensitivity of laboratory processing; a rate of >10% is considered acceptable. In 2002, the NPEV rate was 24% for Ethiopia, 13% for Somalia, and 12% for Sudan.

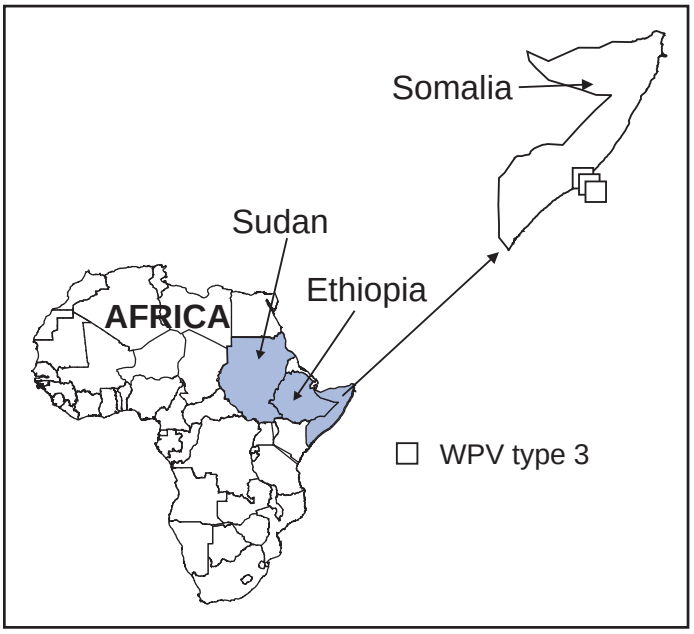
Reported by: *Country Offices for Ethiopia, Somalia, and Sudan, World Health Organization. Polio Eradication Programme, Regional Office for Africa, World Health Organization, Harare, Zimbabwe. Polio Eradication Programme, Regional Office for the Eastern Mediterranean, World Health Organization, Cairo, Egypt. Office of the Director-General, World Health Organization, Geneva, Switzerland. Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Global Immunization Div, National Immunization Program, CDC.*

TABLE. Number of reported cases of acute flaccid paralysis (AFP) and number of confirmed poliomyelitis cases, by key surveillance indicators, country, and year — Ethiopia, Somalia, and Sudan, January 2002–August 2003*

Country	No. AFP cases		No. confirmed wild poliovirus cases†			Nonpolio AFP rate§		% persons with AFP and adequate stool specimens¶	
	2002	2003	2002	January–August 2002	January–August 2003	2002	2003	2002	2003
Ethiopia	539	197	0	0	0	1.9	1.1	69	82
Somalia	108	70	3	2	0	3.6	2.9	67	77
Sudan	371	237	0	0	0	2.6	2.6	90	90

* As of August 25, 2003.
† All countries used the virologic classification scheme. Cases with wild poliovirus isolated are classified as confirmed, and cases among persons without adequate stool specimens but with signs and symptoms consistent with polio are classified as polio-compatible. Cases among persons with inadequate specimens are reviewed by a committee of experts and either discarded or classified as polio-compatible.
§ Per 100,000 population aged <15 years; rates for 2003 are annualized.
¶ Percentage with two adequate stool specimens, collected ≥24 hours apart, within 14 days of onset of paralysis.

FIGURE. Confirmed cases of poliomyelitis, by type of wild poliovirus (WPV) isolate — Somalia, January 2001–August 2003*



* As of August 25, 2003.

Editorial Note: During January 2002–August 2003, substantial progress was made toward the eradication of polio in Ethiopia, Somalia, and Sudan. Ethiopia and Sudan have not reported a WPV-confirmed case since the first quarter of 2001, and Somalia is approaching 1 year without detection of WPV transmission. Any remaining transmission in Somalia is likely to be limited to the greater Mogadishu area. The continued progress in these countries demonstrates the feasibility of polio-eradication strategies, even in countries and areas affected by conflict.

The data presented in this report are subject to at least two limitations. First, because no national census has been conducted in these three countries for several years, accurate population data are not available, which might lead to under- or overestimating AFP surveillance indicators and coverage rates for routine immunization and SIAs. Second, although AFP surveillance indicators are being met at the national level, these indicators are not being achieved at every subnational level.

Progress in Ethiopia, Somalia, and Sudan is attributable to partnerships in support of polio-eradication activities. In Ethiopia, collaboration among government ministries and use of elected parliamentary committees to promote polio-eradication strategies continue to sustain gains. Also, additional surveillance officers posted to work with regional health bureaus and technical support from CDC Stop Transmission of Polio teams have contributed to improved AFP surveillance. In Somalia, the joint coordination, implementation, and promotion of polio activities by UNICEF and WHO supported eradication in an area with no central government and have guaranteed effective use of funds. In Sudan, partners have successfully coordinated activities between the government-controlled areas of the north and the nongovernment-controlled areas of the south. Rotary International has provided financial resources and volunteer support for these efforts.

Progress in these countries also is attributable to the use of data to support decision-making. For example, identification of unvaccinated children in the Mogadishu area led to implementation throughout Somalia of "zero-dose" campaigns (i.e., house-to-house campaigns over a number of days that target all children with <3 doses of OPV and that also register all newborns). These campaigns have likely curtailed any existing poliovirus circulation. In Somalia and Sudan, identification of large numbers of polio-compatible cases in 2001 led to the introduction in 2002 of a new mandatory detailed investigation form to improve case classification.

In Ethiopia, challenges to the eradication programs include strengthening program implementation in Afar and Somali Region, where infrastructure is poor and insecurity is persistent. In Afar and Somali Region, AFP surveillance is poor, and in Somali Region, regular population movements occur to and from the Mogadishu area of Somalia. In addition, access to children in Mogadishu must be rapidly improved to interrupt any remaining WPV transmission. Effective SIAs during the remainder of 2003 and during 2004–2005 must be assured. Finally, the necessary financial resources must be provided in a timely manner to support all program activities.

During 2003–2004, independent technical advisory groups will monitor progress and provide guidance to all three countries. In Ethiopia and Sudan, the process of laboratory containment, required as part of the certification of eradication, will continue. During 2004, Ethiopia is planning to conduct two rounds of SNIDs, Somalia is planning two rounds of NIDs and two rounds of SNIDs, and Sudan is planning two rounds of SNIDs. These activities will need continued partner support to ensure the achievement of polio eradication.

Reference

1. CDC. Progress toward poliomyelitis eradication—Ethiopia, Somalia, and Sudan, January 2001–October 2002. MMWR 2002;51:1070–2.

West Nile Virus Activity — United States, October 30–November 5, 2003

This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET as of 3 a.m., Mountain Standard Time, November 5, 2003.

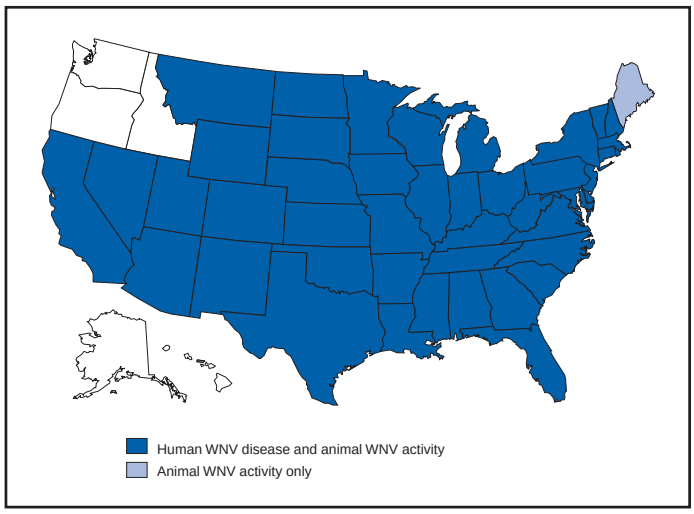
During the reporting week of October 30–November 5, a total of 502 human cases of WNV infection were reported from 24 states (Alabama, Colorado, Illinois, Iowa, Kansas, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Rhode Island, South Dakota, Tennessee, Texas, West Virginia, and Wyoming), including 16 fatal cases from six states (Colorado, Missouri, Nebraska, Pennsylvania, South Dakota, and Texas). During the same period, WNV infections were reported in 293 dead birds, 473 mosquito pools, 520 horses, five dogs, three squirrels, and six unidentified animal species.

During 2003, a total of 8,219 human cases of WNV infection have been reported from Colorado (n = 2,477), Nebraska (n = 1,594), South Dakota (n = 972), Texas (n = 513), North Dakota (n = 422), Wyoming (n = 339), Montana (n = 220), Pennsylvania (n = 212), New Mexico (n = 199), Minnesota (n = 144), Iowa (n = 143), Ohio (n = 104), Kansas (n = 86), Louisiana (n = 84), Oklahoma (n = 75), New York (n = 67), Mississippi (n = 62), Missouri (n = 59), Illinois (n = 50), Maryland (n = 47), Georgia (n = 36), Alabama (n = 33), Florida (n = 32), Indiana (n = 30), New Jersey (n = 28), North Carolina (n = 24), Tennessee (n = 22), Arkansas (n = 21), Virginia (n = 21), Massachusetts (n = 16), Kentucky (n = 14), Delaware (n = 13), Wisconsin (n = 13), Connecticut (n = 12), Michigan (n = eight), Rhode Island (n = six), Arizona (n = three), District of Columbia (n = three), New Hampshire (n = three), Vermont (n = three), West Virginia (n = three), California (n = two), Nevada (n = two), South Carolina (n = one), and Utah (n = one) (Figure). Of 8,087 (98%) cases for which demographic data were available, 4,253 (53%) occurred among males; the median age was 47 years (range: 1 month–99 years), and the dates of illness onset ranged from March 28 to October 22. Of the 8,087 cases, 182 fatal cases were reported from Colorado (n = 45), Texas (n = 26), Nebraska (n = 21), South Dakota (n = 13), New York (n = eight), Wyoming (n = eight), Pennsylvania (n = seven), Maryland (n = five), Missouri (n = five), Georgia (n = four), Iowa (n = four), Kansas (n = four), Minnesota (n = four), New Mexico (n = four), North Dakota (n = four), Alabama (n = three), Ohio (n = three), Indiana (n = two), Montana (n = two), New Jersey (n = two), Delaware (n = one), Illinois (n = one), Kentucky (n = one), Louisiana (n = one), Michigan (n = one), Mississippi (n = one), Tennessee (n = one), and Virginia (n = one). A total of 713 presumptive West Nile viremic blood donors have been reported to ArboNET, including 621 (87%) from the following nine western and midwestern states: Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. Of the 583 donors for whom data were reported completely, six (1%) subsequently had neuroinvasive disease (median age: 45 years; range: 28–76 years), and 89 (15%) had West Nile fever.

In addition, 11,076 dead birds with WNV infection have been reported from 42 states, the District of Columbia, and New York City. WNV infections also have been reported from 41 states in horses (n = 3,991), dogs (n = 21), squirrels (n = 17), and unidentified animal species (n = 31). During 2003, WNV seroconversions have been reported in 1,377 sentinel chicken flocks from 15 states. Of the 61 seropositive sentinel horses reported, Illinois reported 43, West Virginia, eight; Minnesota, seven; and South Dakota, three. In addition, seropositivity was reported from one other unidentified animal species. A total of 7,590 WNV-positive mosquito pools have been reported from 38 states, the District of Columbia, and New York City.

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

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2003*



* As of 3 a.m., Mountain Standard Time, November 5, 2003.

Notice to Readers

National American Indian and Alaska Native Heritage Month — November 2003

November is National American Indian and Alaska Native Heritage Month. During this month, the U.S. Department of Health and Human Services will join with other federal departments and agencies, local government offices, national and local organizations, and interested persons to recognize American Indian and Alaska Native (AI/AN) contributions to the development and history of the United States. Information about activities to celebrate National American Indian and Alaska Native Heritage Month is available from the Indian Health Service (IHS) at http://www2.ihs.gov/heritage.

Health challenges facing AI/AN communities include cancer, diabetes, environmental contamination, heart disease, injuries, sexually transmitted diseases, substance abuse, sudden infant death syndrome, vaccine-preventable diseases, and viral hepatitis. Substantial health disparities affect AI/AN communities (*1*,*2*). To address these disparities, CDC and ATSDR work with tribal governments, tribal organizations, urban Indian health centers, IHS, and other partners to provide funding and technical assistance to tribal governments and organizations. CDC and ATSDR also commit professional staff to help strengthen AI/AN public health capacity. Additional information is available from CDC at http://www.cdc.gov/omh/populations/aian/aian.htm and from ATSDR at http://www.atsdr.cdc.gov/tribal.

References

1. CDC. Health disparities experienced by American Indians and Alaska Natives. MMWR 2003;52:697.
2. CDC. Tobacco, alcohol, and other drug use among high school students attending Bureau of Indian Affairs–funded schools—United States, 2001. MMWR 2003;52:1070–2.

Notice to Readers

National Epilepsy Awareness Month — November 2003

November is National Epilepsy Awareness Month. Epilepsy is one of the most common chronic central nervous system disorders in children and is characterized by unprovoked seizures. These seizures and the side effects of epilepsy medications, and the lifestyle restrictions and social stigma associated with the disorder can affect their quality of life substantially.

Of approximately 2.3 million persons in the United States with epilepsy, approximately 316,000 are aged <15 years. Epilepsy is especially burdensome for those making the transition from childhood to adulthood. Seizures and their treatment can impede learning, lead to isolation, and make youth susceptible to taunts and bullying from their peers. To improve peer acceptance and understanding, the Epilepsy Foundation (EF), in partnership with CDC, is continuing its "Entitled to Respect" campaign. During November, the campaign will focus on educating black youth, an underserved segment of the community, and on building new partnerships and improving services to affected children and families within the black community. Additional information about epilepsy and the "Entitled to Respect" campaign is available from EF at telephone, 1-800-332-1000 or at http://www.epilepsyfoundation.org.

Notice to Readers

Publication of "The Burden of Musculoskeletal Conditions at the Start of the New Millennium"

The World Health Organization (WHO) has published "The Burden of Musculoskeletal Conditions at the Start of the New Millennium," the first global report on musculoskeletal conditions. These >150 conditions usually are associated with pain and loss of function, are the most frequent cause of disability, and comprise a large and growing problem in both developing and developed countries. The report, the result of 3 years of work by an international group of scientific experts, focuses on the most common conditions, including rheumatoid arthritis, osteoarthritis, osteoporosis, spinal disorders (including low back pain), and severe limb trauma. The report documents levels of incidence and prevalence, characterizes the severity and course of each condition, and assesses economic impact, risk factors, impact on resource utilization, and relevant survey instruments. Data are presented by sex, age group, and world region.

The report was prepared in collaboration with the Bone and Joint Decade 2000–2010, an international initiative to improve health-related quality of life for persons affected by musculoskeletal conditions. This initiative seeks to raise awareness of the problem, empower patients to participate in their own care, promote cost-effective prevention and treatment, and advance research for improvements in care and understanding of the conditions. The U.S. affiliate, the U.S. Bone and Joint Decade, is working to achieve these goals in the United States.

The report is available from WHO at http://www.who.int/ncd/cra or by e-mail, bookorders@who.int. Additional information about the Bone and Joint Decade is available at http://www.boneandjointdecade.org and at http://www.usbjd.org.

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Erratum: Vol. 52, No. 42

In Table II, "Provisional cases of selected notifiable diseases, United States, weeks ending October 18, 2003, and October 19, 2002," on page 1028, incorrect data were given for cumulative 2003 AIDS case counts for some states. The correct counts are given in this issue.

Erratum: Vol. 52, No. 39

In the article, "Cardiac Deaths After a Mass Smallpox Vaccination Campaign—New York City, 1947," an error occurred in the labeling of Figure 3 on page 936. The findings are unchanged. The correct figure follows.

FIGURE 3. Number of daily cardiac deaths during risk periods compared with other periods — New York City, March–June 1946–1948

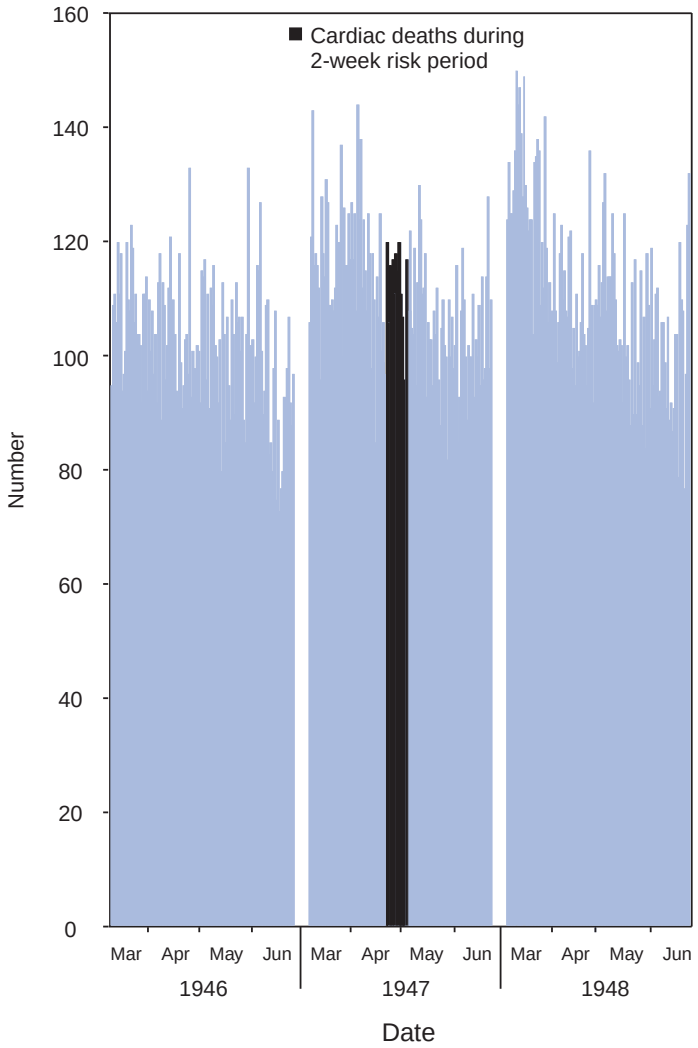
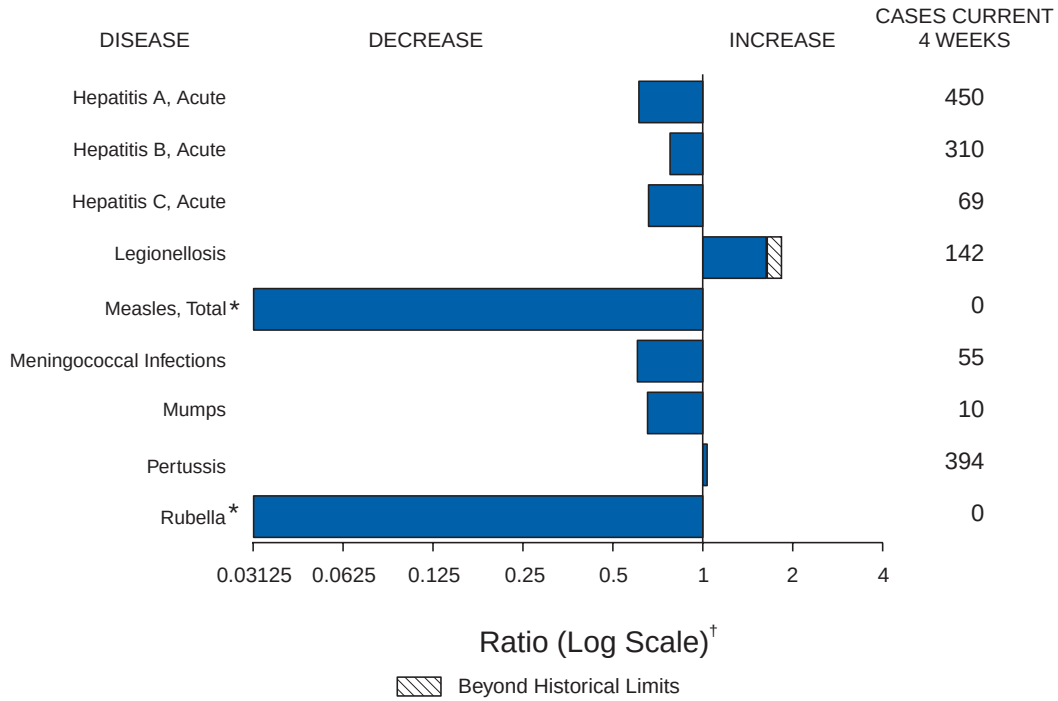


FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals November 1, 2003, with historical data



* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 44 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 November 1, 2003 (44th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	2	Hansen disease (leprosy)†	47	72
Botulism:	-	-	Hantavirus pulmonary syndrome†	15	17
foodborne	11	25	Hemolytic uremic syndrome, postdiarrheal†	129	179
infant	53	57	HIV infection, pediatric†§	187	135
other (wound & unspecified)	23	17	Measles, total	41¶	26**
Brucellosis†	69	101	Mumps	161	234
Chancroid	40	58	Plague	1	-
Cholera	1	2	Poliomyelitis, paralytic	-	-
Cyclosporiasis†	57	153	Psittacosis†	14	14
Diphtheria	1	1	Q fever†	63	49
Ehrlichiosis:	-	-	Rabies, human	3	3
human granulocytic (HGE)†	288	269	Rubella	6	16
human monocytic (HME)†	166	176	Rubella, congenital	-	1
other and unspecified	35	19	Streptococcal toxic-shock syndrome†	129	95
Encephalitis/Meningitis:	-	-	Tetanus	12	20
California serogroup viral†	67	135	Toxic-shock syndrome	107	90
eastern equine†	8	5	Trichinosis	1	13
Powassan†	-	1	Tularemia†	70	69
St. Louis†	21	20	Yellow fever	-	-
western equine†	2	-			

-: No reported cases.
* Incidence data for reporting years 2002 and 2003 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 October 26, 2003.
¶ Of 41 cases reported, 31 were indigenous, and 10 were imported from another country.
** Of 26 cases reported, 13 were indigenous, and 13 were imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 2003, and November 2, 2002 (44th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003§	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	38,482	35,422	689,964	702,168	3,148	3,674	2,677	2,604	1,475	2,451
NEW ENGLAND	1,277	1,370	22,991	23,278	-	-	146	175	-	27
Maine	49	28	1,600	1,428	N	N	18	10	-	-
N.H.	34	30	1,037	1,321	-	-	11	28	-	-
Vt.	15	12	905	790	-	-	29	31	-	-
Mass.	518	693	9,618	9,180	-	-	58	71	-	18
R.I.	90	86	2,443	2,336	-	-	15	19	-	-
Conn.	571	521	7,388	8,223	N	N	15	16	-	9
MID. ATLANTIC	9,040	8,273	92,318	79,094	-	-	324	349	141	119
Upstate N.Y.	853	659	16,850	14,373	N	N	113	112	2	37
N.Y. City	4,989	4,949	27,441	25,624	-	-	72	128	-	28
N.J.	1,356	1,214	10,306	11,979	-	-	6	15	8	23
Pa.	1,842	1,451	37,721	27,118	N	N	133	94	131	31
E.N. CENTRAL	3,556	3,864	118,388	128,956	7	21	761	875	98	1,389
Ohio	718	726	28,041	32,199	-	-	135	114	93	262
Ind.	482	463	13,979	14,552	N	N	76	44	-	17
Ill.	1,609	1,866	36,709	41,084	-	2	68	113	1	554
Mich.	581	645	26,524	26,680	7	19	117	116	4	506
Wis.	166	164	13,135	14,441	-	-	365	488	-	50
W.N. CENTRAL	685	610	38,778	39,632	1	1	502	367	310	170
Minn.	144	131	8,140	8,799	N	N	128	175	45	17
Iowa	72	71	3,344	4,817	N	N	113	41	60	-
Mo.	319	278	15,032	13,556	-	-	40	35	29	99
N. Dak.	2	2	1,027	1,024	N	N	13	24	5	-
S. Dak.	10	10	2,243	1,844	-	-	36	28	40	14
Nebr.¶	52	58	3,269	3,897	1	1	18	48	45	32
Kans.	86	60	5,723	5,695	N	N	154	16	86	8
S. ATLANTIC	10,692	10,296	132,642	133,186	5	4	328	282	138	61
Del.	195	165	2,556	2,268	N	N	4	3	11	-
Md.	1,285	1,510	13,821	13,955	5	4	21	19	33	21
D.C.	859	616	2,666	2,801	-	-	16	4	-	-
Va.	819	712	14,445	15,102	-	-	41	21	17	-
W. Va.	79	76	2,157	2,104	N	N	4	2	1	1
N.C.	1,006	835	22,020	21,221	N	N	44	31	-	-
S.C.¶	719	747	13,573	12,344	-	-	8	6	1	1
Ga.	1,667	1,431	27,100	27,635	-	-	105	109	31	21
Fla.	4,063	4,204	34,304	35,756	N	N	85	87	44	17
E.S. CENTRAL	1,704	1,675	43,970	44,546	N	N	103	110	38	270
Ky.	175	277	6,896	7,523	N	N	21	7	11	41
Tenn.	738	691	17,226	13,607	N	N	35	51	14	7
Ala.	390	342	10,202	13,651	-	-	37	45	13	32
Miss.	401	365	9,646	9,765	N	N	10	7	-	190
W.S. CENTRAL	4,110	3,635	84,310	92,084	3	10	72	59	442	414
Ark.	165	206	6,493	6,308	-	-	16	8	19	11
La.	522	879	14,215	16,347	N	N	2	9	43	203
Okla.	176	166	9,670	9,526	N	N	13	16	25	-
Tex.	3,247	2,384	53,932	59,903	3	10	41	26	355	200
MOUNTAIN	1,342	1,170	37,393	43,510	1,981	2,309	120	143	304	1
Mont.	13	10	1,501	1,821	N	N	18	5	213	-
Idaho	21	26	2,065	2,107	N	N	26	28	-	1
Wyo.	7	8	811	790	1	-	5	9	86	-
Colo.	328	255	9,226	11,949	N	N	31	51	-	-
N. Mex.	103	78	5,833	6,399	6	7	9	18	2	-
Ariz.	584	486	10,622	12,826	1,929	2,253	5	15	-	-
Utah	60	57	2,905	2,558	14	11	19	13	1	-
Nev.	226	250	4,430	5,060	31	38	7	4	2	-
PACIFIC	6,076	4,529	119,174	117,882	1,150	1,328	321	244	4	-
Wash.	422	412	13,983	12,407	N	N	43	28	-	-
Oreg.	229	288	5,476	5,780	-	-	35	37	4	-
Calif.	5,321	3,710	93,458	92,766	1,150	1,328	242	176	-	-
Alaska	15	28	3,121	3,106	-	-	1	1	-	-
Hawaii	89	91	3,136	3,823	-	-	-	2	-	-
Guam	6	2	-	569	-	-	-	-	-	-
P.R.	944	1,042	1,475	2,148	N	N	N	N	-	-
V.I.	31	63	208	125	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	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 2002 and 2003 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 October 26, 2003.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 2003, and November 2, 2002 (44th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	2,175	3,238	220	168	122	41	15,104	17,549	263,757	298,577
NEW ENGLAND	142	243	47	46	15	5	1,146	1,563	6,085	6,562
Maine	10	33	1	8	1	-	162	181	162	114
N.H.	12	31	2	-	-	-	22	39	76	109
Vt.	15	12	-	1	-	1	108	123	71	81
Mass.	58	112	7	19	14	4	539	839	2,568	2,770
R.I.	1	11	-	1	-	-	95	138	809	768
Conn.	46	44	37	17	-	-	220	243	2,399	2,720
MID. ATLANTIC	207	363	14	1	36	7	2,937	3,587	35,352	36,096
Upstate N.Y.	85	150	9	-	19	-	879	1,042	6,610	7,383
N.Y. City	5	15	-	-	-	-	967	1,257	10,856	10,724
N.J.	14	57	-	-	-	1	268	411	6,031	6,592
Pa.	103	141	5	1	17	6	823	877	11,855	11,397
E.N. CENTRAL	488	766	23	30	22	4	2,510	3,076	53,324	62,939
Ohio	117	138	17	10	21	3	772	795	15,460	18,461
Ind.	75	60	-	1	-	-	-	-	5,562	6,307
Ill.	103	173	-	6	-	-	660	869	16,539	20,700
Mich.	78	128	-	3	-	1	628	808	11,448	12,194
Wis.	115	267	6	10	1	-	450	604	4,315	5,277
W.N. CENTRAL	388	467	44	30	20	4	1,658	1,765	13,681	15,263
Minn.	118	149	18	25	1	-	600	662	2,281	2,661
Iowa	94	113	-	-	-	-	239	272	775	1,156
Mo.	82	67	13	-	1	-	433	432	7,205	7,607
N. Dak.	12	16	4	-	8	-	28	30	56	62
S. Dak.	26	38	4	2	-	-	71	68	196	225
Nebr.	29	55	4	3	-	-	105	140	1,083	1,248
Kans.	27	29	1	-	10	4	182	161	2,085	2,304
S. ATLANTIC	131	279	61	30	8	1	2,355	2,513	66,100	75,979
Del.	9	8	N	N	N	N	39	47	977	1,358
Md.	10	26	-	-	-	-	100	105	6,629	7,753
D.C.	1	-	-	-	-	-	44	38	2,105	2,255
Va.	33	60	9	9	-	-	304	257	6,679	8,720
W. Va.	4	8	-	-	-	1	35	48	726	824
N.C.	4	72	26	-	-	-	N	N	12,786	13,702
S.C.	2	5	-	-	-	-	123	114	7,410	7,871
Ga.	27	41	3	7	-	-	812	802	13,629	15,210
Fla.	41	59	23	14	8	-	898	1,102	15,159	18,286
E.S. CENTRAL	74	99	2	-	7	10	298	327	21,694	25,804
Ky.	24	30	2	-	7	10	N	N	3,070	3,214
Tenn.	31	40	-	-	-	-	152	156	7,198	7,969
Ala.	13	18	-	-	-	-	146	171	6,469	8,794
Miss.	6	11	-	-	-	-	-	-	4,957	5,827
W.S. CENTRAL	80	102	3	1	9	6	251	214	34,854	41,317
Ark.	9	10	-	-	-	-	127	147	3,329	3,984
La.	3	4	-	-	-	-	9	5	8,635	10,089
Okla.	25	21	-	-	-	-	114	60	4,003	4,081
Tex.	43	67	3	1	9	6	1	2	18,887	23,163
MOUNTAIN	283	313	23	23	5	4	1,359	1,410	8,167	9,541
Mont.	16	27	-	-	-	-	94	78	81	80
Idaho	70	41	15	13	-	-	175	109	62	80
Wyo.	3	14	1	2	-	-	20	28	37	55
Colo.	67	93	3	5	5	4	384	467	2,227	2,949
N. Mex.	10	10	3	3	-	-	42	130	945	1,285
Ariz.	28	33	N	N	N	N	212	187	2,910	3,179
Utah	67	68	-	-	-	-	317	276	306	259
Nev.	22	27	1	-	-	-	115	135	1,599	1,654
PACIFIC	382	606	3	7	-	-	2,590	3,094	24,500	25,076
Wash.	95	132	1	-	-	-	294	369	2,317	2,430
Oreg.	92	200	2	7	-	-	343	378	737	737
Calif.	182	233	-	-	-	-	1,809	2,168	20,253	20,773
Alaska	4	7	-	-	-	-	74	101	448	524
Hawaii	9	34	-	-	-	-	70	78	745	612
Guam	N	N	-	-	-	-	-	7	-	41
P.R.	-	1	-	-	36	-	122	78	156	308
V.I.	-	-	-	-	-	-	-	-	55	31
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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 2003, and November 2, 2002 (44th 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. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	1,415	1,386	19	26	77	107	161	129	5,431	7,724
NEW ENGLAND	105	89	1	-	6	8	5	2	283	264
Maine	4	1	-	-	-	-	1	-	13	8
N.H.	11	8	1	-	-	-	-	-	11	11
Vt.	8	7	-	-	-	-	-	-	6	1
Mass.	46	41	-	-	6	4	3	2	171	126
R.I.	6	10	-	-	-	-	1	-	14	30
Conn.	30	22	-	-	-	4	-	-	68	88
MID. ATLANTIC	317	260	-	2	1	14	45	21	1,026	993
Upstate N.Y.	120	101	-	2	1	4	13	7	124	160
N.Y. City	52	59	-	-	-	-	10	9	373	399
N.J.	54	50	-	-	-	-	7	5	111	167
Pa.	91	50	-	-	-	10	15	-	418	267
E.N. CENTRAL	202	273	4	3	8	11	31	39	560	945
Ohio	63	69	-	-	-	1	11	8	101	264
Ind.	40	36	1	1	4	7	-	-	60	41
Ill.	62	109	-	-	-	-	15	20	176	247
Mich.	21	14	3	2	4	3	1	-	182	209
Wis.	16	45	-	-	-	-	4	11	41	184
W.N. CENTRAL	103	62	2	1	7	2	14	6	158	260
Minn.	40	42	2	1	7	2	2	4	37	37
Iowa	-	1	-	-	-	-	-	-	25	58
Mo.	40	11	-	-	-	-	12	2	58	75
N. Dak.	2	4	-	-	-	-	-	-	1	1
S. Dak.	1	1	-	-	-	-	-	-	-	3
Nebr.	3	-	-	-	-	-	-	-	11	17
Kans.	17	3	-	-	-	-	-	-	26	69
S. ATLANTIC	330	312	3	5	12	15	19	23	1,443	2,112
Del.	-	-	-	-	-	-	-	-	7	14
Md.	76	78	1	2	5	3	2	1	148	275
D.C.	-	-	-	-	-	-	-	-	37	72
Va.	46	29	-	-	-	-	5	4	90	123
W. Va.	14	17	-	-	-	1	-	1	14	17
N.C.	36	30	-	-	3	3	2	-	92	194
S.C.	4	12	-	-	-	-	1	2	35	56
Ga.	56	67	-	-	-	-	5	10	643	417
Fla.	98	79	2	3	4	8	4	5	377	944
E.S. CENTRAL	69	60	1	1	1	4	10	11	200	243
Ky.	5	5	-	-	1	1	-	1	29	41
Tenn.	42	30	-	-	-	-	6	7	143	108
Ala.	20	16	1	1	-	3	3	1	14	35
Miss.	2	9	-	-	-	-	1	2	14	59
W.S. CENTRAL	62	52	1	2	8	9	5	2	311	929
Ark.	7	1	-	-	1	-	-	-	19	62
La.	12	7	-	-	-	-	5	2	51	77
Okla.	41	42	-	-	7	9	-	-	17	46
Tex.	2	2	1	2	-	-	-	-	224	744
MOUNTAIN	141	149	4	4	19	26	21	14	400	482
Mont.	-	-	-	-	-	-	-	-	8	13
Idaho	4	2	-	-	-	-	1	1	-	25
Wyo.	1	2	-	-	-	-	-	-	1	3
Colo.	35	31	-	-	-	-	7	3	65	71
N. Mex.	14	24	-	-	4	6	1	1	19	27
Ariz.	64	62	4	2	6	14	8	6	222	252
Utah	13	16	-	1	5	4	4	-	40	44
Nev.	10	12	-	1	4	2	-	3	45	47
PACIFIC	86	129	3	8	15	18	11	11	1,050	1,496
Wash.	11	3	-	2	7	1	3	-	54	141
Oreg.	39	48	-	-	-	-	3	3	51	56
Calif.	20	42	3	6	8	17	4	4	928	1,266
Alaska	-	1	-	-	-	-	-	1	8	9
Hawaii	16	35	-	-	-	-	1	3	9	24
Guam	-	-	-	-	-	-	-	-	-	1
P.R.	-	1	-	-	-	-	-	-	49	206
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 2002 and 2003 are provisional and cumulative (year-to-date).

† Non-serotype b: nontypeable and type other than b; Unknown serotype: type unknown or not reported. Previously, cases reported without type information were counted as non-serotype b.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 2003, and November 2, 2002 (44th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	5,174	6,207	1,519	1,568	1,675	1,039	517	549	14,976	19,031
NEW ENGLAND	218	252	6	19	83	95	40	59	2,819	6,105
Maine	1	9	-	-	2	2	6	5	189	102
N.H.	11	19	-	-	6	4	3	4	95	223
Vt.	2	6	6	13	5	35	1	3	39	32
Mass.	169	130	-	6	34	41	13	33	900	1,752
R.I.	13	24	-	-	14	2	-	1	515	314
Conn.	22	64	U	U	22	11	17	13	1,081	3,682
MID. ATLANTIC	786	1,320	138	94	475	302	100	167	9,860	9,873
Upstate N.Y.	108	101	37	40	136	85	30	51	4,056	4,320
N.Y. City	261	661	-	-	43	60	14	35	5	56
N.J.	181	270	-	4	41	31	12	33	1,551	2,172
Pa.	236	288	101	50	255	126	44	48	4,248	3,325
E.N. CENTRAL	359	583	141	99	336	243	62	70	736	1,202
Ohio	124	83	8	1	203	96	22	20	76	57
Ind.	33	42	8	-	22	16	6	7	18	20
Ill.	1	135	16	21	3	23	7	17	33	46
Mich.	170	280	109	73	93	73	19	18	8	26
Wis.	31	43	-	4	15	35	8	8	601	1,053
W.N. CENTRAL	280	191	219	617	57	53	19	16	331	297
Minn.	31	26	8	2	3	11	10	1	224	206
Iowa	10	17	1	1	9	11	-	2	44	37
Mo.	195	98	209	601	28	15	5	9	51	39
N. Dak.	2	4	-	-	1	-	-	1	-	1
S. Dak.	2	2	-	1	2	4	-	1	1	2
Nebr.	22	23	1	12	4	12	4	1	2	6
Kans.	18	21	-	-	10	-	-	1	9	6
S. ATLANTIC	1,591	1,470	139	177	456	178	112	71	993	1,229
Del.	5	13	-	-	24	7	N	N	166	170
Md.	112	110	17	9	115	41	24	17	555	679
D.C.	10	21	-	-	17	6	-	-	9	21
Va.	156	170	7	12	85	21	8	7	81	138
W. Va.	25	18	2	3	16	-	6	-	20	17
N.C.	149	204	11	24	36	11	16	6	91	119
S.C.	144	104	24	4	7	8	4	8	8	20
Ga.	439	383	3	63	28	18	28	11	14	2
Fla.	551	447	75	62	128	66	26	22	49	63
E.S. CENTRAL	364	339	69	119	85	40	26	17	53	64
Ky.	57	50	12	4	37	18	6	3	14	21
Tenn.	171	116	19	24	32	14	7	9	15	21
Ala.	52	92	6	10	13	8	11	4	5	11
Miss.	84	81	32	81	3	-	2	1	19	11
W.S. CENTRAL	328	822	660	293	51	29	31	31	64	133
Ark.	58	102	3	10	2	-	1	-	-	3
La.	100	118	97	89	1	4	2	4	6	5
Okla.	41	62	2	5	7	3	3	7	-	-
Tex.	129	540	558	189	41	22	25	20	58	125
MOUNTAIN	512	527	46	49	58	40	29	27	17	15
Mont.	14	9	2	1	4	3	2	-	-	-
Idaho	-	6	-	1	3	1	2	2	3	4
Wyo.	29	17	-	5	2	2	-	-	2	1
Colo.	71	67	14	6	12	7	10	6	4	1
N. Mex.	30	144	-	2	2	2	2	3	1	1
Ariz.	240	190	7	4	9	7	9	12	1	3
Utah	55	40	-	4	20	13	-	3	3	4
Nev.	73	54	23	26	6	5	4	1	3	1
PACIFIC	736	703	101	101	74	59	98	91	103	113
Wash.	60	60	14	21	8	5	5	8	3	10
Oreg.	94	112	11	11	N	N	4	9	15	12
Calif.	555	515	73	68	66	53	84	66	82	88
Alaska	9	8	1	-	-	-	-	-	3	3
Hawaii	18	8	2	1	-	1	5	8	N	N
Guam	-	1	-	-	-	-	-	-	-	-
P.R.	78	163	-	-	-	-	-	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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 2003, and November 2, 2002 (44th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	951	1,236	1,344	1,517	6,020	7,012	4,936	6,749	735	936
NEW ENGLAND	39	68	65	82	719	668	498	805	-	6
Maine	3	5	6	4	12	13	61	53	-	-
N.H.	4	7	3	11	60	18	13	42	-	-
Vt.	2	4	3	4	60	127	30	86	-	-
Mass.	10	29	41	44	555	470	184	262	-	3
R.I.	2	5	2	5	16	13	55	68	-	3
Conn.	18	18	10	14	16	27	155	294	-	-
MID. ATLANTIC	228	337	153	182	675	425	836	1,138	33	53
Upstate N.Y.	50	39	39	42	399	285	367	622	2	-
N.Y. City	109	215	29	33	-	18	6	14	11	10
N.J.	33	39	19	27	42	-	62	162	10	16
Pa.	36	44	66	80	234	122	401	340	10	27
E.N. CENTRAL	78	151	189	228	510	817	149	157	15	29
Ohio	18	21	52	70	233	370	50	37	9	10
Ind.	2	13	40	29	56	114	26	31	1	4
Ill.	25	60	41	49	-	149	23	31	-	12
Mich.	23	44	39	38	97	47	43	44	5	3
Wis.	10	13	17	42	124	137	7	14	-	-
W.N. CENTRAL	44	57	134	127	367	645	506	433	66	103
Minn.	21	17	25	32	141	336	31	37	1	-
Iowa	5	4	23	19	104	111	96	69	2	3
Mo.	5	15	65	43	74	125	51	49	50	95
N. Dak.	1	1	1	-	5	5	50	47	-	-
S. Dak.	3	2	1	2	3	6	67	83	5	1
Nebr.	-	5	8	23	6	8	58	-	3	4
Kans.	9	13	11	8	34	54	153	148	5	-
S. ATLANTIC	274	293	234	249	550	378	2,243	2,322	440	438
Del.	3	5	8	7	8	3	56	24	1	1
Md.	66	100	24	8	72	59	255	348	96	37
D.C.	13	20	-	-	2	2	-	-	1	2
Va.	35	29	24	38	90	128	451	513	29	35
W. Va.	4	3	5	4	16	31	77	157	5	2
N.C.	20	21	30	30	118	40	687	624	207	262
S.C.	3	7	21	28	113	41	206	131	32	68
Ga.	53	47	30	28	30	26	346	365	59	19
Fla.	77	61	92	106	101	48	165	160	10	12
E.S. CENTRAL	18	19	74	86	122	229	159	204	90	119
Ky.	7	7	17	14	41	89	35	25	2	5
Tenn.	5	3	23	35	60	99	97	108	58	73
Ala.	3	4	15	20	15	32	26	67	12	14
Miss.	3	5	19	17	6	9	1	4	18	27
W.S. CENTRAL	59	71	150	186	517	1,495	202	1,122	80	171
Ark.	4	3	13	23	37	485	25	94	31	97
La.	4	4	32	38	6	7	-	-	-	-
Okla.	4	8	14	19	14	35	177	106	42	61
Tex.	47	56	91	106	460	968	-	922	7	13
MOUNTAIN	42	43	65	79	810	883	155	292	10	14
Mont.	-	2	4	2	5	5	20	18	1	1
Idaho	1	-	6	3	69	64	15	37	2	-
Wyo.	1	-	2	-	123	11	6	18	2	5
Colo.	21	23	21	23	282	353	38	59	2	2
N. Mex.	2	3	7	4	56	180	5	10	-	1
Ariz.	12	7	15	23	126	131	54	129	1	-
Utah	4	5	2	4	116	92	14	12	2	-
Nev.	1	3	8	20	33	47	3	9	-	5
PACIFIC	169	197	280	298	1,750	1,472	188	276	1	3
Wash.	23	22	27	57	603	391	-	-	-	-
Oreg.	10	9	52	42	397	168	6	14	-	2
Calif.	128	157	188	188	735	881	175	236	1	1
Alaska	1	2	3	4	5	4	7	26	-	-
Hawaii	7	7	10	7	10	28	-	-	-	-
Guam	-	-	-	1	-	2	-	-	-	-
P.R.	1	1	5	7	1	3	67	78	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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 2003, and November 2, 2002 (44th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	34,748	37,092	18,616	17,611	4,486	3,967	1,772	2,085	367	299
NEW ENGLAND	1,801	1,966	272	294	346	287	40	97	8	3
Maine	114	130	6	8	25	20	-	-	-	-
N.H.	100	122	5	11	21	35	-	-	N	N
Vt.	63	69	7	1	19	9	6	5	4	2
Mass.	1,064	1,111	179	184	165	96	N	N	N	N
R.I.	112	149	14	16	14	15	10	12	4	1
Conn.	348	385	61	74	102	112	24	80	U	U
MID. ATLANTIC	3,877	4,992	1,919	1,516	803	623	110	95	85	70
Upstate N.Y.	997	1,304	425	250	319	248	61	79	67	57
N.Y. City	1,110	1,225	334	426	113	139	U	U	U	U
N.J.	426	932	228	536	131	136	N	N	N	N
Pa.	1,344	1,531	932	304	240	100	49	16	18	13
E.N. CENTRAL	4,570	4,877	1,470	1,860	930	851	369	195	146	117
Ohio	1,205	1,186	267	542	266	183	239	53	84	16
Ind.	486	485	132	97	95	46	130	140	39	52
Ill.	1,470	1,620	748	896	182	246	-	2	-	-
Mich.	678	782	218	158	320	270	N	N	N	N
Wis.	731	804	105	167	67	106	N	N	23	49
W.N. CENTRAL	2,208	2,262	707	921	292	216	138	414	49	53
Minn.	473	482	89	191	143	108	-	292	41	49
Iowa	337	438	70	112	N	N	N	N	N	N
Mo.	887	733	339	164	66	42	11	5	2	1
N. Dak.	34	40	3	18	13	-	3	1	6	3
S. Dak.	102	105	16	151	21	13	1	1	-	-
Nebr.	131	151	100	203	23	21	-	25	N	N
Kans.	244	313	90	82	26	32	123	90	N	N
S. ATLANTIC	9,252	9,545	6,280	5,753	789	652	916	954	18	30
Del.	86	85	154	252	6	2	1	3	N	N
Md.	750	820	536	997	237	104	-	-	-	21
D.C.	42	70	67	51	13	8	2	-	7	3
Va.	932	1,044	388	841	92	69	N	N	N	N
W. Va.	113	124	-	9	31	19	59	37	11	6
N.C.	1,157	1,305	837	381	93	112	N	N	U	U
S.C.	653	716	415	105	36	35	124	169	N	N
Ga.	1,832	1,716	1,472	1,406	104	119	220	237	N	N
Fla.	3,687	3,665	2,411	1,711	177	184	510	508	N	N
E.S. CENTRAL	2,278	2,834	770	1,242	176	100	121	118	-	-
Ky.	348	329	115	147	40	19	16	16	N	N
Tenn.	647	699	281	97	136	81	105	102	N	N
Ala.	454	746	222	677	-	-	-	-	N	N
Miss.	829	1,060	152	321	-	-	-	-	-	-
W.S. CENTRAL	4,473	4,109	3,994	2,707	248	260	53	166	56	22
Ark.	698	942	91	175	5	7	8	6	-	-
La.	420	700	226	419	1	1	45	160	8	7
Okla.	423	445	736	509	78	39	N	N	31	3
Tex.	2,932	2,022	2,941	1,604	164	213	N	N	17	12
MOUNTAIN	1,877	1,908	1,018	798	380	472	22	46	5	4
Mont.	93	78	2	3	2	-	-	-	-	-
Idaho	156	129	29	13	18	9	N	N	N	N
Wyo.	73	63	6	8	2	7	5	13	-	-
Colo.	420	521	257	179	117	105	-	-	-	-
N. Mex.	217	268	205	188	94	95	17	32	-	-
Ariz.	560	499	416	336	136	226	-	-	N	N
Utah	202	160	45	25	9	30	-	-	5	4
Nev.	156	190	58	46	2	-	-	1	-	-
PACIFIC	4,412	4,599	2,186	2,520	522	506	3	-	-	-
Wash.	467	456	135	141	53	56	-	-	N	N
Oreg.	363	307	203	92	N	N	N	N	N	N
Calif.	3,335	3,529	1,801	2,216	369	366	N	N	N	N
Alaska	62	74	9	5	-	-	-	-	N	N
Hawaii	185	233	38	66	100	84	3	-	-	-
Guam	-	38	-	30	-	-	-	4	-	-
P.R.	313	475	8	30	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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 1, 2003, and November 2, 2002 (44th Week)*

Reporting area	Syphilis: Primary & secondary		Syphilis: Congenital		Tuberculosis		Typhoid fever		Varicella (Chickenpox)
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003
UNITED STATES	5,675	5,689	308	363	9,269	10,744	259	282	10,575
NEW ENGLAND	171	122	1	1	275	349	23	13	1,546
Maine	7	2	1	-	5	20	-	-	759
N.H.	14	6	-	-	7	12	2	-	-
Vt.	1	1	-	-	7	4	-	-	631
Mass.	115	82	-	1	180	183	12	7	151
R.I.	16	6	-	-	28	45	2	-	5
Conn.	18	25	-	-	48	85	7	6	-
MID. ATLANTIC	696	623	51	57	1,747	1,863	44	71	32
Upstate N.Y.	37	29	9	4	234	262	10	7	N
N.Y. City	394	364	31	23	943	900	16	39	-
N.J.	128	138	11	29	317	427	13	17	-
Pa.	137	92	-	1	253	274	5	8	32
E.N. CENTRAL	745	1,041	64	56	937	1,086	17	31	4,535
Ohio	181	133	3	3	171	181	2	6	1,016
Ind.	43	53	10	3	111	107	4	2	-
Ill.	288	408	19	34	444	517	1	15	-
Mich.	222	424	32	16	171	224	10	4	2,884
Wis.	11	23	-	-	40	57	-	4	635
W.N. CENTRAL	116	109	4	2	381	447	4	9	45
Minn.	34	54	-	1	155	198	-	3	N
Iowa	7	2	-	-	17	24	2	-	N
Mo.	45	28	4	1	99	115	1	2	-
N. Dak.	2	-	-	-	-	4	-	-	45
S. Dak.	2	-	-	-	16	10	-	-	-
Nebr.	4	6	-	-	10	23	1	4	-
Kans.	22	19	-	-	84	73	-	-	-
S. ATLANTIC	1,544	1,452	56	80	1,893	2,237	43	39	1,810
Del.	6	10	-	-	23	14	-	-	28
Md.	251	172	10	15	202	247	8	7	-
D.C.	49	50	-	1	-	-	-	-	27
Va.	69	60	1	1	221	228	12	7	473
W. Va.	2	2	-	-	19	28	-	-	1,061
N.C.	133	246	16	18	265	293	7	2	N
S.C.	86	117	4	10	144	145	-	-	221
Ga.	397	314	6	13	303	446	7	5	-
Fla.	551	481	19	22	716	836	9	18	N
E.S. CENTRAL	264	416	10	25	559	643	4	4	1
Ky.	31	83	1	3	103	113	-	4	N
Tenn.	116	151	3	7	181	249	2	-	N
Ala.	98	139	4	9	191	176	2	-	-
Miss.	19	43	2	6	84	105	-	-	1
W.S. CENTRAL	797	706	56	78	1,233	1,584	30	28	2,095
Ark.	42	30	-	10	77	110	-	-	-
La.	136	131	-	-	-	-	-	-	11
Okla.	57	52	1	2	124	140	1	2	N
Tex.	562	493	55	66	1,032	1,334	29	26	2,084
MOUNTAIN	256	271	22	16	311	349	5	9	511
Mont.	-	-	-	-	5	6	-	-	N
Idaho	11	7	-	-	8	13	-	-	N
Wyo.	-	-	-	-	4	3	-	-	43
Colo.	24	56	3	2	62	80	3	4	-
N. Mex.	52	30	1	-	6	32	-	1	2
Ariz.	155	162	18	14	174	176	2	-	4
Utah	4	6	-	-	30	25	-	2	462
Nev.	10	10	-	-	22	14	-	2	-
PACIFIC	1,086	949	44	48	1,933	2,186	89	78	-
Wash.	66	52	-	1	206	202	3	4	-
Oreg.	35	18	-	-	88	97	4	2	-
Calif.	983	871	44	46	1,533	1,722	81	67	-
Alaska	-	-	-	-	47	42	-	-	-
Hawaii	2	8	-	1	59	123	1	5	-
Guam	-	6	-	-	-	61	-	-	-
P.R.	156	242	1	21	86	90	-	-	390
V.I.	1	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending November 1, 2003 (44th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	456	331	89	25	7	4	42
Boston, Mass.	127	87	28	7	2	3	14
Bridgeport, Conn.	23	17	4	1	1	-	3
Cambridge, Mass.	17	11	6	-	-	-	1
Fall River, Mass.	34	27	4	2	1	-	2
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	25	17	6	1	1	-	-
Lynn, Mass.	8	6	2	-	-	-	1
New Bedford, Mass.	25	21	4	-	-	-	-
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	71	50	14	7	-	-	10
Somerville, Mass.	3	3	-	-	-	-	1
Springfield, Mass.	47	34	9	4	-	-	1
Waterbury, Conn.	21	15	4	-	2	-	3
Worcester, Mass.	55	43	8	3	-	1	6
MID. ATLANTIC	2,096	1,444	416	141	51	42	100
Albany, N.Y.	44	34	7	1	-	2	1
Allentown, Pa.	24	16	2	4	-	2	1
Buffalo, N.Y.	99	71	15	7	2	4	6
Camden, N.J.	28	16	5	1	2	4	1
Elizabeth, N.J.	22	17	5	-	-	-	1
Erie, Pa.	44	36	3	2	3	-	2
Jersey City, N.J.	38	26	8	3	1	-	-
New York City, N.Y.	1,087	754	217	76	23	15	47
Newark, N.J.	41	16	12	5	3	5	5
Paterson, N.J.	22	11	7	2	1	1	3
Philadelphia, Pa.	235	140	60	22	8	5	9
Pittsburgh, Pa.§	35	20	9	5	-	1	-
Reading, Pa.	31	27	2	-	2	-	1
Rochester, N.Y.	139	104	24	8	1	2	10
Schenectady, N.Y.	31	24	5	2	-	-	1
Scranton, Pa.	31	27	4	-	-	-	2
Syracuse, N.Y.	81	60	17	1	2	1	5
Trenton, N.J.	22	13	8	1	-	-	-
Utica, N.Y.	21	18	1	1	1	-	4
Yonkers, N.Y.	21	14	5	-	2	-	1
E.N. CENTRAL	2,002	1,339	432	134	35	56	109
Akron, Ohio	49	36	10	1	-	2	3
Canton, Ohio	30	21	5	3	1	-	2
Chicago, Ill.	395	233	98	35	7	16	14
Cincinnati, Ohio	70	52	13	3	2	-	7
Cleveland, Ohio	123	77	33	8	3	2	6
Columbus, Ohio	177	120	38	9	5	5	12
Dayton, Ohio	125	89	27	7	1	1	15
Detroit, Mich.	176	97	47	19	8	5	9
Evansville, Ind.	37	26	10	1	-	-	1
Fort Wayne, Ind.	68	48	12	4	1	3	8
Gary, Ind.	7	2	3	1	1	-	-
Grand Rapids, Mich.	48	40	7	1	-	-	2
Indianapolis, Ind.	227	147	50	17	4	9	9
Lansing, Mich.	61	45	9	5	-	2	1
Milwaukee, Wis.	121	85	21	11	1	3	4
Peoria, Ill.	56	42	11	1	-	2	5
Rockford, Ill.	56	38	13	1	-	4	2
South Bend, Ind.	28	20	6	2	-	-	2
Toledo, Ohio	82	64	12	4	1	1	5
Youngstown, Ohio	66	57	7	1	-	1	2
W.N. CENTRAL	541	350	111	47	20	13	44
Des Moines, Iowa	60	42	13	3	2	-	7
Duluth, Minn.	21	16	2	2	1	-	3
Kansas City, Kans.	40	25	9	3	1	2	4
Kansas City, Mo.	96	63	18	6	7	2	4
Lincoln, Nebr.	33	22	8	3	-	-	5
Minneapolis, Minn.	81	41	22	10	5	3	3
Omaha, Nebr.	96	65	13	14	1	3	10
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	44	33	8	2	1	-	3
Wichita, Kans.	70	43	18	4	2	3	5
S. ATLANTIC	1,189	718	303	103	34	30	61
Atlanta, Ga.	160	85	50	17	6	2	1
Baltimore, Md.	133	81	40	11	1	-	17
Charlotte, N.C.	109	64	26	11	3	5	9
Jacksonville, Fla.	144	84	39	14	4	2	10
Miami, Fla.	109	67	22	12	4	4	6
Norfolk, Va.	64	40	16	4	1	3	2
Richmond, Va.	54	28	13	4	6	3	-
Savannah, Ga.	59	35	14	5	1	4	1
St. Petersburg, Fla.	51	29	13	5	3	1	3
Tampa, Fla.	195	136	40	13	2	4	10
Washington, D.C.	101	62	28	6	3	2	1
Wilmington, Del.	10	7	2	1	-	-	1
E.S. CENTRAL	813	529	198	52	15	18	53
Birmingham, Ala.	152	101	37	4	7	3	17
Chattanooga, Tenn.	55	35	13	3	2	2	5
Knoxville, Tenn.	94	64	22	7	-	1	-
Lexington, Ky.	65	42	16	5	1	1	5
Memphis, Tenn.	171	111	45	11	4	-	4
Mobile, Ala.	95	65	21	6	1	1	3
Montgomery, Ala.	28	19	8	1	-	-	7
Nashville, Tenn.	153	92	36	15	-	10	12
W.S. CENTRAL	1,462	979	300	109	38	36	80
Austin, Tex.	94	64	20	8	1	1	2
Baton Rouge, La.	33	24	6	2	-	1	-
Corpus Christi, Tex.	58	38	16	4	-	-	2
Dallas, Tex.	197	121	51	17	3	5	14
El Paso, Tex.	73	55	14	2	2	-	2
Ft. Worth, Tex.	109	66	24	11	4	4	5
Houston, Tex.	373	229	70	40	15	19	28
Little Rock, Ark.	81	52	22	5	1	1	-
New Orleans, La.	37	29	8	-	-	-	-
San Antonio, Tex.	227	160	47	13	4	3	14
Shreveport, La.	65	54	8	3	-	-	4
Tulsa, Okla.	115	87	14	4	8	2	9
MOUNTAIN	912	557	182	70	13	17	53
Albuquerque, N.M.	95	69	17	9	-	-	10
Boise, Idaho	42	33	7	-	1	1	1
Colo. Springs, Colo.	77	56	17	2	-	2	3
Denver, Colo.	107	61	24	11	2	8	6
Las Vegas, Nev.	254	153	63	30	3	5	16
Ogden, Utah	31	21	5	4	1	-	2
Phoenix, Ariz.	75	1	-	2	-	-	-
Pueblo, Colo.	23	21	1	-	-	1	-
Salt Lake City, Utah	73	48	16	4	5	-	8
Tucson, Ariz.	135	94	32	8	1	-	7
PACIFIC	1,650	1,158	315	105	43	27	156
Berkeley, Calif.	10	8	2	-	-	-	-
Fresno, Calif.	160	104	34	17	2	3	12
Glendale, Calif.	15	13	-	2	-	-	4
Honolulu, Hawaii	81	58	16	4	2	1	8
Long Beach, Calif.	70	49	14	4	2	1	13
Los Angeles, Calif.	353	249	64	26	10	4	31
Pasadena, Calif.	25	22	3	-	-	-	4
Portland, Oreg.	127	78	31	7	6	4	6
Sacramento, Calif.	174	132	32	4	5	1	18
San Diego, Calif.	132	93	18	12	5	4	11
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	193	145	36	9	-	3	21
Santa Cruz, Calif.	36	29	4	1	1	1	2
Seattle, Wash.	125	74	30	11	7	3	12
Spokane, Wash.	60	47	10	2	-	1	8
Tacoma, Wash.	89	57	21	6	3	1	6
TOTAL	11,121¶	7,405	2,346	786	256	243	698

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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