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Hepatic Toxicity Possibly Associated with Kava-Containing Products — United States, Germany, and Switzerland, 1999–2002

Since 1999, health-care professionals in Germany, Switzerland, and the United States have reported the occurrence of severe hepatic toxicity possibly associated with the consumption of products containing kava (i.e., kava kava or *Piper methysticum*). A total of 11 patients who used kava products had liver failure and underwent subsequent liver transplantation (*1*–*7*). On March 25, 2002, in response to five such case reports (four in Europe and one in the United States), the Food and Drug Administration (FDA) issued a consumer advisory (*8*) and subsequently completed an investigation already underway of a similar U.S. case. This report presents the investigation of the two U.S. cases of liver failure associated with kava-containing dietary supplement products and summarizes the European cases. FDA continues to advise consumers and health-care providers about the potential risk associated with the use of kava-containing products.

Case Reports

Case 1. In May 2001, a previously healthy woman aged 45 years reported the onset of nausea and weakness approximately 8 weeks after beginning use of a kava-containing dietary supplement that listed on the package label, "Kava kava extract (root), standardized to 30% kavalactones (75 mg), hops (strobiles), German chamomile (flower head), passion flower (flower and fruit), gelatin, and natural vegetable fiber." The patient reported taking one tablet twice daily, which was less than the package label recommendation of one tablet three times daily. The patient reported no concomitant medication or dietary supplement use and rare alcohol ingestion (one to two drinks a year). The patient was initially prescribed rabeprazole for acid reflux symptoms, and this drug was taken for 4 days. In addition, the patient discontinued use of the kava-containing supplement. Several days later, the patient was hospitalized with jaundice and hepatitis. Liver biopsy demonstrated subfulminant hepatic necrosis. Autoimmune and infectious hepatitis tests were negative. Liver transplantation was performed in July 2001, and the patient resumed daily activities following recovery from the procedure.

Case 2. In December 2000, a previously healthy girl aged 14 years reported the onset of nausea, vomiting, decreased appetite, weight loss, and fatigue. One week later, the patient had scleral icterus and was hospitalized with acute hepatitis. During late August to mid-December 2000, the patient reportedly used two kava-containing products. One product was taken intermittently in accordance with package directions (two capsules once daily). The patient estimated that she used the product on approximately 44 days during this period. The patient reported taking the second product in accordance with package directions (two capsules once daily) for 7 consecutive days at the beginning of the 4-month period. Because the product labels were unavailable, other product ingredients were unknown. The patient reported no use of alcohol or medications other than occasional ibuprofen. At the time of hospitalization, the patient's liver-function tests were markedly abnormal (alanine aminotransferase: 4,076 U/L, aspartate aminotransfease: 3,355 U/L, gamma-glutamyltransferase: 148 U/L, total bilirubin: 16.2 mg/dL, ammonia: 17 mg/dL, and prothrombin time: 29.4 seconds) (*5*). Tests for human immunodeficiency virus (HIV),

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cytomegalovirus, Epstein-Barr virus, Wilson's disease, a-antitrypsin deficiency, antinuclear antibodies, and hepatitis A, B, C, and E were negative. Initial liver biopsy revealed active fulminant hepatitis with extensive centrilobular necrosis, approximately 25% hepatocellular viability, and mixed inflammatory infiltrates consisting of lymphocytes, histiocytes, scattered eosinophils, and occasional neutrophils. No viral cytopathic changes were identified, and immunohistochemical stains for hepatitis B surface and core antigens were negative. The patient underwent successful orthotopic liver transplantation. Pathological examination of the native liver revealed active fulminant hepatitis with total hepatocyte necrosis and extensive parenchymal infiltration by lymphocytes, histocytes, and occasional eosinophils (*5*). The patient resumed daily activities following recovery from the procedure.

Summary of European Case Reports

Eight hepatic transplant cases following hepatic failure associated with the use of kava-containing products have been reported in Europe (six in Germany and two in Switzerland). Two male patients aged 32 and 50 years and six females aged 22–61 years required liver transplants after using kava-containing products. The duration of kava use ranged from 8 weeks to 12 months. The products were used at doses ranging from 60 mg to 240 mg per day. Seven patients used kava prepared either by ethanol or acetone extraction methods; one patient used an unspecified type of kava-containing product. The patients had varying symptoms, including influenza-like symptoms and jaundice. Each patient's condition worsened and progressed to fulminant hepatic failure. Four of these cases have been reported in medical literature (*1–4*). Additional information about these cases is available from the German regulatory authority, the Federal Institute for Drugs and Medical Devices, Bonn, Germany, at http://www.bfarm.de. A ninth European transplant case was reported directly to FDA's MedWatch System by a U.S. pharmaceutical manufacturer.

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Editorial Note: Kava is a botanical product derived from the rhizome and roots of *Piper methysticum*, a shrub indigenous to the South Pacific. In the United States, kava-containing products are sold as dietary supplements and marketed for the treatment of anxiety, occasional insomnia, premenstrual syndrome, and stress. These supplements often are in the form of raw plant material or concentrated extracts, which are

obtained by using either acetone or ethanol extraction or cryoprecipitation. Preparations marketed for human consumption contain a mixture of components collectively known as kava pyrones (i.e., kavalactones). Kava-containing products might differ based on the absolute amount of kava pyrones present and on the relative distribution of kava pyrones. Several countries, including Germany, Switzerland, Canada, Australia, and France, have restricted the sale of kava-containing products based on the occurrence of hepatic adverse events and the documented hepatic toxicity following rechallenge with a kava-containing product (*9*). FDA research suggests that <1% of the severe adverse events that occur with the use of dietary supplements are reported to FDA (*10*).

FDA has advised consumers and health-care providers about the potential risk for hepatic toxicity associated with the use of kava-containing products (*7*). Additional caution by persons who have pre-existing liver disease or are at risk for liver disease might be warranted. Health-care providers should consider questioning patients with evidence of hepatic injury about the use of dietary supplements and herbal products. Adverse events associated with the use of any dietary supplement should be reported to FDA's MedWatch Program, telephone 800-332-1088, or http://www.fda.gov/medwatch.

References

1. Brauer RB, Pfab R, Becker K, Berger H, Stangl M. Fulminantes leberversagen nach einnahme des pflazlichen heilmittels kava-kava. Z Gastroenterol 2001;39:491.
2. Escher M, Desmeules J, Giostra E, et al. Hepatitis associated with kava, a herbal remedy for anxiety. BMJ 2001;322:139.
3. Kraft M, Spahn TW, Menzel J, et al. Fulminant liver failure after administration of the herbal antidepressant kava-kava. Dtsch Med Wochenschr 2001;126:970–2.
4. Saß M, Schnabel S, Kröger J, Liebe S, Schareck WD. Acute liver failure from kava-kava—a rare indication for liver transplantation. Z Gastroenterol 2001;39:491.
5. Campo JV, McNabb J, Perel JM, Mazariegos GV, Hasegawa SL, Reyes J. Kava-induced fulminant hepatic failure. J Am Acad Child Adolesc Psychiatry 2002;41:631–2.
6. Humbertston C, Akhtar J, Krenzelok E. Acute hepatitis induced by kava kava, an herbal product derived from *Piper methysticum*. J Clin Toxicol 2001;39:549.
7. Russmann S, Lauterburg BH, Helbling A. Kava hepatotoxicity. Ann Intern Med 2001;135:68–9.
8. Food and Drug Administration. Letter to health-care professionals: FDA issues consumer advisory that kava products may be associated with severe liver injury. Rockville, Maryland: U.S. Department of Health and Human Services, Food and Drug Administration, 2002. Available at http://www.cfsan.fda.gov/~dms/addskava.html.
9. Strahl S, Ehret V, Dahm HH, Maier KP. Necrotizing hepatitis after taking herbal remedies. Dtsch Med Wochenschr 1998;123:1410–4.
10. Walker AM. The relation between voluntary notification and material risk in dietary supplement safety. Food and Drug Administration docket 00N-1200, 2000. Available at http://www.fda.gov/ohrms/dockets/00n1200.

Invasive Cervical Cancer Among Hispanic and Non-Hispanic Women — United States, 1992–1999

During 1973–1999, both the incidence of and death rates for cervical cancer decreased approximately 50% in the United States (*1*). For 2002, approximately 13,000 new cases of invasive cervical cancer are expected, and approximately 4,100 women will die of the disease (*2*). Although invasive cervical cancer can be prevented by regular screening (*3*), the prevalence of Papanicolaou (Pap) testing remains relatively low among minority populations such as Hispanic women (*4*). To characterize the incidence of invasive cervical cancer, CDC analyzed incidence data for Hispanic and non-Hispanic women during 1992–1999 in 11 geographic areas with population-based registries (*5*). This report summarizes the results of this analysis, which indicate that the incidence of invasive cervical cancer decreased for Hispanic and non-Hispanic women. However, among women aged ≥30 years, cervical cancer incidence for Hispanic women was approximately twice that for non-Hispanic women. To lower the incidence of invasive cervical cancer, local health organizations should provide culturally appropriate public health interventions that encourage participation in readily accessible cervical cancer– screening programs.

Data were obtained from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (*5*). Microscopically confirmed invasive cervical cancer cases (*International Classification of Diseases for Oncology, Second Edition*, codes C532–C539) were selected. SEER*Stat version 4.2 (*5*) was used to compute incidences per 100,000 women and age-adjusted to the 2000 U.S. standard population by 5-year age groups. To test for significant trends, linear regression was used to determine the estimated annual percent change (EAPC) and the 95% confidence interval (CI). The chi-square test was used to determine whether differences in incidences were significant. Invasive disease confined to the cervix was categorized as localized; cancers that had spread beyond the cervix to regional nodes or metastasized to other sites were categorized as advanced.

During 1992–1999, a total of 14,759 invasive cervical cancer cases were diagnosed (53% localized, 40% advanced, and 7% unstaged). After excluding 235 cases of persons with unknown ethnicity, the analysis included data from 14,524 invasive cervical cancer cases; 3,166 (22%) were among Hispanic women, and 11,358 (78%) were among non-Hispanic women.

The incidence for invasive cervical cancer was 16.9 per 100,000 women (95% CI=16.2–17.5) for Hispanic women and 8.9 (95% CI=8.8–9.1) for non-Hispanic women (Table).

TABLE. Incidence* of invasive cervical cancer among Hispanic and non-Hispanic women, by stage at diagnosis† — Surveillance, Epidemiology, and End Results Program, United States, 1992–1999

	Localized					Advanced					All				
	Hispanic		Non-Hispanic		Incidence rate	Hispanic		Non-Hispanic		Incidence rate	Hispanic		Non-Hispanic		Incidence rate
Year	Rate	(95% CI§)	Rate	(95% CI)	ratio¶	Rate	(95% CI)	Rate	(95% CI)	ratio	Rate	(95% CI)	Rate	(95% CI)	ratio
1992	9.1	(7.8–10.6)	4.7	(4.4–5.1)	1.9	9.2	(7.8–10.9)	4.0	(3.7–4.3)	2.3	**20.0**	**(18.0–22.2)**	**9.5**	**(9.0–10.0)**	**2.1**
1993	8.9	(7.6–10.4)	5.1	(4.7–5.5)	1.7	8.6	(7.3–10.2)	3.6	(3.3–3.9)	2.4	**18.9**	**(17.0–21.0)**	**9.3**	**(8.9– 9.8)**	**2.0**
1994	9.5	(8.2–10.9)	4.7	(4.4–5.1)	2.0	7.8	(6.6– 9.3)	3.9	(3.6–4.2)	2.0	**18.9**	**(17.1–21.0)**	**9.2**	**(8.7– 9.7)**	**2.1**
1995	9.2	(7.9–10.6)	4.7	(4.4–5.0)	2.0	6.8	(5.7– 8.1)	3.4	(3.1–3.7)	2.0	**16.8**	**(15.0–18.7)**	**8.7**	**(8.2– 9.2)**	**1.9**
1996	8.3	(7.2– 9.6)	4.9	(4.6–5.3)	1.7	7.8	(6.6– 9.2)	3.9	(3.6–4.2)	2.0	**17.0**	**(15.3–18.9)**	**9.4**	**(8.9– 9.9)**	**1.8**
1997	7.1	(6.1– 8.3)	4.8	(4.4–5.1)	1.5	6.6	(5.6– 7.8)	3.4	(3.2–3.7)	1.9	**14.6**	**(13.0–16.2)**	**8.7**	**(8.3– 9.2)**	**1.7**
1998	7.3	(6.3– 8.5)	4.7	(4.3–5.0)	1.6	6.6	(5.6– 7.8)	3.6	(3.3–3.9)	1.8	**14.6**	**(13.1–16.3)**	**8.7**	**(8.3– 9.2)**	**1.7**
1999	7.9	(6.9– 9.1)	4.3	(4.0–4.6)	1.8	6.8	(5.8– 8.0)	3.2	(2.9–3.5)	2.1	**15.5**	**(14.0–17.1)**	**7.9**	**(7.5– 8.3)**	**2.0**
Total	**8.4**	**(7.9– 8.8)**	**4.7**	**(4.6–4.8)**	**1.8**	**7.4**	**(7.0– 7.9)**	**3.6**	**(3.5–3.7)**	**2.0**	16.9	(16.2–17.5)	8.9	(8.8– 9.1)	1.9
Estimated annual percentage change	-3.3	(-6.0– -0.6)	-1.3	(-2.9–0.4)	—	-4.5	(-6.9– -2.0)	-2.1	(-4.4–0.2)	—	**-4.4**	**(-6.3– -2.5)**	**-2.0**	**(-3.5– -0.6)**	—

* Per 100,000 women age-adjusted to 2000 U.S. standard population.
† Localized-stage cancer is confined to the cervix; advanced-stage cancer (includes regional and distant) requires direct extension to corpus uteri or any site beyond the cervix, lymph node involvement, or metastasis. All stages include localized, advanced, and unstaged cancer.
§ Confidence interval.
¶ Incidence of Hispanic women divided by incidence of non-Hispanic women.

Regardless of the stage of disease at diagnosis, incidences for Hispanic women were approximately twice those for non-Hispanic women in each year during 1992–1999 (Table). Overall incidences significantly decreased an average of 4.4% per year for Hispanic women and 2.0% per year for non-Hispanic women (Table). Incidences of localized-stage cancer declined 3.3% per year for Hispanic women (EAPC=-3.3; 95% CI=-6.0– -0.6); the decline for non-Hispanic women was not significant (EAPC=-1.3; 95% CI=-2.9–0.4). Incidences of advanced-stage cancer declined 4.5% per year for Hispanic women (EAPC=-4.5; 95% CI=-6.9– -2.0); the decline for non-Hispanic women was not significant (EAPC=-2.1; 95% CI=-4.4–0.2).

Analyses of invasive cervical cancer incidences by age and stage at diagnosis indicated that, except for women aged 20–29 years, incidences for Hispanic women were significantly higher than those for non-Hispanic women, regardless of stage at diagnosis (Figures 1 and 2). For both Hispanic and non-Hispanic women, approximately 30% of all new invasive cervical cancers diagnosed among women aged <50 years were at an advanced stage; among women who were aged ≥50 years, advanced-stage cervical cancer represented 52% of new diagnoses.

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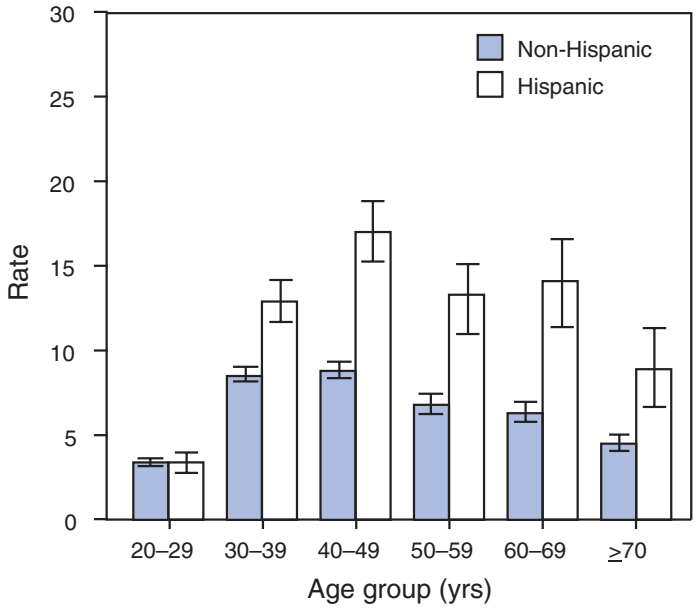
Editorial Note: The findings in this report indicate that in a population defined by 11 SEER registry areas, overall incidences of invasive cervical cancer are decreasing but that incidences remain relatively high for Hispanic women aged ≥30 years and for non-Hispanic women aged ≥50 years. The findings also indicate that women who have cervical cancer diagnosed at age ≥50 years are more likely to have advanced-stage cervical cancer.

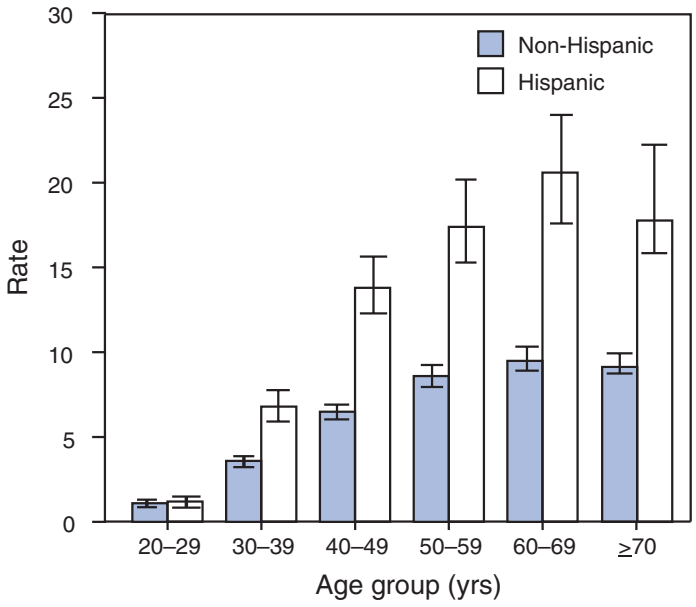
Analyses of cervical cancer incidence by stage at diagnosis contribute to the assessment of the impact of screening programs. Cervical cancer screening identifies precancerous lesions and prompts early treatment to prevent advanced-stage

FIGURE 1. Incidence* and 95% confidence intervals of localized† invasive cervical cancer among Hispanic and non-Hispanic women, by age group — Surveillance, Epidemiology, and End Results Program, United States, 1992–1999



* Per 100,000 women.
† Localized-stage cancer is confined to the cervix.

FIGURE 2. Incidence* and 95% confidence intervals of advanced† invasive cervical cancer among Hispanic and non-Hispanic women, by age group — Surveillance, Epidemiology, and End Results Program, United States, 1992–1999



* Per 100,000 women.
† Advanced-stage cancer (includes regional and distant) requires direct extension to corpus uteri or any site beyond the cervix, lymph node involvement, or metastasis.

cancer and death (*6*). Risk factors for cervical cancer include early onset of sexual activity, having multiple sex partners, human papillomavirus infection, and smoking. However, the most important determinant of invasive cervical cancer occurrence is infrequent or no cervical cancer screening (*6*).

The decrease in incidence of localized and advanced-stage cervical cancer for both Hispanic and non-Hispanic women in the United States reflects the widespread use of cervical cancer–screening services (*6*). Recent data indicate that increases in cervical cancer screening are greater for Hispanics than for non-Hispanics (National Cancer Institute, Division of Cancer Control and Population Science, unpublished data, 2002). To increase access to screening services for women who lack health insurance or who are underinsured, the Breast and Cervical Cancer Mortality Prevention Act was enacted in 1990 (*7*). During the 1990s, all states, territories, and Indian tribes, in collaboration with CDC, established cervical cancer–screening programs (*7*).

Hispanics constitute the largest ethnic minority group in the United States, representing 12.5% of the general population (2000 U.S. Census Bureau, http://factfinder.census.gov). Overall, the incidence of cancer among Hispanics differs from those of other U.S. population groups (*8*). For invasive cervical cancer, analyses of the SEER data for 1988–1992 indicated that the incidence for Hispanic women was second only to that of Vietnamese women, which was more than twice the incidence for Hispanics (*9*). Analysis of the 1998 National Health Interview Survey indicated that the prevalence of Pap testing within the preceding 3 years was 80% for non-Hispanic white women, 83% for non-Hispanic black women, and 74% for Hispanic women (*4*). Barriers to using screening services among Hispanic women include older age, low education, low household income, and lack of health insurance (*10*). Nonuse of other screening tests (*10*) and unrecognized social-cultural factors also might play a role. Research is needed to better understand barriers to screening practices.

The higher incidence of invasive cervical cancer among both Hispanic and non-Hispanic women aged ≥50 years and the greater likelihood that they have advanced disease might be a result of the low use of screening services among this population. Across all states, the use of Pap tests ranged from 84% to 93% among women of reproductive age (aged 18–44 years) and from 75% to 91% among older women (*4*).

The findings in this report are subject to at least three limitations. First, SEER registries cover approximately 14% of the U.S. population and might not be representative of the general U.S. population (*5*). Second, although the U.S. Hispanic population comprises diverse communities, Hispanics identified by SEER registries represent 25% of the U.S. Hispanic population and are largely of Mexican origin (*9*). Third, the classification "non-Hispanic women" includes other minority groups (e.g., Asians/Pacific Islanders and blacks) who also have high incidences of cervical cancer.

In the United States, the use of Pap tests has had an important impact on cervical cancer morbidity and mortality. The findings in this report suggest that Hispanic women aged ≥30 years and non-Hispanic women aged ≥50 years need improved access to screening services. To decrease incidence of advanced-stage cervical cancer, public health programs should target women with culturally appropriate interventions that encourage screening. For women with abnormal Pap test results, appropriate diagnostic and treatment services also should be accessible.

References

1. Ries LAG, Eisner MP, Kosary CL, et al., eds. SEER cancer statistics review, 1973–1999. Bethesda, Maryland: National Cancer Institute, 2002. Available at http://seer.cancer.gov/csr/1973_1999.
2. American Cancer Society. Cancer Facts and Figures 2002. Atlanta, Georgia: American Cancer Society, 2002.
3. Kinney W, Sung HY, Kearney KA, Miller M, Sawaya G, Hiatt RA. Missed opportunities for cervical cancer screening of HMO members developing invasive cervical cancer (ICC). Gynecol Oncol 1998;71:428–30.

4. American Cancer Society. Cancer Prevention and Early Detection Facts and Figures 2002. Atlanta, Georgia: American Cancer Society, 2002.
5. National Cancer Institute. Surveillance, Epidemiology, and End Results. Bethesda, Maryland: National Cancer Institute, 2002. Available at http://seer.cancer.gov.
6. Schiffman MH, Brinton LA, Devessa SS, Fraumeni J, Joseph F. Cervical cancer. In: Schottenfeld D, Fraumeni J, Joseph F, eds. Cancer Epidemiology and Prevention. New York, New York: Oxford University Press, 1996.
7. Henson RM, Wyatt SW, Lee NC. The National Breast and Cervical Cancer Early Detection Program: a comprehensive public health response to two major health issues for women. J Public Health Manag Pract 1996;2:36–47.
8. Trapido EJ, Burciaga-Valdez R, Obeso JL, Strickman-Stein N, Rotger A, Perez-Stable EJ. Epidemiology of cancer among Hispanics in the United States. J Natl Cancer Inst Monogr 1995;18:17–28.
9. Miller BA, Kolonel LN, Bernstein L, et al., eds. Racial/ethnic patterns of cancer in the United States 1988–1992. Bethesda, Maryland: National Cancer Institute, 1996 (NIH publication no. 96-4104).
10. Coughlin SS, Uhler RJ. Breast and cervical cancer screening practices among Hispanic women in the United States and Puerto Rico, 1998–1999. Prev Med 2002;34:242–51.

Progress Toward Poliomyelitis Eradication — Ethiopia, Somalia, and Sudan, January 2001–October 2002

Since the World Health Assembly resolved in May 1988 to eradicate poliomyelitis, the estimated number of polio cases globally has declined >99%. The number of countries in which polio was estimated to be endemic decreased from 125 in 1988 to 10 in 2001, and three World Health Organization (WHO) regions (American, European, and Western Pacific) comprising approximately 55% of the world's population have been certified polio-free (*1*). Ethiopia, Somalia, and Sudan have achieved the lowest levels of poliovirus circulation since the polio eradication initiative began and are approaching interruption of transmission. This report describes intensified polio eradication activities in these countries during January 2001–October 2002, summarizes progress made, and highlights remaining challenges. Continued political commitment and financial support will be required to eradicate polio in these countries.

Routine Immunization

According to national estimates, 50% of children in Ethiopia aged <1 year received 3 doses of oral poliovirus vaccine (OPV3) in 2001. In Somalia, where vaccination services are delivered through national and international nongovernment organizations supported by WHO, the United Nations Children's Fund (UNICEF), and other United Nations agencies, OPV3 coverage was an estimated 33% in 2001. In Sudan, officially reported OPV3 coverage increased from 65% in 2000 to 71% in 2001. However, because of the lack of a routine vaccination program in the conflict-affected areas of the southern part of the country, WHO and UNICEF estimate actual total national coverage at 47%.

Supplementary Immunization Activities

Supplementary immunization activities (SIAs) began in 1994 in Sudan, in 1996 in Ethiopia, and in 1997 in Somalia (*2–4*). SIAs were intensified through house-to-house vaccination beginning in 1999 in Somalia and Sudan and in 2000 in Ethiopia. During 2001–2002, at least two rounds of National Immunization Days (NIDs)* were conducted in Ethiopia, Somalia, and Sudan among children aged <5 years (total estimated target populations: 13.7 million, 1.3 million, and 7.0 million, respectively). In addition to NIDs, countries conducted additional rounds of subnational immunization days† (SNIDs) targeting high-risk areas and populations. In Ethiopia, SNIDs were conducted in 21 zones and three subzonal areas in five regions of the country. The criteria used to select these areas included previous isolation of wild poliovirus, poor surveillance indicators, poor routine vaccination coverage, below-optimal performance in previous campaigns, difficulty in obtaining access, and shared borders with countries in which polio is endemic. Approximately 3.5 million children were vaccinated in these campaigns.

High-quality implementation of SIAs has occurred in Somalia and Sudan despite continuing armed conflict in those countries. In Somalia, during lulls in fighting, a "rapid access" SIA strategy has been implemented in which vaccinators have worked independently to target small populations in a short time. In Sudan, which has experienced civil war for 34 years, SIAs in areas controlled by the government have been coordinated successfully with SIAs in areas in the south not controlled by the central government. During 2000–2001, lulls in fighting allowed implementation of SIAs for the first time in the Nuba Mountains and southern Blue Nile areas of Sudan.

Acute Flaccid Paralysis Surveillance

Since 2001, Ethiopia, Somalia, and Sudan have exceeded the WHO-established target for a nonpolio acute flaccid paralysis (AFP) rate indicative of sensitive surveillance (i.e., ≥1 per 100,000 population aged <15 years) (Table). These

*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.

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 2001–October 2002*

	No. AFP cases		No. confirmed wild poliovirus cases†			Nonpolio AFP rate§		% of persons with AFP with adequate stool specimen¶	
	2001	2002	2001	January–October 2001	January–October 2002	2001	2002	2001	2002
Ethiopia	553	376	1	1	0	1.74	1.31	47%	71%
Somalia	129	98	7	6	3	4.09	3.91	59%	63%
Sudan	303	306	1	1	0	2.15	2.65	74%	89%

* As of November 4, 2002. The three confirmed wild poliovirus cases in Somalia during January–October 2002 include one case reported by personal communication on November 20, 2002.
† As of January 2001, Somalia and Sudan used the virologic classification scheme, which Ethiopia adopted during 2001. Cases with wild poliovirus isolated are classified as "confirmed," and those without adequate specimens but with signs and symptoms consistent with polio are classified as "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 2002 are annualized.
¶ Percentage with two adequate stool specimens, collected ≥24 hours apart, within 14 days of onset of paralysis.

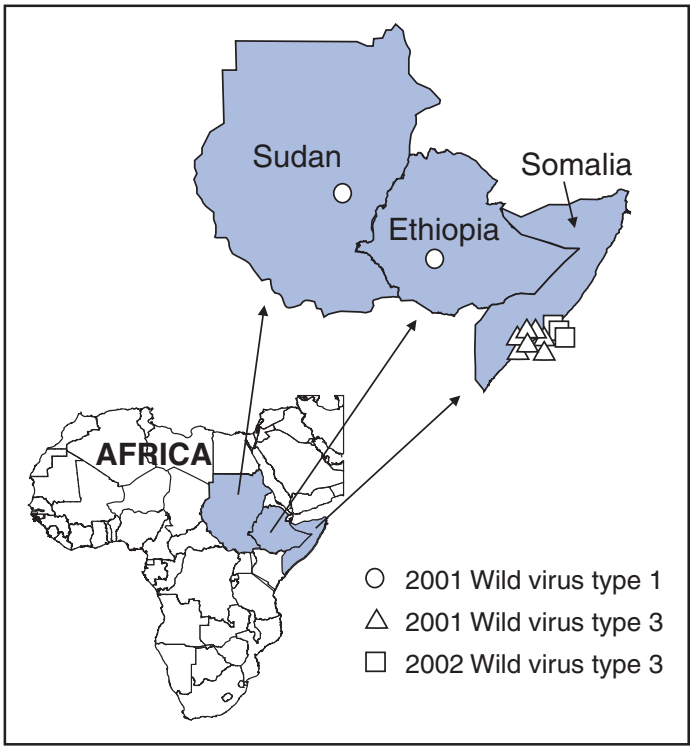
countries did not meet the WHO target measure of adequacy of collected stool specimens (i.e., ≥ 80%) in 2001, although Sudan has met this target in 2002. In 2001, the nonpolio enterovirus isolation rate (target: ≥10%), a marker of laboratory performance and the integrity of the reverse cold chain for specimens, was 25% for Ethiopia, 17% for Sudan, and 16% for Somalia.

AFP surveillance in Ethiopia, Somalia, and Sudan is facilitated by staffs comprising trained polio eradication officers. In Ethiopia, 19 staff members are posted throughout the country. In Somalia, which has not had a functioning central government since 1991, UNICEF and WHO have deployed 164 full-time national and international staff in all districts to assist with surveillance and SIAs. In Sudan, 44 persons have been deployed in the north and 230 in the south, a large area lacking infrastructure and experiencing conflict. In addition to polio eradication duties, staff conduct limited activities in the surveillance of other vaccine-preventable diseases (e.g., measles) and participate in the early-warning network for other major infectious diseases.

Wild Poliovirus Incidence

The last reported wild poliovirus–positive cases in Ethiopia and Sudan occurred in January and April of 2001, respectively (Figure). Both polioviruses were type 1. In 2000, Ethiopia reported 155 confirmed polio cases, three of which were confirmed virologically, and Sudan reported 79 cases, four of which were confirmed virologically. In Somalia, 96 cases were reported in 2000; 46 were confirmed virologically, 42 (92%) of which occurred in the capital city, Mogadishu. In 2001, seven virologically confirmed cases were identified in the heavily populated Mogadishu area (Lower Shabelle and Banadir). During 2002, three virologically confirmed cases have been identified in Somalia (most recently in October); all of these cases occurred in the Mogadishu area (Lower Shabelle, Middle Shabelle, and Banadir).

FIGURE. Confirmed cases of poliomyelitis*, by type of wild poliovirus isolate — Ethiopia, Somalia, and Sudan, January 2001–October 2002



*As of November 4, 2002. The 2002 wild virus type 3 includes one case in Somalia reported by personal communication on November 20, 2002.

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

Editorial Note: Since January 2001, substantial progress has been made toward polio eradication in Ethiopia, Somalia, and Sudan. Ethiopia and Sudan have not reported a polio case in >1 year, and transmission in Somalia appears limited to the Mogadishu area. These achievements have been the result of substantial efforts by the countries with the support of the international public- and private-sector partnership for polio eradication.

Progress toward polio eradication in Somalia and Sudan demonstrates that eradication strategies can be implemented successfully even in areas with poor access and ongoing conflict. Cease-fire agreements have allowed access to children previously unreached by health services. National capacity has been strengthened to address other diseases by building disease reporting and surveillance systems and by developing national human resources through training. The program has developed a platform to provide countrywide health services by establishing an extensive system to access children.

Key challenges to the eradication programs include improving the quality of SIAs and surveillance. Countries classified as polio-free should maintain high levels of polio vaccination coverage and surveillance to ensure interruption of virus transmission and provide a barrier against virus importation. Program activities should be strengthened in the Somali and Afar regions of Ethiopia bordering Somalia; weak or absent health infrastructures in these regions have resulted in low vaccination coverage and inadequate AFP surveillance. Although reaching children in conflict-affected areas (including the Mogadishu area) is difficult, access must be secured to interrupt wild poliovirus transmission. The close collaboration between WHO and UNICEF, which has been of critical importance in Somalia, should continue.

To enhance eradication activities, countries must provide the necessary technical support and maintain political commitment as polio incidence declines and attention turns to other pressing health needs. In April 2002, the Global Technical Consultative Group for Poliomyelitis Eradication identified the greatest challenge to polio eradication as securing the necessary financial resources (*5*). To support continuing high-quality polio eradication activities in Ethiopia, Somalia, and Sudan, WHO and UNICEF will require an estimated $50 million in 2003.

Efforts to support polio eradication programs will continue. Independent technical advisory groups will meet, and managerial reviews will be conducted in each country to monitor progress and provide guidance. Before regional certification of polio eradication, laboratory containment of wild polioviruses must be achieved. WHO is assisting countries in developing and implementing national plans for laboratory containment of poliovirus (*6*), and the polio-free countries of Ethiopia and Sudan have begun the containment process. Substantial trained personnel and infrastructure have been established in Ethiopia, Somalia, and Sudan through polio eradication programs, particularly in Somalia and Sudan; this infrastructure will be available after polio eradication to address other important health issues, and planning will be needed to ensure optimal use.

References

1. CDC. Progress toward global eradication of poliomyelitis, 2001. MMWR 2002;51:253–6.
2. CDC. Progress toward poliomyelitis and dracunculiasis eradication—Sudan, 1999–2000. MMWR 2001;50:269–73.
3. CDC. Progress toward poliomyelitis eradication—Ethiopia, 1997–August 2000. MMWR 2000;49:867–70.
4. CDC. Progress toward poliomyelitis eradication during armed conflict—Somalia and Southern Sudan, January 1998–June 1999. MMWR 1999;48:633–7.
5. World Health Organization. Report of the Seventh Meeting of the Global Technical Consultative Group (TCG) for Poliomyelitis Eradication. Geneva, Switzerland: World Health Organization, 2002 (WHO document no. WHO/V&B/02.12).
6. CDC. Global progress toward laboratory containment of wild polioviruses, July 2001–August 2002. MMWR 2002;51:993–6.

West Nile Virus Activity — United States, November 21–26, 2002

This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET and by states and other jurisdictions as of 9:30 a.m. Mountain Standard Time, November 26, 2002.

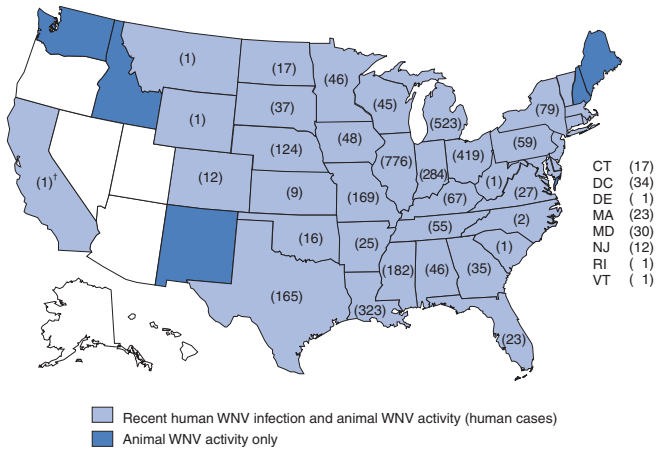
During November 21–26, a total of 39 laboratory-positive human cases of WNV-associated illness were reported from Michigan (n=19), Illinois (n=15), Wisconsin (n=three), Florida (n=one), Maryland (n=one), Minnesota (n=one), and New York (n=one). During the same period, WNV infections were reported in 103 dead crows and 215 other dead birds. A total of 328 veterinary cases and 12 WNV-positive mosquito pools were reported.

During 2002, a total of 3,737 human cases with laboratory evidence of recent WNV infection have been reported from Illinois (n=776), Michigan (n=523), Ohio (n=419), Louisiana (n=323), Indiana (n=284), Mississippi (n=182), Missouri (n=169), Texas (n=165), Nebraska (n=124), New York (n=79), Kentucky (n=67), Pennsylvania (n=59), Tennessee (n=55), Iowa (n=48), Alabama (n=46), Minnesota (n=46), Wisconsin (n=45), South Dakota (n=37), Georgia (n=35), the District of Columbia (n=34), Maryland (n=30), Virginia (n=27), Arkansas (n=25), Florida (n=23), Massachusetts (n=23), Connecticut (n=17), North Dakota (n=17), Oklahoma (n=16),

Colorado (n=12), New Jersey (n=12), Kansas (n=nine), North Carolina (n=two), California (n=one), Delaware (n=one), Montana (n=one), Rhode Island (n=one), South Carolina (n=one), Vermont (n=one), West Virginia (n=one), and Wyoming (n=one) (Figure). Among the 3,378 patients for whom data were available, the median age was 55 years (range: 1.5 months–99 years); 1,802 (54%) were male, and the dates of illness onset ranged from June 10 to November 4. A total of 201 human deaths have been reported. The median age of decedents was 78 years (range: 24–99 years); 121 (60%) deaths were among men. In addition, 7,715 dead crows and 6,275 other dead birds with WNV infection were reported from 42 states and the District of Columbia; 9,051 WNV infections in mammals (9,038 equines, three canines, and 10 other species) have been reported from 38 states (Alabama, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, Washington, Wisconsin, and Wyoming). During 2002, WNV seroconversions have been reported in 366 sentinel chicken flocks from Florida, Iowa, Nebraska, North Carolina, Pennsylvania, Texas, and New York City; 4,943 WNV-positive mosquito pools have been reported from 28 states (Alabama, Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Vermont, and Virginia), New York City, and the District of Columbia.

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

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2002*



*As of 9:30 a.m. Mountain Standard Time, November 26, 2002.
†California has reported human WNV activity only.

Notice to Readers

Occupational Health Indicators for Tracking Work-Related Health Effects and Their Determinants

Experts in various fields of public health have developed proposed indicators to enhance public health surveillance. These indicators have been published in *Indicators for Chronic Disease Surveillance, June 2000*; *State Injury Indicator Report January 2002*; and *Draft Environmental Public Health Indicators, August 2002*. The indicators are measures of health or factors associated with health in specified populations.

The Council of State and Territorial Epidemiologists (CSTE) Occupational Health Surveillance Work Group, a subcommittee of the Environmental/Occupational/Injury Committee, completed a set of proposed occupational health indicators that can be used by states to track work-related adverse health effects and their determinants. Occupational health indicators provide information about a population's health status with respect to workplace factors that can influence health. These proposed indicators include measures of health endpoints (e.g., work-related disease or injury) and measures of workplace factors associated with health (e.g., workplace exposures, hazards, and interventions). These indicators serve as a guide for states about the minimal level of occupational health surveillance activity. The indicators are intended to bring consistency to time-trend analyses and comparisons of occupational health status among states and to inform program and policy development at the national, state, and local levels to protect worker safety and health.

The occupational health indicators were developed, with support from the National Institute for Occupational Safety and Health (NIOSH), by the workgroup, which included representatives of state labor and health agencies, CSTE, and NIOSH. These indicators represent the consensus view of state and NIOSH representatives and are intended as an advisory to the states. The implementation of these indicators will depend on the availability of fiscal resources and epidemiologic capacity. During the next year, California, Maine, Massachusetts, Michigan, New York, and Washington will pilot the occupational health indicators to assess the data

availability and the resources involved in implementing the indicators and to refine recommendations for standard data collection and presentation.

Additional information about the proposed occupational health indicators and publications from the CSTE Occupational Health Surveillance Workgroup are available at http://www.cste.org/occupationalhealth.htm.

Notice to Readers

2003 CDC and ATSDR Symposium on Statistical Methods

The Ninth Biennial Symposium on Statistical Methods sponsored by CDC and the Agency for Toxic Substances and Disease Registry will be held January 28–29, 2003, in Atlanta, Georgia, at the Crown Plaza Ravinia. A short course, "Modeling and Analysis Using Monte Carlo Methods," will be offered January 27, along with the symposium. Presentations will include applications of study designs that have improved public health decision-making, alternate study designs and implications for public health decision-making processes, decision-making algorithms and related software applications and development, and statistics and policymaking in the face of uncertainty. The symposium and course are open to the public, and there is no charge to attend. Registration and additional information about the symposium are available from CDC at http://www.cdc.gov/od/ads/sag.

Notice to Readers

Publication of "Health, United States, 2002 with Chartbook on Trends in the Health of Americans"

CDC has published *Health, United States, 2002 with Chartbook on Trends in the Health of Americans,* the 26th edition of the annual report on the nation's health. This report includes 147 trend tables organized around four broad subject areas: health status and determinants, health-care use, health-care resources, and health-care expenditures. Disparities in health by race/ethnicity and socioeconomic status are presented in several tables.

This year's report includes *Chartbook on Trends in the Health of Americans*. The chartbook assesses the nation's health by presenting trends and current information on selected determinants and measures of health status. Determinants of health include demographic factors, health insurance coverage, health behaviors, and preventive health care, and measures of health status focus on trends in mortality and limitations of activity caused by chronic health conditions. During the 20th century, the health of persons in the United States improved substantially, reflecting the influence of healthier lifestyles, greater use of preventive care, public health efforts, and Maine, Maine, advances in medicine. Despite these health gains, disparities in health and health care among segments of the U.S. population persist.

This report is available at http://www.cdc.gov/nchs/hus.htm. Additional information is available from the National Center for Health Statistics, telephone 301-458-4636 or at nchsquery@cdc.gov. Print copies can be purchased from the Government Printing Office, telephone 202-512-1800, or at http://bookstore.gpo.gov/index.html.

Notice to Readers

World AIDS Day, December 1, 2002

"Live and Let Live" is the theme designated by the Joint United Nations Program on Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) for this year's World AIDS Day, December 1, 2002. This year's theme highlights the challenges that stigma and discrimination pose to the success of prevention, treatment, and care programs for persons living with HIV/AIDS.

AIDS continues to be a stigmatizing health issue for infected persons (*1*). Discrimination against persons with infectious diseases is not new (*2*), and after 20 years of HIV and AIDS public education, 18.7% of respondents in a 2000 survey reported some level of agreement with the statement, "People who get AIDS through sex or drug use have gotten what they deserve," a proxy measure for stigma (*3*). One fourth of these respondents also reported misinformed opinions on modes of HIV transmission (*3*).

At the end of 2001, an estimated 362,827 persons in the United States (*4*) and 40 million persons worldwide were living with HIV/AIDS (*5*). Worldwide in 2001, three million persons died of AIDS and 14 million children lost one or both parents to AIDS (*5*). Overcoming stigma and discrimination against persons with AIDS remains a challenge to effective public health prevention and education programs.

Information about domestic HIV infection and AIDS is available from CDC's National Prevention Information Network at http://www.cdcnpin.org and from CDC's National Center for HIV, STD, and TB Prevention at http://www.cdc.gov/nchstp/od/nchstp.html. Additional information is available at 800-342-2437 or in Spanish at 800-344-7432. Information on the global pandemic is available from the Joint United Nations Program on AIDS at http://www.unaids.org.

References

1. Herek GM, Capitanio JP, Widaman KF. HIV-related stigma and knowledge in the United States: prevalence and trends, 1991–1999. Am J Public Health 2002;92:371–7.
2. Valdiserri R. HIV/AIDS stigma: an impediment to public health. Am J Public Health 2002;92:341–2.
3. CDC. HIV-related knowledge and stigma—United States, 2000. MMWR 2000;49:1062–4.
4. CDC. HIV/AIDS surveillance report. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2001;12.
5. UNAIDS. Joint United Nations Programme on HIV/AIDS. Report on the global HIV/AIDS epidemic, 2002. Geneva, Switzerland: World Health Organization, July 2002.

Erratum: Vol. 51, No. RR-18

In the *MMWR Recommendations and Reports,* "U.S. Public Health Service Task Force Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1–Infected Women for Maternal Health and Interventions To Reduce Perinatal HIV-1 Transmission in the United States," published on November 22, 2002, on page 16 of the printed copies, an error occurred, erasing parts of three sentences.

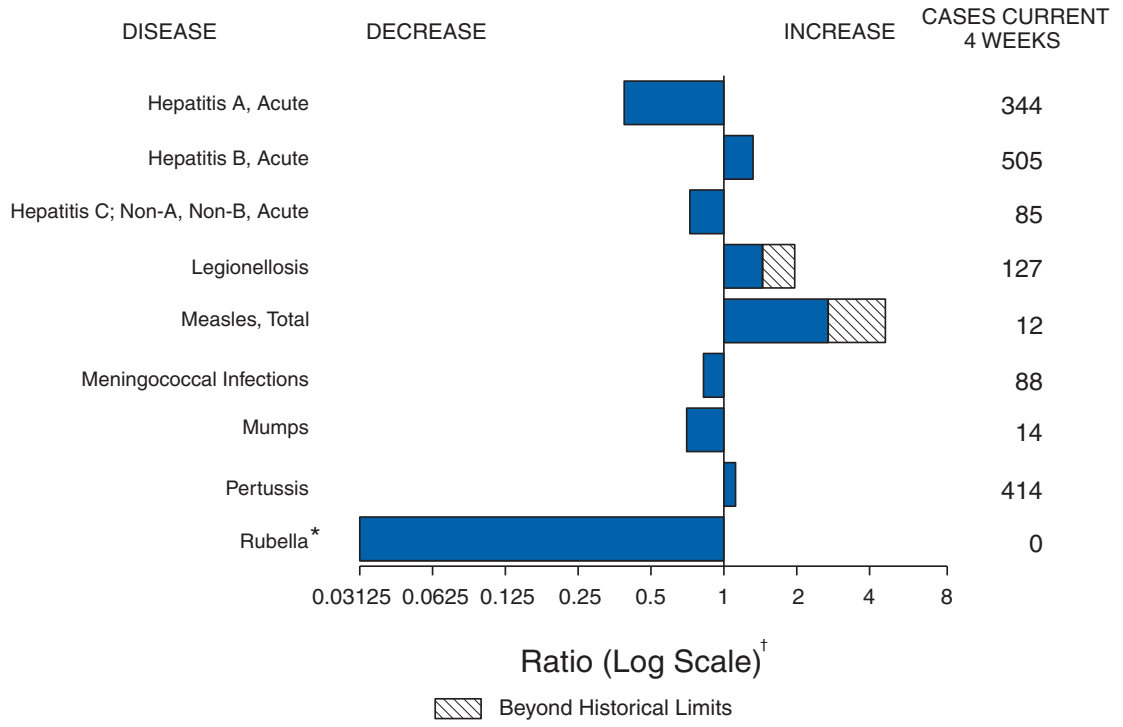
The first sentence in paragraph four should read, "For women with suboptimal suppression of HIV-1 RNA (i.e., ≥1,000 copies/mL) near the time of delivery despite having received prenatal ZDV prophylaxis with or without combination antiretroviral therapy, it is not known if administration of additional antiretroviral drugs during labor and delivery provides added protection against perinatal transmission."

The third and fourth sentences in paragraph six should read, "However, the appropriate dosage and short- and long-term safety of many antiretroviral agents in the neonate has not been established. The half-lives of ZDV, 3TC, and nevirapine are prolonged during the neonatal period because of immature liver metabolism and renal function, requiring specific dosing adjustments when these agents are administered to neonates."

Erratum: Vol. 51, No. 46

In the Notice to Readers, "Approval of a New Rapid Test for HIV Antibody," an error occurred in the first paragraph on page 1051. The second sentence should read, "OraQuick is a simple, rapid test that can detect antibodies to HIV in fingerstick whole blood specimens and provide results in as little as 20 minutes." Test results are read 20–60 minutes after the test is initiated.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending November 23, 2002, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 47 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 23, 2002 (47th Week)*

		Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax		2	21	Encephalitis: West Nile†	1,404	53
Botulism:	foodborne	12	33	Hansen disease (leprosy)†	62	62
	infant	50	86	Hantavirus pulmonary syndrome†	13	7
	other (wound & unspecified)	26	16	Hemolytic uremic syndrome, postdiarrheal†	178	166
Brucellosis†		70	116	HIV infection, pediatric†§	116	172
Chancroid		64	31	Plague	-	2
Cholera		5	4	Poliomyelitis, paralytic	-	-
Cyclosporiasis†		160	141	Psittacosis†	17	20
Diphtheria		1	2	Q fever†	43	23
Ehrlichiosis:	human granulocytic (HGE)†	319	203	Rabies, human	2	1
	human monocytic (HME)†	158	106	Streptococcal toxic-shock syndrome†	72	68
	other and unspecified	11	5	Tetanus	20	28
Encephalitis:	California serogroup viral†	118	112	Toxic-shock syndrome	101	107
	eastern equine†	3	8	Trichinosis	12	21
	Powassan†	1	-	Tularemia†	56	125
	St. Louis†	11	76	Yellow fever	1	-
	western equine†	2	-			

-:No reported cases.
* Incidence data for reporting year 2001 and 2002 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 (NCHSTP). Last update October 31, 2002.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli, Enterohemorrhagic*			
							O157:H7		Shiga Toxin Positive, Serogroup non-O157	
	Cum. 2002§	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	24,713	34,080	693,729	695,659	2,590	3,515	3,234	2,946	151	143
NEW ENGLAND	1,011	1,268	24,393	21,921	170	138	253	233	32	38
Maine	23	40	1,505	1,205	11	18	38	26	5	1
N.H.	20	31	1,426	1,245	29	15	32	33	-	3
Vt.	8	13	847	562	32	32	12	13	1	1
Mass.	519	654	9,885	9,264	61	52	113	112	9	10
R.I.	71	84	2,505	2,668	21	4	14	13	-	1
Conn.	370	446	8,225	6,977	16	17	44	36	17	22
MID. ATLANTIC	5,619	8,977	77,471	76,451	320	326	224	219	-	-
Upstate N.Y.	404	1,168	15,332	13,028	131	100	163	139	-	-
N.Y. City	3,210	4,773	24,998	26,916	123	116	13	16	-	-
N.J.	925	1,509	10,764	12,795	10	20	48	64	-	-
Pa.	1,080	1,527	26,377	23,712	56	90	N	N	-	-
E.N. CENTRAL	2,494	2,499	121,040	129,004	824	1,532	779	756	19	11
Ohio	453	476	29,298	34,211	120	168	144	205	15	9
Ind.	347	306	15,552	13,901	52	81	69	80	1	-
Ill.	1,170	1,110	32,653	38,886	87	478	165	165	-	-
Mich.	398	457	29,083	27,025	115	178	132	92	3	2
Wis.	126	150	14,454	14,981	450	627	269	214	-	-
W.N. CENTRAL	421	718	38,184	35,364	386	506	485	470	37	38
Minn.	90	118	8,408	7,414	201	174	155	191	32	29
Iowa	54	80	4,909	4,517	42	80	117	77	-	-
Mo.	189	337	13,859	12,641	32	50	69	60	N	N
N. Dak.	1	2	801	908	20	13	17	19	-	2
S. Dak.	3	23	1,946	1,610	28	7	39	42	2	6
Nebr.	43	72	2,456	2,898	47	179	54	59	3	1
Kans.	41	86	5,805	5,376	16	3	34	22	-	-
S. ATLANTIC	7,537	10,268	134,539	133,584	329	347	350	227	37	34
Del.	131	217	2,426	2,511	3	6	8	4	-	1
Md.	1,066	1,517	15,102	13,754	21	38	25	29	-	-
D.C.	371	733	3,036	2,933	4	12	-	-	-	-
Va.	538	843	15,180	16,244	23	24	59	48	9	5
W. Va.	58	71	2,081	2,128	2	2	9	10	-	-
N.C.	555	778	22,601	19,817	32	27	130	46	-	-
S.C.	547	612	10,921	13,676	6	7	5	16	-	-
Ga.	1,160	1,232	27,046	28,965	142	150	55	44	10	9
Fla.	3,111	4,265	36,146	33,556	96	81	59	30	18	19
E.S. CENTRAL	1,128	1,532	43,642	44,774	109	48	99	135	-	-
Ky.	173	299	7,991	8,110	8	5	30	64	-	-
Tenn.	483	488	14,460	12,987	52	13	44	42	-	-
Ala.	197	378	11,972	12,913	42	16	18	17	-	-
Miss.	275	367	9,219	10,764	7	14	7	12	-	-
W.S. CENTRAL	2,696	3,435	95,983	96,348	35	126	65	199	-	-
Ark.	163	176	6,516	6,680	8	9	11	15	-	-
La.	693	699	17,312	16,428	5	7	2	7	-	-
Okla.	133	204	9,496	9,530	16	14	22	31	-	-
Tex.	1,707	2,356	62,659	63,710	6	96	30	146	-	-
MOUNTAIN	790	1,175	42,002	41,629	153	228	335	271	18	16
Mont.	8	15	1,976	1,739	5	37	29	20	-	-
Idaho	18	19	2,228	1,812	29	22	48	67	8	3
Wyo.	6	3	841	746	9	7	14	10	2	2
Colo.	157	262	12,417	11,981	56	40	87	87	4	6
N. Mex.	53	133	5,739	5,489	18	28	12	14	3	5
Ariz.	327	446	13,264	13,092	17	7	34	27	1	-
Utah	43	98	2,354	2,365	15	81	83	31	-	-
Nev.	178	199	3,183	4,405	4	6	28	15	-	-
PACIFIC	3,017	4,208	116,475	116,584	264	264	644	436	8	6
Wash.	302	427	13,496	12,184	43	U	138	121	-	-
Oreg.	216	177	6,133	6,528	38	53	221	67	8	6
Calif.	2,416	3,525	89,908	91,863	180	207	239	226	-	-
Alaska	17	19	3,120	2,374	1	1	7	4	-	-
Hawaii	66	60	3,818	3,635	2	3	39	18	-	-
Guam	2	11	-	360	-	-	N	N	-	-
P.R.	668	1,017	1,997	2,479	-	-	-	2	-	-
V.I.	66	2	125	137	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	138	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 year 2001 and 2002 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 31, 2002.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	*Escherichia coli Enterohemorrhagic* Shiga Toxin Positive, Not Serogrouped		Giardiasis	Gonorrhea		*Haemophilus influenzae*, Invasive All Ages, All Serotypes		*Haemophilus influenzae*, Invasive Age <5 Years Serotype B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	39	17	15,419	293,607	321,969	1,355	1,307	22	22
NEW ENGLAND	1	1	1,532	6,864	6,223	118	98	-	1
Maine	-	-	194	121	125	1	2	-	-
N.H.	-	-	41	117	164	9	6	-	-
Vt.	1	1	130	86	62	7	3	-	-
Mass.	-	-	779	2,986	2,846	50	41	-	1
R.I.	-	-	145	858	764	10	5	-	-
Conn.	-	-	243	2,696	2,262	41	41	-	-
MID. ATLANTIC	-	3	3,315	35,579	38,749	238	200	4	3
Upstate N.Y.	-	-	1,139	7,897	7,929	108	69	2	-
N.Y. City	-	-	1,174	10,444	11,431	56	51	-	-
N.J.	-	-	342	6,130	7,455	49	45	-	-
Pa.	-	3	660	11,108	11,934	25	35	2	3
E.N. CENTRAL	11	6	2,948	58,991	67,878	191	250	3	2
Ohio	10	6	862	16,373	19,043	74	65	-	1
Ind.	-	-	-	6,709	6,260	38	46	1	-
Ill.	-	-	682	17,429	21,495	57	94	-	-
Mich.	1	-	857	13,186	15,592	14	13	2	-
Wis.	-	-	547	5,294	5,488	8	32	-	1
W.N. CENTRAL	2	3	1,831	14,963	15,104	63	67	1	1
Minn.	-	-	714	2,564	2,369	42	37	1	-
Iowa	-	-	289	1,143	1,207	1	-	-	-
Mo.	N	N	431	7,873	7,801	11	18	-	-
N. Dak.	2	3	27	47	42	-	7	-	-
S. Dak.	-	-	70	240	252	-	-	-	-
Nebr.	-	-	133	713	1,060	1	3	-	1
Kans.	-	-	167	2,383	2,373	8	2	-	-
S. ATLANTIC	1	-	2,671	75,830	82,887	333	322	4	1
Del.	-	-	49	1,446	1,545	-	-	-	-
Md.	-	-	106	7,987	8,249	78	82	2	-
D.C.	-	-	42	2,442	2,592	-	-	-	-
Va.	-	-	283	8,557	9,609	31	27	-	-
W. Va.	1	-	54	812	642	15	14	-	1
N.C.	-	-	-	14,441	15,373	30	44	-	-
S.C.	-	-	118	6,587	9,724	12	6	-	-
Ga.	-	-	846	14,992	16,031	84	86	-	-
Fla.	-	-	1,173	18,566	19,122	83	63	2	-
E.S. CENTRAL	8	3	346	25,059	28,905	62	68	1	-
Ky.	8	3	-	3,402	3,237	5	2	-	-
Tenn.	-	-	165	8,533	8,704	32	38	-	-
Ala.	-	-	181	7,729	9,932	16	26	1	-
Miss.	-	-	-	5,395	7,032	9	2	-	-
W.S. CENTRAL	4	-	225	42,955	47,227	60	51	2	2
Ark.	-	-	155	4,131	4,201	2	1	-	-
La.	-	-	4	10,675	11,228	9	9	-	-
Okla.	-	-	66	4,088	4,333	44	39	-	-
Tex.	4	-	-	24,061	27,465	5	2	2	2
MOUNTAIN	12	1	1,512	9,029	9,351	172	132	4	8
Mont.	-	-	78	99	98	-	-	-	-
Idaho	-	-	121	83	69	2	2	-	-
Wyo.	-	-	29	55	76	1	1	-	-
Colo.	12	1	516	3,082	2,873	31	37	-	-
N. Mex.	-	-	132	1,204	910	25	22	-	1
Ariz.	-	-	190	3,307	3,547	84	52	2	4
Utah	-	-	303	239	175	17	7	1	1
Nev.	-	-	143	960	1,603	12	11	1	2
PACIFIC	-	-	1,039	24,337	25,645	118	119	3	4
Wash.	-	-	376	2,637	2,717	3	5	2	-
Oreg.	-	-	411	789	1,006	59	34	-	-
Calif.	-	-	73	19,765	20,979	22	52	1	4
Alaska	-	-	99	516	386	1	6	-	-
Hawaii	-	-	80	630	557	33	22	-	-
Guam	-	-	-	-	46	-	-	-	-
P.R.	-	-	38	292	540	1	1	-	-
V.I.	-	-	-	31	31	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	1	13	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	*Haemophilus influenzae*, Invasive, Age <5 Years, Non-Serotype B, Cum. 2002	*Haemophilus influenzae*, Invasive, Age <5 Years, Non-Serotype B, Cum. 2001	*Haemophilus influenzae*, Invasive, Age <5 Years, Unknown Serotype, Cum. 2002	*Haemophilus influenzae*, Invasive, Age <5 Years, Unknown Serotype, Cum. 2001	Hepatitis (Viral, Acute), By Type, A, Cum. 2002	Hepatitis (Viral, Acute), By Type, A, Cum. 2001	Hepatitis (Viral, Acute), By Type, B, Cum. 2002	Hepatitis (Viral, Acute), By Type, B, Cum. 2001	Hepatitis (Viral, Acute), By Type, C; Non-A, Non-B, Cum. 2002	Hepatitis (Viral, Acute), By Type, C; Non-A, Non-B, Cum. 2001
UNITED STATES	226	218	15	26	7,550	9,280	6,145	6,539	3,113	3,550
NEW ENGLAND	13	15	-	-	272	671	224	128	23	33
Maine	-	-	-	-	8	11	13	5	-	-
N.H.	-	1	-	-	11	16	20	13	-	-
Vt.	-	-	-	-	1	16	4	5	13	7
Mass.	8	7	-	-	135	346	123	33	9	26
R.I.	-	-	-	-	30	59	28	25	1	-
Conn.	5	7	-	-	87	223	36	47	-	-
MID. ATLANTIC	28	34	-	3	967	1,165	1,413	1,242	1,594	1,219
Upstate N.Y.	12	10	-	1	171	241	127	116	64	26
N.Y. City	8	11	-	-	479	406	737	581	-	-
N.J.	5	6	-	-	122	267	345	269	1,499	1,123
Pa.	3	7	-	2	195	251	204	276	31	70
E.N. CENTRAL	32	38	1	2	1,003	1,113	589	877	91	150
Ohio	9	12	1	-	314	226	108	88	4	8
Ind.	7	6	-	1	45	94	51	48	-	1
Ill.	11	14	-	-	253	412	129	148	13	11
Mich.	3	-	-	1	218	307	301	552	74	130
Wis.	2	6	-	-	173	74	-	41	-	-
W.N. CENTRAL	6	5	3	6	284	355	202	192	722	1,043
Minn.	5	3	1	2	39	40	28	21	-	9
Iowa	-	-	-	-	75	34	17	21	1	-
Mo.	-	-	2	4	78	78	108	110	702	1,021
N. Dak.	-	1	-	-	3	3	5	1	-	-
S. Dak.	-	-	-	-	3	3	2	1	1	-
Nebr.	1	1	-	-	17	32	22	26	13	6
Kans.	-	-	-	-	69	165	20	12	5	7
S. ATLANTIC	47	44	2	6	2,181	2,278	1,485	1,384	178	96
Del.	-	-	-	-	12	16	7	25	5	10
Md.	4	8	-	1	282	243	111	131	8	8
D.C.	-	-	-	-	72	51	22	11	-	-
Va.	5	5	-	-	141	122	185	163	16	-
W. Va.	1	1	1	1	19	25	18	20	3	9
N.C.	3	2	-	4	198	206	207	199	25	19
S.C.	2	1	-	-	56	70	112	29	4	6
Ga.	18	18	-	-	410	871	338	395	34	-
Fla.	14	9	1	-	991	674	485	411	83	44
E.S. CENTRAL	14	12	1	3	245	370	347	428	183	183
Ky.	1	-	-	1	41	123	48	49	3	10
Tenn.	8	6	-	1	111	142	120	216	26	63
Ala.	3	5	1	1	36	72	99	80	10	4
Miss.	2	1	-	-	57	33	80	83	144	106
W.S. CENTRAL	14	9	-	-	562	775	614	772	160	652
Ark.	1	1	-	-	50	65	85	92	7	10
La.	2	2	-	-	66	85	95	114	66	145
Okla.	9	6	-	-	48	107	44	92	5	4
Tex.	2	-	-	-	398	518	390	474	82	493
MOUNTAIN	49	21	7	1	522	645	560	420	60	50
Mont.	-	-	-	-	13	11	9	3	1	1
Idaho	1	-	-	-	28	52	7	11	1	2
Wyo.	-	-	-	-	3	7	17	3	5	7
Colo.	3	2	-	-	72	84	73	95	18	8
N. Mex.	6	9	1	1	28	40	140	120	1	11
Ariz.	30	8	5	-	268	323	201	122	4	9
Utah	5	2	-	-	63	65	58	22	4	3
Nev.	4	-	1	-	47	63	55	44	26	9
PACIFIC	23	40	1	5	1,514	1,908	711	1,096	102	124
Wash.	1	3	-	2	141	140	64	132	24	22
Oreg.	5	7	-	-	64	96	116	157	16	14
Calif.	13	28	1	1	1,297	1,642	519	780	62	88
Alaska	1	1	-	-	10	14	4	9	-	-
Hawaii	3	1	-	2	2	16	8	18	-	-
Guam	-	-	-	-	-	2	-	-	-	-
P.R.	-	1	-	-	96	206	84	243	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	37	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1,053	990	537	552	15,663	13,913	1,172	1,334	36†	114§
NEW ENGLAND	94	67	57	53	4,826	3,996	58	92	-	5
Maine	3	8	5	2	111	-	5	4	-	-
N.H.	6	10	4	4	235	98	7	2	-	-
Vt.	36	5	3	3	32	17	4	1	-	1
Mass.	30	20	31	28	1,186	1,119	21	50	-	3
R.I.	5	10	1	1	335	449	7	9	-	-
Conn.	14	14	13	15	2,927	2,313	14	26	-	1
MID. ATLANTIC	285	234	151	97	8,942	7,677	303	401	7	20
Upstate N.Y.	94	62	55	25	4,742	3,261	43	60	1	4
N.Y. City	52	43	32	24	161	61	192	236	6	7
N.J.	27	21	31	17	1,641	1,984	36	62	-	1
Pa.	112	108	33	31	2,398	2,371	32	43	-	8
E.N. CENTRAL	246	283	72	85	91	707	126	161	3	10
Ohio	115	122	24	15	72	40	23	24	1	3
Ind.	21	20	11	8	19	22	13	16	2	4
Ill.	-	24	11	24	-	31	30	66	-	3
Mich.	76	74	19	24	-	17	46	36	-	-
Wis.	34	43	7	14	U	597	14	19	-	-
W.N. CENTRAL	56	46	17	19	364	368	56	34	3	5
Minn.	14	9	3	2	269	296	17	6	1	3
Iowa	12	8	2	2	40	34	4	7	-	-
Mo.	15	20	8	10	40	32	15	13	2	2
N. Dak.	1	1	1	-	1	-	1	-	-	-
S. Dak.	4	3	1	-	2	-	1	-	-	-
Nebr.	10	4	1	1	6	4	5	2	-	-
Kans.	-	1	1	4	6	2	13	6	-	-
S. ATLANTIC	199	170	77	73	1,211	906	346	268	2	5
Del.	9	12	-	2	164	152	4	2	-	-
Md.	44	32	18	14	641	553	105	108	-	3
D.C.	6	8	-	-	21	16	19	13	-	-
Va.	29	21	7	12	146	115	32	45	-	1
W. Va.	N	N	-	5	17	13	3	1	-	-
N.C.	11	11	6	5	124	38	21	17	-	-
S.C.	8	13	8	5	20	5	7	7	-	-
Ga.	18	11	12	14	2	-	84	43	-	1
Fla.	74	62	26	16	76	14	71	32	2	-
E.S. CENTRAL	43	56	19	22	47	65	19	35	12	2
Ky.	19	12	4	7	22	23	7	14	-	2
Tenn.	16	27	11	8	22	27	3	11	-	-
Ala.	8	13	4	7	3	8	4	6	12	-
Miss.	-	4	-	-	-	7	5	4	-	-
W.S. CENTRAL	16	24	18	32	17	83	16	83	2	1
Ark.	-	-	-	1	3	1	2	3	-	-
La.	4	6	-	-	4	8	4	6	-	-
Okla.	3	3	9	2	-	-	9	3	-	-
Tex.	9	15	9	29	10	74	1	71	2	1
MOUNTAIN	46	50	28	37	21	11	45	56	2	2
Mont.	3	-	-	-	-	-	2	3	-	-
Idaho	1	3	2	1	4	5	-	3	-	1
Wyo.	1	2	-	2	2	1	-	-	-	-
Colo.	7	15	6	10	3	-	22	23	-	-
N. Mex.	2	3	3	7	1	-	3	3	-	-
Ariz.	12	16	13	8	3	1	10	11	-	1
Utah	15	7	3	2	7	1	5	4	1	-
Nev.	5	4	1	7	1	3	3	9	1	-
PACIFIC	68	60	98	134	144	100	203	204	5	64
Wash.	7	10	8	10	10	7	22	11	-	15
Oreg.	N	N	9	12	15	11	9	17	-	3
Calif.	60	44	73	106	116	80	163	164	3	39
Alaska	-	1	-	-	3	2	2	1	-	-
Hawaii	1	5	8	6	N	N	7	11	2	7
Guam	-	-	-	-	-	-	-	1	-	-
P.R.	-	2	1	-	N	N	-	5	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Of 36 cases reported, 23 were indigenous and 13 were imported from another country.
§ Of 114 cases reported, 60 were indigenous and 54 were imported from another country.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1,484	2,060	238	220	6,793	5,071	5,593	6,509
NEW ENGLAND	82	98	8	2	611	528	861	677
Maine	8	4	1	-	17	22	58	63
N.H.	12	12	4	-	17	27	45	21
Vt.	4	6	-	-	132	38	88	59
Mass.	39	54	2	2	406	418	285	250
R.I.	5	4	-	-	13	5	71	65
Conn.	14	18	1	-	26	18	314	219
MID. ATLANTIC	137	235	24	25	429	323	1,061	1,207
Upstate N.Y.	41	65	6	3	316	131	654	735
N.Y. City	22	41	2	12	13	53	17	36
N.J.	26	42	-	3	4	18	171	178
Pa.	48	87	16	7	96	121	219	258
E.N. CENTRAL	197	319	38	27	828	777	147	156
Ohio	72	80	13	1	401	285	39	50
Ind.	32	36	2	3	125	79	31	15
Ill.	36	80	14	16	147	91	31	24
Mich.	42	74	8	5	50	135	46	47
Wis.	15	49	1	2	105	187	-	20
W.N. CENTRAL	139	146	17	10	677	351	411	344
Minn.	32	20	4	3	340	146	36	43
Iowa	23	29	1	-	133	68	74	77
Mo.	45	52	5	2	129	94	49	40
N. Dak.	3	6	1	-	2	5	31	37
S. Dak.	2	5	-	-	6	4	65	55
Nebr.	26	20	-	1	8	7	-	4
Kans.	8	14	6	4	59	27	156	88
S. ATLANTIC	265	321	25	38	378	232	2,287	2,282
Del.	7	5	-	-	3	-	24	30
Md.	8	38	5	6	58	42	321	470
D.C.	-	-	-	-	2	1	-	-
Va.	40	37	4	8	133	40	468	449
W. Va.	4	13	-	-	31	4	164	131
N.C.	30	62	2	5	40	69	663	533
S.C.	28	32	3	5	41	31	133	106
Ga.	34	51	4	9	21	22	347	375
Fla.	114	83	7	5	49	23	167	188
E.S. CENTRAL	86	128	13	9	242	179	164	202
Ky.	14	24	3	3	91	80	27	29
Tenn.	36	56	2	1	110	58	102	106
Ala.	22	31	3	-	32	36	31	63
Miss.	14	17	5	5	9	5	4	4
W.S. CENTRAL	183	300	17	13	1,494	615	116	1,035
Ark.	23	21	-	-	470	168	3	-
La.	35	74	1	2	7	9	-	8
Okla.	21	28	-	-	66	28	112	57
Tex.	104	177	16	11	951	410	1	970
MOUNTAIN	87	88	18	14	972	1,253	284	253
Mont.	2	4	-	1	5	36	18	38
Idaho	4	7	1	1	67	170	38	28
Wyo.	-	5	-	1	11	1	18	28
Colo.	21	34	2	3	387	305	59	-
N. Mex.	4	10	1	2	170	129	7	15
Ariz.	30	13	1	1	187	507	120	128
Utah	6	8	8	1	98	76	13	15
Nev.	20	7	5	4	47	29	11	1
PACIFIC	308	425	78	82	1,162	813	262	353
Wash.	60	59	-	2	399	157	-	-
Oreg.	45	56	N	N	175	52	13	4
Calif.	191	295	64	39	567	552	225	311
Alaska	4	2	-	1	4	12	24	38
Hawaii	8	13	14	40	17	40	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	5	5	-	1	3	-	49	87
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	1	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	Rocky Mountain Spotted Fever		Rubella				Salmonellosis	
			Rubella		Congenital Rubella			
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	944	554	13	21	2	-	37,498	36,130
NEW ENGLAND	8	3	-	-	-	-	2,028	2,178
Maine	-	-	-	-	-	-	141	161
N.H.	-	1	-	-	-	-	127	156
Vt.	-	-	-	-	-	-	72	76
Mass.	4	2	-	-	-	-	1,117	1,255
R.I.	4	-	-	-	-	-	163	120
Conn.	-	-	-	-	-	-	408	410
MID. ATLANTIC	42	31	1	8	-	-	4,689	4,744
Upstate N.Y.	7	2	1	1	-	-	1,444	1,116
N.Y. City	9	2	-	6	-	-	1,329	1,190
N.J.	10	9	-	1	-	-	671	1,106
Pa.	16	18	-	-	-	-	1,245	1,332
E.N. CENTRAL	19	16	1	2	-	-	4,834	4,614
Ohio	13	2	-	-	-	-	1,289	1,260
Ind.	3	1	-	-	-	-	458	485
Ill.	-	12	-	2	-	-	1,493	1,288
Mich.	3	1	1	-	-	-	820	803
Wis.	-	-	-	-	-	-	774	778
W.N. CENTRAL	97	68	-	3	-	-	2,399	2,089
Minn.	-	-	-	-	-	-	523	565
Iowa	3	2	-	1	-	-	477	324
Mo.	89	62	-	1	-	-	791	573
N. Dak.	-	1	-	-	-	-	42	58
S. Dak.	1	2	-	-	-	-	102	144
Nebr.	4	1	-	-	-	-	150	145
Kans.	-	-	-	1	-	-	314	280
S. ATLANTIC	492	275	5	5	-	-	10,461	8,515
Del.	4	11	-	-	-	-	87	91
Md.	58	38	-	1	-	-	879	723
D.C.	2	1	-	-	-	-	71	78
Va.	42	26	-	-	-	-	1,131	1,211
W. Va.	2	-	-	-	-	-	140	126
N.C.	274	155	-	-	-	-	1,440	1,256
S.C.	68	31	-	2	-	-	720	805
Ga.	27	9	-	-	-	-	1,889	1,563
Fla.	15	4	5	2	-	-	4,104	2,662
E.S. CENTRAL	105	107	-	-	1	-	2,996	2,502
Ky.	5	2	-	-	-	-	361	342
Tenn.	78	74	-	-	1	-	753	585
Ala.	18	15	-	-	-	-	815	707
Miss.	4	16	-	-	-	-	1,067	868
W.S. CENTRAL	159	42	2	1	-	-	3,302	4,692
Ark.	97	9	-	-	-	-	1,006	854
La.	-	2	-	-	-	-	736	794
Okla.	61	31	-	-	-	-	466	443
Tex.	1	-	2	1	-	-	1,094	2,601
MOUNTAIN	14	11	1	-	-	-	2,003	1,984
Mont.	1	1	-	-	-	-	81	72
Idaho	-	1	-	-	-	-	136	127
Wyo.	5	2	-	-	-	-	102	58
Colo.	2	2	-	-	-	-	506	546
N. Mex.	1	1	-	-	-	-	281	267
Ariz.	-	-	-	-	-	-	529	537
Utah	-	3	1	-	-	-	190	207
Nev.	5	1	-	-	-	-	178	170
PACIFIC	8	1	3	2	1	-	4,786	4,812
Wash.	-	-	-	-	-	-	471	476
Oreg.	3	1	-	-	-	-	331	256
Calif.	5	-	3	1	-	-	3,660	3,710
Alaska	-	-	-	-	-	-	72	44
Hawaii	-	-	-	1	1	-	252	326
Guam	-	-	-	-	-	-	-	24
P.R.	-	-	-	3	-	-	201	843
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	25	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		*Streptococcus pneumoniae*, Drug Resistant, Invasive		*Streptococcus pneumoniae*, Invasive (<5 Years)	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	16,914	17,506	3,656	3,300	2,095	2,325	243	381
NEW ENGLAND	298	283	171	209	18	116	3	41
Maine	10	6	20	12	-	-	-	-
N.H.	11	6	35	N	-	-	N	N
Vt.	1	7	10	15	5	7	2	1
Mass.	178	198	91	63	N	N	N	N
R.I.	17	17	15	12	13	4	1	3
Conn.	81	49	-	107	-	105	-	37
MID. ATLANTIC	1,278	1,381	594	608	103	151	67	98
Upstate N.Y.	299	442	268	240	85	144	65	98
N.Y. City	405	382	136	157	U	U	U	U
N.J.	349	257	128	132	N	N	N	N
Pa.	225	300	62	79	18	7	2	-
E.N. CENTRAL	1,646	4,042	660	733	216	169	106	119
Ohio	602	2,686	195	187	67	3	23	-
Ind.	95	213	46	57	144	166	57	56
Ill.	629	569	145	235	2	-	-	63
Mich.	172	285	273	203	3	-	N	N
Wis.	148	289	1	51	N	N	26	-
W.N. CENTRAL	929	1,777	227	346	417	142	49	54
Minn.	205	402	113	159	292	63	49	45
Iowa	118	348	-	-	N	N	N	N
Mo.	171	294	42	70	5	10	-	-
N. Dak.	16	21	3	17	1	6	-	9
S. Dak.	153	556	13	11	1	4	-	-
Nebr.	179	87	18	39	29	21	N	N
Kans.	87	69	38	50	89	38	N	N
S. ATLANTIC	6,344	2,578	734	540	1,103	1,223	8	8
Del.	316	16	2	4	3	6	N	N
Md.	1,101	139	128	N	N	N	N	N
D.C.	56	54	7	21	52	7	1	4
Va.	905	389	70	72	N	N	N	N
W. Va.	12	8	19	19	42	37	7	4
N.C.	405	316	112	135	N	N	U	U
S.C.	106	238	34	12	169	256	N	N
Ga.	1,453	524	155	171	270	387	N	N
Fla.	1,990	894	207	106	567	530	N	N
E.S. CENTRAL	1,343	1,575	105	108	122	218	-	-
Ky.	176	753	18	36	17	24	N	N
Tenn.	104	93	87	72	105	193	N	N
Ala.	747	198	-	-	-	1	N	N
Miss.	316	531	-	-	-	-	-	-
W.S. CENTRAL	1,625	2,700	105	305	75	264	6	61
Ark.	188	544	7	-	8	16	-	-
La.	394	226	-	1	67	248	3	61
Okla.	534	86	41	43	N	N	3	-
Tex.	509	1,844	57	261	N	N	-	-
MOUNTAIN	817	879	537	374	41	38	4	-
Mont.	3	8	-	-	-	-	-	-
Idaho	15	39	9	7	N	N	N	N
Wyo.	9	7	7	12	10	7	-	-
Colo.	165	229	135	146	-	-	-	-
N. Mex.	194	112	96	78	30	29	-	-
Ariz.	350	358	260	128	-	-	N	N
Utah	36	57	30	3	-	-	4	-
Nev.	45	69	-	-	1	2	-	-
PACIFIC	2,634	2,291	523	77	-	4	-	-
Wash.	158	197	65	-	-	-	N	N
Oreg.	108	103	N	N	N	N	N	N
Calif.	2,301	1,928	366	-	N	N	N	N
Alaska	6	7	-	-	-	-	N	N
Hawaii	61	56	92	77	-	4	-	-
Guam	-	48	-	1	-	-	-	-
P.R.	8	16	N	N	-	-	N	N
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	-	-	U	U
C.N.M.I.	17	U	-	U	-	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 23, 2002, and November 24, 2001 (47th Week)*

Reporting Area	Syphilis				Tuberculosis		Typhoid Fever	
	Primary & Secondary		Congenital					
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	5,705	5,415	313	450	10,474	12,525	243	321
NEW ENGLAND	127	56	-	8	344	412	14	16
Maine	2	1	-	3	10	17	-	1
N.H.	7	1	-	-	15	16	-	2
Vt.	1	3	-	-	-	4	-	-
Mass.	85	32	-	3	197	212	8	10
R.I.	6	9	-	-	35	58	-	-
Conn.	26	10	-	2	87	105	6	3
MID. ATLANTIC	638	473	60	71	1,865	2,054	58	106
Upstate N.Y.	30	18	10	5	267	333	9	15
N.Y. City	396	256	23	32	933	1,013	30	44
N.J.	138	116	26	34	439	446	15	38
Pa.	74	83	1	-	226	262	4	9
E.N. CENTRAL	976	958	55	64	1,043	1,292	18	32
Ohio	151	70	4	2	137	250	6	4
Ind.	64	142	1	12	110	94	2	2
Ill.	295	348	30	40	531	609	1	17
Mich.	442	375	20	6	224	268	4	5
Wis.	24	23	-	4	41	71	5	4
W.N. CENTRAL	95	91	-	9	474	485	8	15
Minn.	48	32	-	2	203	207	3	6
Iowa	2	4	-	-	24	34	-	-
Mo.	25	24	-	5	117	123	1	9
N. Dak.	-	-	-	-	4	3	-	-
S. Dak.	-	-	-	-	10	12	-	-
Nebr.	3	8	-	-	23	32	4	-
Kans.	17	23	-	2	93	74	-	-
S. ATLANTIC	1,535	1,816	69	106	2,126	2,379	45	41
Del.	11	14	-	-	15	15	-	1
Md.	184	244	14	4	260	207	8	10
D.C.	58	35	1	2	-	51	-	-
Va.	60	93	1	5	166	232	7	11
W. Va.	2	4	-	-	28	26	-	-
N.C.	264	416	18	14	311	307	2	2
S.C.	120	216	9	21	146	161	-	-
Ga.	328	352	10	23	358	429	9	9
Fla.	508	442	16	37	842	951	19	8
E.S. CENTRAL	428	597	20	31	650	753	4	1
Ky.	85	44	3	1	118	116	4	-
Tenn.	156	297	10	18	260	274	-	1
Ala.	146	122	4	5	183	240	-	-
Miss.	41	134	3	7	89	123	-	-
W.S. CENTRAL	769	678	65	74	1,463	1,885	5	18
Ark.	32	36	2	8	115	139	-	-
La.	138	162	-	-	-	114	-	-
Okla.	61	56	3	6	127	139	2	-
Tex.	538	424	60	60	1,221	1,493	3	18
MOUNTAIN	264	201	15	32	323	502	10	8
Mont.	-	-	-	-	6	14	-	1
Idaho	5	1	-	-	9	7	-	-
Wyo.	-	1	-	-	3	3	-	-
Colo.	44	20	1	1	55	117	5	1
N. Mex.	30	16	-	2	22	49	1	-
Ariz.	169	146	14	29	188	200	-	1
Utah	8	10	-	-	26	33	2	1
Nev.	8	7	-	-	14	79	2	4
PACIFIC	873	545	29	55	2,186	2,763	81	84
Wash.	57	43	1	-	198	216	6	5
Oreg.	21	13	1	-	101	101	2	7
Calif.	787	477	26	55	1,717	2,266	68	68
Alaska	-	-	-	-	43	46	-	1
Hawaii	8	12	1	-	127	134	5	3
Guam	-	9	-	1	-	54	-	3
P.R.	227	248	15	13	75	95	-	-
V.I.	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	15	U	-	U	32	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending November 23, 2002 (47th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	486	352	76	42	13	3	43
Boston, Mass.	134	90	24	16	4	-	8
Bridgeport, Conn.	37	28	7	2	-	-	3
Cambridge, Mass.	22	17	3	2	-	-	1
Fall River, Mass.	22	17	1	3	1	-	3
Hartford, Conn.	32	21	8	-	2	1	1
Lowell, Mass.	22	18	3	-	1	-	1
Lynn, Mass.	14	11	2	1	-	-	1
New Bedford, Mass.	31	25	4	2	-	-	6
New Haven, Conn.	35	24	4	4	3	-	6
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	11	9	2	-	-	-	1
Springfield, Mass.	41	30	5	4	1	1	3
Waterbury, Conn.	19	17	2	-	-	-	2
Worcester, Mass.	66	45	11	8	1	1	7
MID. ATLANTIC	2,232	1,569	425	154	42	42	96
Albany, N.Y.	51	38	9	3	-	1	2
Allentown, Pa.	23	20	2	1	-	-	-
Buffalo, N.Y.	82	54	18	6	2	2	3
Camden, N.J.	29	16	4	7	1	1	1
Elizabeth, N.J.	26	20	6	-	-	-	-
Erie, Pa.	34	26	5	1	-	2	3
Jersey City, N.J.	38	27	8	1	1	1	-
New York City, N.Y.	1,200	832	237	86	26	19	36
Newark, N.J.	44	25	13	4	1	1	3
Paterson, N.J.	18	14	3	1	-	-	1
Philadelphia, Pa.	300	195	61	25	7	12	13
Pittsburgh, Pa.§	33	26	4	3	-	-	6
Reading, Pa.	21	18	3	-	-	-	-
Rochester, N.Y.	135	103	24	4	3	1	8
Schenectady, N.Y.	26	22	1	3	-	-	1
Scranton, Pa.	21	16	4	1	-	-	-
Syracuse, N.Y.	72	55	12	4	-	1	9
Trenton, N.J.	21	15	3	1	1	1	-
Utica, N.Y.	29	24	5	-	-	-	5
Yonkers, N.Y.	29	23	3	3	-	-	5
E.N. CENTRAL	1,777	1,237	335	125	40	40	124
Akron, Ohio	64	34	17	6	4	3	7
Canton, Ohio	31	24	3	3	-	1	5
Chicago, Ill.	126	80	29	13	3	1	6
Cincinnati, Ohio	106	76	22	4	1	3	8
Cleveland, Ohio	126	80	29	13	3	1	6
Columbus, Ohio	210	144	41	18	1	6	11
Dayton, Ohio	126	88	22	7	4	5	7
Detroit, Mich.	216	139	44	19	9	5	19
Evansville, Ind.	51	37	13	1	-	-	4
Fort Wayne, Ind.	60	51	6	1	1	1	2
Gary, Ind.	10	3	3	2	1	1	-
Grand Rapids, Mich.	46	34	8	2	1	1	4
Indianapolis, Ind.	198	123	46	14	7	8	18
Lansing, Mich.	38	29	5	3	1	-	4
Milwaukee, Wis.	109	84	16	8	-	1	8
Peoria, Ill.	43	38	5	-	-	-	-
Rockford, Ill.	66	55	7	2	1	1	4
South Bend, Ind.	U	U	U	U	U	U	U
Toledo, Ohio	86	66	11	6	2	1	9
Youngstown, Ohio	65	52	8	3	1	1	2
W.N. CENTRAL	616	441	110	31	16	18	52
Des Moines, Iowa	41	31	8	-	1	1	4
Duluth, Minn.	39	30	7	-	1	1	6
Kansas City, Kans.	32	19	8	3	2	-	1
Kansas City, Mo.	102	62	28	10	1	1	9
Lincoln, Nebr.	59	49	6	1	2	1	2
Minneapolis, Minn.	89	59	15	6	2	7	4
Omaha, Nebr.	91	74	11	3	1	2	16
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	59	40	11	3	2	3	7
Wichita, Kans.	104	77	16	5	4	2	3
S. ATLANTIC	1,246	839	252	92	44	17	86
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	255	164	55	28	5	3	25
Charlotte, N.C.	124	91	21	4	3	5	14
Jacksonville, Fla.	145	93	34	8	7	2	7
Miami, Fla.	130	80	24	12	12	2	6
Norfolk, Va.	49	35	9	3	-	2	1
Richmond, Va.	51	36	10	2	3	-	8
Savannah, Ga.	90	63	16	9	2	-	3
St. Petersburg, Fla.	64	52	8	3	1	-	2
Tampa, Fla.	167	119	34	8	4	2	10
Washington, D.C.	150	93	36	14	5	1	6
Wilmington, Del.	21	13	5	1	2	-	4
E.S. CENTRAL	924	607	215	56	20	25	88
Birmingham, Ala.	182	120	46	9	3	3	20
Chattanooga, Tenn.	71	51	17	2	-	1	4
Knoxville, Tenn.	117	83	28	4	1	1	5
Lexington, Ky.	60	41	12	3	1	3	1
Memphis, Tenn.	206	125	48	18	7	8	27
Memphis, Tenn.	U	U	U	U	U	U	U
Mobile, Ala.	80	48	20	9	-	3	3
Montgomery, Ala.	50	39	6	2	3	-	13
Nashville, Tenn.	158	100	38	9	5	6	15
W.S. CENTRAL	1,320	870	288	79	44	39	90
Austin, Tex.	99	64	22	6	5	2	10
Baton Rouge, La.	60	39	18	3	-	-	1
Corpus Christi, Tex.	64	41	14	3	5	1	6
Dallas, Tex.	201	120	54	17	6	4	19
El Paso, Tex.	75	54	14	4	-	3	3
Ft. Worth, Tex.	U	U	U	U	U	U	U
Houston, Tex.	309	189	74	14	14	18	25
Little Rock, Ark.	64	42	9	7	5	1	-
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	207	150	32	16	5	4	8
Shreveport, La.	93	68	15	4	2	4	5
Tulsa, Okla.	148	103	36	5	2	2	13
MOUNTAIN	828	566	167	59	25	11	68
Albuquerque, N.M.	102	71	21	8	1	1	11
Boise, Idaho	33	24	5	2	1	1	2
Colo. Springs, Colo.	68	46	10	6	5	1	4
Denver, Colo.	103	65	22	10	2	4	11
Las Vegas, Nev.	166	106	36	15	8	1	9
Ogden, Utah	29	18	9	2	-	-	2
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	32	23	7	-	2	-	3
Salt Lake City, Utah	129	93	22	8	3	3	17
Tucson, Ariz.	166	120	35	8	3	-	9
PACIFIC	1,709	1,190	357	106	32	24	142
Berkeley, Calif.	15	10	4	1	-	-	1
Fresno, Calif.	119	81	29	8	-	1	14
Glendale, Calif.	28	24	3	-	1	-	-
Honolulu, Hawaii	73	61	9	1	2	-	5
Long Beach, Calif.	44	25	16	3	-	-	6
Los Angeles, Calif.	448	289	90	47	11	11	21
Pasadena, Calif.	22	18	4	-	-	-	5
Portland, Oreg.	U	U	U	U	U	U	U
Sacramento, Calif.	221	158	42	11	6	4	24
San Diego, Calif.	196	145	33	13	2	3	23
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	208	161	30	10	4	3	22
Santa Cruz, Calif.	34	20	13	1	-	-	2
Seattle, Wash.	130	81	40	6	2	1	4
Spokane, Wash.	42	30	8	1	2	1	4
Tacoma, Wash.	129	87	36	4	2	-	11
TOTAL	11,138¶	7,671	2,225	744	276	219	789

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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