



MMWRTM

Morbidity and Mortality Weekly Report

Weekly

March 14, 2003 / Vol. 52 / No. 10

National Colorectal Cancer Awareness Month — March 2003

March is National Colorectal Cancer Awareness Month. This national health observance serves to increase public awareness about the disease burden of colorectal cancer (i.e., cancer of the colon or rectum) and to encourage adults aged ≥ 50 years to reduce their risk through regular screening examinations. Colorectal cancer is the second leading cause of cancer-related death in the United States. During 2003, an estimated 147,500 new cases and 57,100 deaths will occur (1). However, despite recommendations for screening, many persons who are at risk for colorectal cancer are not being screened.

CDC's Colorectal Cancer Prevention and Control Initiative raises public awareness through the "Screen for Life" campaign, which communicates the importance of regular screening for adults aged ≥ 50 years, and "A Call to Action," an education program designed to raise health-care providers' awareness and knowledge about prevention and early detection. CDC also works with partners to support the National Colorectal Cancer Roundtable, a coalition of organizations that educates health-care providers and the public about screening. Finally, CDC funds comprehensive cancer control programs to integrate a full range of cancer control activities, improve community-based education and health promotion, and target at-risk populations.

Additional information about colorectal cancer awareness and provider training materials are available from CDC at <http://www.cdc.gov/cancer/screenforlife> and <http://www.cdc.gov/cancer/colorct/calltoaction>.

Reference

1. American Cancer Society. Cancer facts and figures, 2003. Atlanta, Georgia: American Cancer Society, 2003; publication no. 5008.03.

Colorectal Cancer Test Use Among Persons Aged ≥ 50 Years — United States, 2001

Colorectal cancer is the second leading cause of cancer-related death in the United States (1). The lifetime risk for having colorectal cancer diagnosed is 6% (2). Screening measures decrease the incidence and mortality of colorectal cancer by detecting early disease and removing precancerous lesions (3). The U.S. Preventive Services Task Force recommends routine cancer screening for U.S. adults aged ≥ 50 years with one or a combination of the following screening options: annual home fecal occult blood testing (FOBT), sigmoidoscopy every 5 years, colonoscopy every 10 years, or double contrast barium enema every 5 years (3). To estimate rates and evaluate trends for colorectal cancer test use among U.S. adults aged ≥ 50 years, CDC analyzed data from the 2001 Behavioral Risk Factor Surveillance System (BRFSS) on the use of FOBT and sigmoidoscopy/colonoscopy and compared the data for 2001 with those for 1997 and 1999. This report summarizes the results of that analysis, which indicate that despite small increases in the self-reported use of colorectal cancer tests, screening rates remain low. Efforts to increase awareness and encourage regular colorectal cancer screening should continue.

INSIDE

- 196 Donated Television Airplay of Colorectal Cancer Education Public Service Announcements — United States, 1999–2002
- 199 Poisoning by an Illegally Imported Chinese Rodenticide Containing Tetramethylenedisulfotetramine — New York City, 2002
- 201 Smallpox Vaccine Adverse Events Among Civilians — United States, March 4–10, 2003
- 203 Notices to Readers

The *MMWR* series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION

Centers for Disease Control and Prevention. [Article Title]. *MMWR* 2003;52:[inclusive page numbers].

Centers for Disease Control and Prevention

Julie L. Gerberding, M.D., M.P.H.
Director

David W. Fleming, M.D.
Deputy Director for Public Health Science

Dixie E. Snider, Jr., M.D., M.P.H.
Associate Director for Science

Epidemiology Program Office

Stephen B. Thacker, M.D., M.Sc.
Director

Office of Scientific and Health Communications

John W. Ward, M.D.
Director

Editor, MMWR Series

Suzanne M. Hewitt, M.P.A.
Managing Editor, MMWR Series

David C. Johnson
(Acting) Lead Technical Writer/Editor

Jude C. Rutledge
Teresa F. Rutledge
Jeffrey D. Sokolow, M.A.
Writers/Editors

Lynda G. Cupell
Malbea A. Heilman
Visual Information Specialists

Quang M. Doan
Erica R. Shaver
Information Technology Specialists

Division of Public Health Surveillance and Informatics

Notifiable Disease Morbidity and 122 Cities Mortality Data

Robert F. Fagan
Deborah A. Adams
Felicia J. Connor
Lateka Dammond
Patsy A. Hall
Pearl C. Sharp

BRFSS is a state-based, random-digit-dialed telephone survey of the civilian, U.S. noninstitutionalized population aged ≥ 18 years. In 2001, all 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam participated in BRFSS. Respondents aged ≥ 50 years, the age group for which colorectal cancer screening is recommended, were asked whether they ever had used "a special kit at home to determine whether the stool contains blood" (FOBT), whether they ever had "a tube inserted through the rectum to view the bowel for signs of cancer or other health problems" (sigmoidoscopy/colonoscopy), and when these tests were last performed. For this report, both sigmoidoscopy and colonoscopy are described as "lower endoscopy."

Previous reports have examined lower endoscopic surveillance within 5 years as a measure of compliance with screening guidelines (4). Because BRFSS could not differentiate between sigmoidoscopy and colonoscopy, for this survey, the surveillance period was 10 years to include those undergoing colonoscopy. Any respondents reporting lower endoscopy within 10 years were considered to have been screened within the recommended period. Percentages were estimated for persons aged ≥ 50 years who had reported FOBT ever and within the 12 months preceding the survey, lower endoscopy ever and within 5 and 10 years preceding the survey, and FOBT within 12 months and/or lower endoscopy within 10 years preceding the survey.

For the 2001 BRFSS, the median state response rate was 51.1% (range: 33.3%–81.5%) using the CASRO method (5). A total of 87,729 persons aged ≥ 50 years responded. Responses coded as "don't know/unsure" or "refused" were excluded from analysis (3%–4%). Proportions, standard errors, and 95% confidence intervals were calculated by using SAS v8 and SUDAAN. Data were weighted to the age, sex, and race/ethnicity distribution of the adult population in each state by using intercensal estimates and age standardized to the 2001 BRFSS population. Estimates for the percentage of adults aged ≥ 50 years who self-reported receiving either FOBT within 12 months or lower endoscopy within 5 years (1997 and 1999 surveys did not include responses within 10 years) were compared for 1997, 1999, and 2001.

In 2001, an estimated 44.6% of adults aged ≥ 50 years had ever had FOBT, and 47.3% had ever had a lower endoscopy. An estimated 23.5% had FOBT within 12 months; 43.4% had lower endoscopy within 10 years; 53.1% had one or both tests within the periods described (Table). By state, the estimates for FOBT within 12 months ranged from 6.8% in Alabama to 34.5% in Maine; for lower endoscopy within 10 years, estimates ranged from 28.4% in the Virgin Islands to 58.5% in Minnesota. The estimates for reporting either FOBT

within 12 months and/or lower endoscopy within 10 years varied by state from 42.2% in Oklahoma to 65.3% in the District of Columbia (Figure 1).

The percentage of persons aged ≥50 years who had received FOBT within 12 months was 19.4% in 1997, 20.4% in 1999, and 23.5% in 2001. For lower endoscopy within 5 years, the proportions were 29.9%, 33.3%, and 38.7%, respectively (Figure 2).

Reported by: *L Seeff, MD, M Nadel, PhD, D Blackman, PhD, Div of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion; LA Pollack, MD, EIS Officer, CDC.*

Editorial Note: The findings in this report indicate that colorectal cancer test use among U.S. adults remains low. Approximately half of U.S. adults aged ≥50 years have not received the recommended screening.

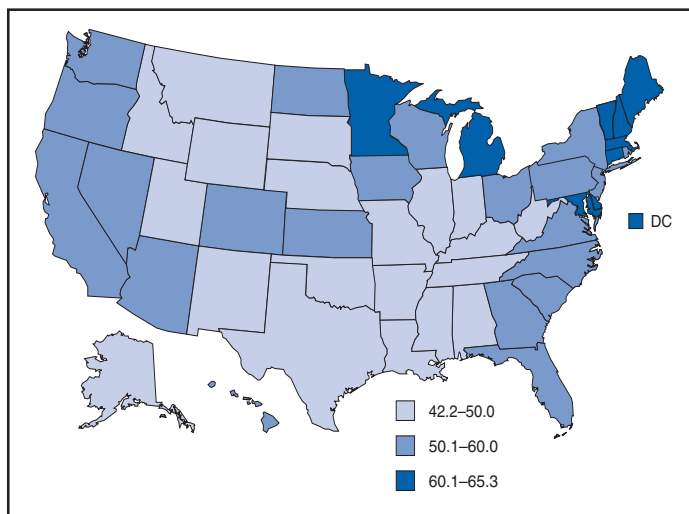
TABLE. Percentage of adults aged ≥50 years who reported receiving a fecal occult blood test (FOBT) within 12 months preceding survey and/or lower endoscopy within 5 and 10 years preceding survey, by test type — Behavioral Risk Factor Surveillance System (BRFSS), United States, 2001*

Test	%	(95% CI†)
FOBT within 12 mos	23.5	(±0.5)
Lower endoscopy within 5 yrs	38.7	(±0.5)
Lower endoscopy within 10 yrs	43.4	(±0.6)
FOBT within 12 mos and/or lower endoscopy within 10 yrs	53.1	(±0.6)

* Age-adjusted to the 2001 BRFSS population.

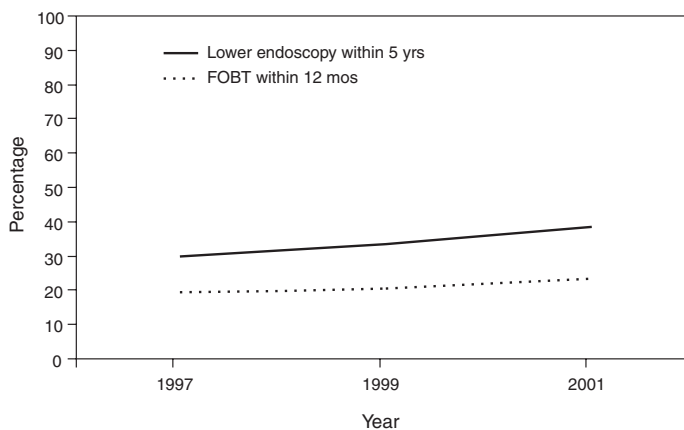
† Confidence interval.

FIGURE 1. Percentage of adults aged ≥50 years who reported receiving a fecal occult blood test within 12 months preceding survey and/or lower endoscopy within 10 years preceding survey, by state — Behavioral Risk Factor Surveillance System (BRFSS), United States, 2001*



* Age-adjusted to the 2001 BRFSS population.

FIGURE 2. Percentage of adults aged ≥50 years who reported receiving a fecal occult blood test (FOBT) within 12 months preceding survey and/or lower endoscopy within 5 years* preceding survey, by test type and year — Behavioral Risk Factor Surveillance System (BRFSS), United States, 1997–2001†



* 1997 and 1999 surveys did not include responses within 10 years.

† Age-adjusted to the 2001 BRFSS population.

The findings in this report are subject to at least five limitations. First, the percentages reported overestimate colorectal cancer screening rates because 1) BRFSS could not differentiate test use specifically for screening from tests performed for diagnostic purposes and 2) persons who received sigmoidoscopy outside the recommended 5-year screening interval, but within 10 years, were considered compliant with screening guidelines. As a result, colorectal cancer screening rates are probably lower than the estimates in this report. Second, BRFSS excludes residents of institutions and persons who do not own telephones. Third, estimates from BRFSS were based on self-reports and were not validated; however, previous studies document moderate-to-good concordance between the self-reporting of colorectal cancer tests and medical records (6,7). Fourth, the response rate of 51.1% is low and has been low in previous years (62.1% in 1997 and 55.2% in 1999) (5). Health-care-seeking behaviors might differ among respondents and nonrespondents. Finally, data on the use of barium enema, another option for colorectal cancer screening, were not provided in BRFSS. However, barium enema is recommended less often than FOBT or sigmoidoscopy (8).

Colorectal cancer test screening rates are much lower than breast and cervical cancer test screening rates (mammography and Papanicolaou smear, respectively) (9). This shortfall warrants increased public and health-care provider awareness and supportive health-care systems that emphasize and ensure accessibility to colorectal cancer screening. In July 2001, Medicare reimbursement was approved for colonoscopy

screening for persons with average risk for colorectal cancer; this measure might increase future screening rates.

To promote colorectal cancer screening, CDC will launch its annual "Screen for Life: A National Colorectal Cancer Awareness Campaign" (<http://www.cdc.gov/cancer/screenforlife>), which encourages persons aged ≥ 50 years to discuss screening for colorectal cancer with their doctor and to select appropriate test(s). For health-care providers, CDC also has produced an education program, "A Call to Action: Prevention and Early Detection of Colorectal Cancer" (<http://www.cdc.gov/cancer/colorctl/calltoaction>). In addition, CDC has supported a measure of colorectal cancer screening for the Health Plan Employer Data and Information Set (HEDIS), a set of standardized performance measures that permits comparison of managed care organizations. The measure has been approved provisionally for inclusion in HEDIS in 2004. To address issues related to mass screening, CDC's Survey of Endoscopy Capacity will examine the national distribution of lower endoscopes and trained health-care providers.

References

1. American Cancer Society. Cancer facts and figures, 2003. Atlanta, Georgia: American Cancer Society, 2003; publication no. 5008.03.
2. 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.
3. Pignone M, Rich M, Teutsch S, Berg AO, Lohr KN. Screening for colorectal cancer in adults at average risk: a summary of the evidence for the U.S. Preventive Services Task Force. *Ann Intern Med* 2002;137:132–41.
4. CDC. Trends in screening for colorectal cancer—United States, 1997 and 1999. *MMWR* 2001;50:162–6.
5. CDC. 2001 Behavioral Risk Factor Surveillance System summary data quality report. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2001.
6. Mandelson MT, LaCroix AZ, Anderson LA, Nadel MR, Lee NC. Comparison of self-reported fecal occult blood testing with automated laboratory records among older women in a health maintenance organization. *Am J Epidemiol* 1999;150:617–21.
7. Baier M, Calonge N, Cutter G, et al. Validity of self-reported colorectal cancer screening behavior. *Cancer Epidemiol Biomarkers Prev* 2000;9:229–32.
8. Klabunde C, Frame P, Meadow A, Jones E, Nadel M. A national survey of primary care physicians' colorectal cancer screening recommendations and practices. *Prev Med* 2003 (in press).
9. Seeff L, Shapiro J, Nadel M. Are we doing enough to screen for colorectal cancer? Findings from the 1999 Behavioral Risk Factor Surveillance System. *J Fam Prac* 2002;51:761–6.

Acknowledgment

This report is based on data contributed by state BRFSS coordinators.

Donated Television Airplay of Colorectal Cancer Education Public Service Announcements — United States, 1999–2002

To help communicate the importance of colorectal cancer (CRC) screening, in 1999, the U.S. Department of Health and Human Services (DHHS) launched the "Screen for Life: National Colorectal Cancer Action Campaign" (SFL) (<http://www.cdc.gov/cancer/screenforlife>) (1) as one of many strategies addressing the prevention and early detection of CRC. As a central part of this campaign, public service announcements (PSAs) were developed to take advantage of the influence and reach of television to encourage Americans aged ≥ 50 years to get tested for CRC. This report summarizes an assessment of donated television airplay that SFL PSAs received during March 1999–February 2002. According to data obtained from Arbitron Inc., a research firm that monitors broadcast media in the United States, SFL PSAs were broadcast 41,624 times, amounting to approximately \$4.3 million in donated television airtime. As DHHS and others promote CRC screening, CDC will continue to release and track airplay of SFL PSAs and examine the collective influence that SFL and other educational efforts and strategies have on CRC screening rates in the United States.

CDC, in collaboration with the Centers for Medicare & Medicaid Services, developed and launched SFL in March 1999 and released new campaign materials in July 2000 (Phase II) and March 2001 (Phase III). Each campaign phase builds upon the previous one and includes these messages: CRC is the second leading cancer killer, screening saves lives, and screening can find precancerous polyps that can be removed before they turn cancerous. To track campaign airplay, CDC uses the 24-hour monitoring services of Arbitron's Sigma system, which monitors PSA airplay on approximately 1,000 television stations in all 210 U.S. Designated Market Areas[®] (DMAs)* and approximately 75 regional and national cable channels. The Sigma system tracks airplay by embedding an electronic code in the video signal of PSAs before their distribution to television stations nationwide.

When a PSA airs, monitoring devices in that DMA detect the code and record the broadcast time, date, day of week; television station call letters; and PSA name and length. Arbitron links these data to estimates of the commercial dollar value of each airplay and the number of times the PSA was seen, known as "audience impressions." The data are transmitted monthly to CDC for analysis.

* As defined by Nielsen Media Research (<http://www.nielsenmedia.com/DMAs.html>).

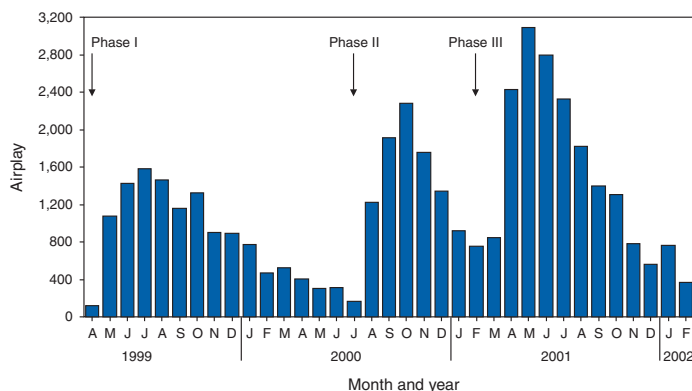
During March 1999–February 2002, the PSAs were broadcast nationwide 41,624 times, resulting in an estimated 749 million audience impressions worth an estimated \$4.3 million. Phase II of the campaign had the highest number of audience impressions, and Phase III had the most airplay and highest value (Table). During each phase, total airplay for SFL PSAs peaked within 3–4 months of launch, then slowly decreased. Each phase has been associated with a higher airplay peak than the previous phase (Figure 1). The percent of DMAs airing the PSAs also increased with each phase. During the 3-year period, 94% of DMAs played the PSAs at least once, and airplay ranged from 1 to 4,578 per DMA (Figure 2).

Patterns of airplay over the three phases indicate that 17,061 (41%) of the total 41,624 SFL PSA plays occurred during daytime (6:00 a.m.–7:59 p.m.); 2,144 (5%) occurred during prime time (8:00 p.m.–10:59 p.m.); and 22,419 (54%) occurred overnight (11:00 p.m.–5:59 a.m.). The airplay that occurred during daytime accounted for 415 million (55%) of total audience impressions. Prime time airplay accounted for 97 million (13%) total audience impressions. Overnight airplay accounted for 236 million (32%) of total estimated audience impressions.

During each campaign phase, an increasing number of states incorporated SFL materials, including PSAs, into their CRC prevention programs. By Phase III, 23 states had adopted SFL. To assess whether CRC burden influenced the adoption of SFL, CDC compared the latest CRC mortality rates (1999) (2) in states that participated in SFL in 2002 with those that did not participate. No statistically significant differences were found. A comparison of airplay in participating and nonparticipating states is planned.

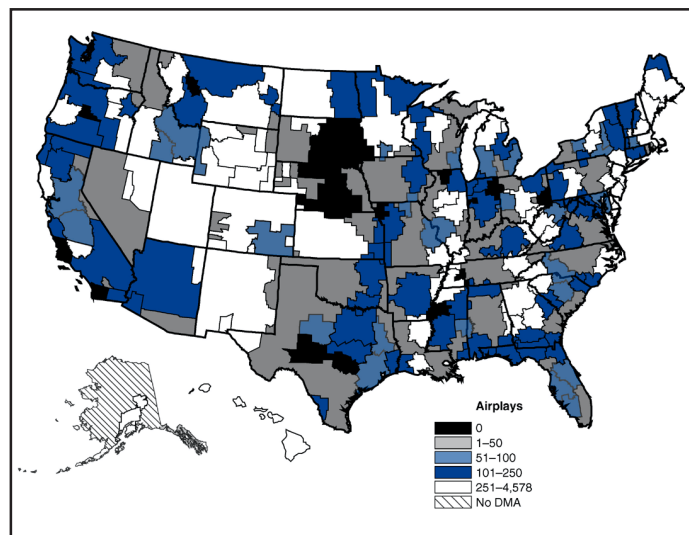
Reported by: Div of Partnership Development, Centers for Medicare & Medicaid Services. CM Jorgensen, DrPH, C Purvis Cooper, PhD, T Richards, MD, CA Gelb, Div of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC.

FIGURE 1. Airplay of “Screen for Life” public service announcements, by month and campaign phase — United States, March 1999*–February 2002



* Campaign launched March 1999; first airplay recorded April 1999.

FIGURE 2. Airplay of “Screen for Life” public service announcements, by Designated Market Area® (DMA) — United States, March 1999*–February 2002



* Campaign launched March 1999; first airplay recorded April 1999.

TABLE. Performance of “Screen for Life” public service announcements (PSAs), by campaign phase — United States, March 1999*–February 2002

	Phase I 3/99–7/00	Phase II 8/00–2/01	Phase III 3/01–2/02	Total 3/99–2/02
Airplay (no. times PSAs played)	12,945	10,188	18,491	41,624
Estimated audience impressions (no. times PSAs viewed)	165 million	313 million	271 million	749 million
Estimated value of donated airtime	\$0.9 million	\$1.6 million	\$1.8 million	\$4.3 million
% of DMAs [†] airing PSAs [§]	57%	71%	87%	94%
Average airplay per DMA ^{§¶}	107	67	100	208
Range of airplay per DMA ^{§¶}	1–2,096	1–888	1–1,594	1–4,578

* Campaign launched March 1999; first airplay recorded April 1999.

[†] Designated Market Areas[®] in the United States; N = 210.

[§] Does not include cable airplay.

[¶] Of those DMAs airing “Screen for Life” PSAs.

*"When the mind is ready,
a teacher appears."*

Chinese Proverb

MMWR Continuing Education is designed with your needs in mind: timely public health and clinical courses, online exams, instant course certificates, and economical tuition (it's free).

Visit MMWR Online to learn more about our program's features and available courses.

MMWR CE
It's ready when you are.

cdc.gov/mmwr



Editorial Note: Media campaigns alone rarely change behaviors; however, when included as part of a multicomponent intervention strategy, they have a strong synergetic effect. Used in this manner, media campaigns can reach large numbers of people quickly, raise awareness about health issues, and reinforce communication between patients and health-care providers (3–7). The findings in this report indicate that the SFL campaign has benefitted from the donation of a substantial amount of airplay by television stations nationwide.

As the campaign progressed, each phase achieved an increasingly higher peak of airplay. This trend might be associated with several factors, including increased national attention to CRC as a major public health issue, designation by the U.S. Congress in 2000 of March as “National Colorectal Cancer Awareness Month,” and increased state and local educational efforts. All these factors might have helped influence public attitudes and contributed to the increases in CRC screening rates observed in some states (8). However, additional research would be necessary to gauge the specific contribution of PSAs to these increases.

The findings in this report are subject to at least two limitations. First, Arbitron’s Sigma system, the only PSA tracking system available, bases estimates of dollar value and audience impressions on advertising figures used by the commercial sector. These figures change weekly and are set according to a complex and proprietary system of perceived market value and demand. Second, the Sigma system provides a conservative estimate of airplay because it does not monitor many channels offered through local cable or satellite services.

Data analysis using the Sigma system and Geographic Information Systems technology can be useful in identifying media markets that have little or no airplay, allowing state and local health officials to increase promotion of SFL. CDC and its partners will continue to release new phases of SFL, including PSAs, as part of a multicomponent approach to prevention and early detection of CRC.

References

1. Jorgensen CM, Gelb C, Merritt T, Seeff L. CDC’s “Screen for Life Campaign: A National Colorectal Cancer Action Campaign.” *J Womens Health Gend Based Med* 2001;10:417–22.
2. American Cancer Society. *Cancer Facts and Figures*, 2003. Atlanta, Georgia: American Cancer Society, 2003; publication no. 5008.03.
3. Flay BR. Mass media smoking cessation: a critical review. *Am J Public Health* 1987;77:153–60.
4. Grilli R, Freemantle N, Minozzi S, Domenighetti G, Finer D. Mass media interventions: effects on health services utilisation. *Cochrane Database Systematic Reviews* 2000;2:CD000389.
5. Marcus BH, Owen N, Forsyth LH, Cavill NA, Fridinger F. Physical activity interventions using mass media, print media, and information technology. *Am J Prev Med* 1998;15:362–78.
6. Snyder L. How effective are mediated health campaigns? In: Rice R, Atkin C, eds. *Public Communication Campaigns*. Thousand Oaks, California: Sage, 2000.

7. Sowden AJ, Arblaster L. Mass media interventions for preventing smoking in young people. *Cochrane Database Systematic Reviews* 2000;2:CD001006.
8. CDC. Colorectal cancer test use among persons aged ≥ 50 years—United States, 2001. *MMWR* 2003;52:193–6.

Poisoning by an Illegally Imported Chinese Rodenticide Containing Tetramethylenedisulfotetramine — New York City, 2002

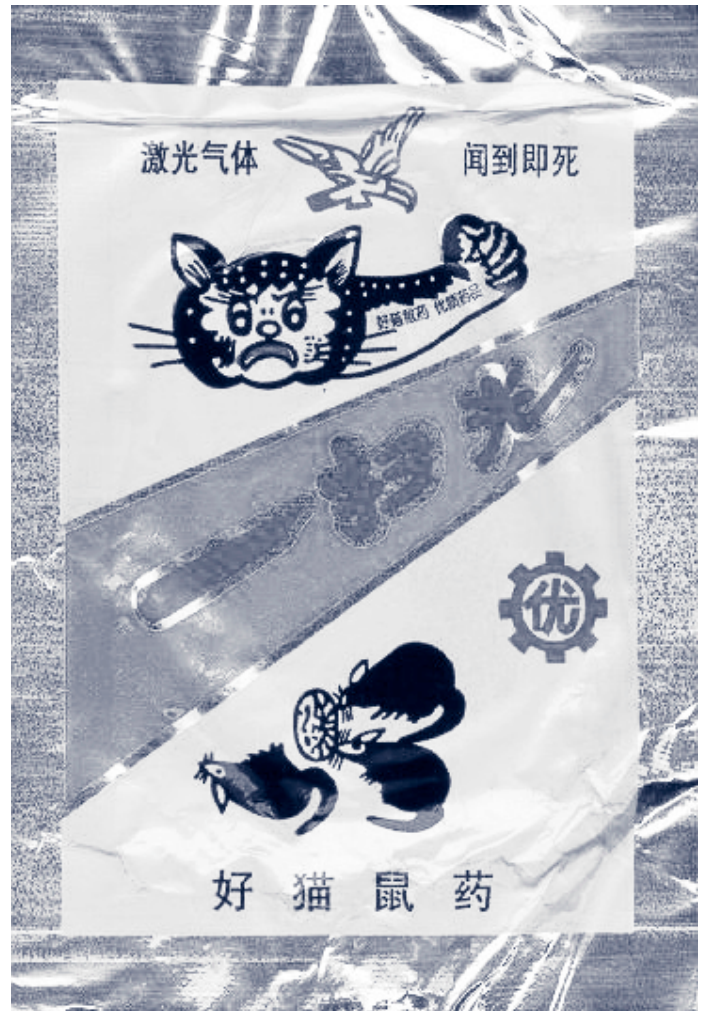
Illegally imported foreign products can result in domestic exposures to unusual toxic chemicals, and health-care providers might not be able to provide appropriate therapy because the chemical ingredients might not be listed or recognized even after translation of the product label. This report describes the first known case in the United States of exposure to a Chinese rodenticide containing the toxin tetramethylenedisulfotetramine (TETS), a convulsant poison. The report of this investigation highlights the need to prevent such poisonings through increased public education, awareness, and enforcement of laws banning the importation of illegal toxic chemicals.

On May 15, 2002, a previously healthy female infant aged 15 months living with her family in New York City was found by her parents to be playing with a white rodenticide powder that they had brought from China and applied in the corner of their kitchen. After 15 minutes, the child had generalized seizures and was taken to an emergency department. Her initial blood glucose level was 108 mg/dL (normal range: 80–120 mg/dL). Despite aggressive therapy with lorazepam, phenobarbital, and pyridoxine, she had intermittent generalized seizure activity for 4 hours and required intubation.

After 3 days, the infant was extubated successfully but appeared to have multiple neurologic deficits, including absence seizures and possibly cortical blindness. Continuous electroencephalogram monitoring, performed during the initial hospitalization, revealed multiple epileptogenic foci. The infant was discharged in June; as of November 5, the infant remained severely developmentally delayed and was on valproic acid therapy for seizure control.

Translation of the rodenticide package labeling from Chinese to English did not clarify its contents (Figure). A search of the China National Poison Control Center's (NPCC) website for rodenticides suggested that the ingredients might have included sodium monofluoroacetate, fluoroacetamide, tetramethylenedinitrosotetramine, or strychnine. However, an initial laboratory analysis was negative for sodium fluoroac-

FIGURE. Package of Chinese rodenticide implicated in the poisoning of a female infant aged 15 months — New York City, 2002



Photo/New York City Poison Control Center

etate, fluoroacetamide, bromethalin, strychnine, 1,3-difluoro, 2-propanol, and carbamate insecticides.

On September 14, a snack shop owner in China poisoned food in a competitor's snack shop with a rodenticide identified as Dushuqiang, resulting in 38 deaths. Although Dushuqiang, which contains TETS, has been banned for sale since the mid-1980s, it is still widely available in China. Following news reports of this incident, the New York City Poison Control Center conducted additional laboratory testing of the product associated with the poisoning in New York City and confirmed TETS in the product by gas chromatography-mass spectrometry (GC-MS) (1). TETS concentration was 6.4% weight/weight [w/w] in one rodenticide packet and 13.8% w/w in another.

Reported by: *F Barrueto Jr, MD, LS Nelson, MD, RS Hoffman, MD, New York City Poison Control Center; MB Heller, PhD, Public Health Laboratory, General Toxicology and Environmental Science Laboratory, New York City Dept of Health and Mental Hygiene; PM Furdyna, New York State Div of Environmental Conservation; RJ Hoffman, MD, Div of Toxicology, Maimonides Medical Center, New York, New York. KS Whitlow, DO, MG Belson, MD, AK Henderson, PhD, Div of Environmental Hazards and Health Effects, National Center for Environmental Health, CDC.*

Editorial Note: TETS is a little-known, often unrecognized, and highly lethal neurotoxic rodenticide that once was used widely. An odorless, tasteless, and water-soluble white crystalline powder that acts as a γ -amino butyric acid (GABA) antagonist (China Center for Disease Control and Prevention [CDC], unpublished data, 2002), TETS, like picrotoxin, binds noncompetitively and irreversibly to the GABA receptor on the neuronal cell membrane and blocks chloride channels. The most common routes of exposures are through ingestion and inhalation (China CDC, unpublished data, 2002). TETS is not registered by the U.S. Environmental Protection Agency for use in the United States, and its importation, manufacture, and use in the United States are illegal.

TETS meets criteria for inclusion in the list of extremely hazardous pesticides maintained by the World Health Organization (WHO) and is more lethal than WHO's most toxic registered pesticide, sodium fluoroacetate (2). Multiple large intentional and unintentional exposures in China have demonstrated the human toxicity of TETS (1). The dose at which TETS kills 50% of mammals (LD50) is 0.1–0.3 mg/kg; a dose of 7.0–10.0 mg is considered lethal in humans. TETS is potentially 100 times more toxic to humans than potassium cyanide and might be a more powerful human convulsant than strychnine (3).

The most recognizable clinical signs after a TETS exposure are refractory seizures. Other potentially serious signs include coma and possible electrocardiogram evidence of ischemia (China CDC, unpublished data, 2002). Symptoms typically begin within 30 minutes after exposure and can begin as long as 13 hours after exposure. Severe poisonings are usually fatal within 3 hours (Sun C, China NPCC, personal communication, 2002). TETS intoxication is determined rapidly from history and clinical suspicion. Laboratory identification, although not clinically useful in an acute presentation, is accomplished by several methods, including gas chromatography (GC) with nitrogen-phosphorous detection, GC with flame photometric detection, and GC-MS (1,4,5). TETS is registered with the Chemical Abstract Service Division of the American Chemical Society as number 80-12-6, molecular weight 240, and chemical formula of $C_4H_8N_4O_4S_2$. Every attempt should be made to identify this chemical if it is suspected.

No proven antidote exists for TETS poisoning. Treatment should follow accepted modalities for a poisoned, altered, or seizing patient (6). Universal precautions should be taken to prevent secondary exposure of health-care workers. If TETS is suspected, regional poison control centers can provide information and guidance. A small study of rodents conducted in China suggested that intravenous pyridoxine and dimercaptosuccinic acid might be effective treatments (7). In China, charcoal hemoperfusion and hemodialysis are used to provide extracorporeal removal in patients poisoned with TETS (1,3) (Sun C, China NPCC, personal communication, 2002).

This is the first known case of TETS poisoning in the United States. The chemical's morbidity and lethality and the lack of a known antidote present a danger to human health in areas where TETS might be imported illegally, especially large urban areas with substantial immigrant populations. The appearance of a banned or illegal substance presents challenges to regulatory and enforcement agencies because of the increased risk for unintentional and intentional exposures. Poisoning caused by TETS exposure can be prevented with heightened public health education, increased awareness, and adequate enforcement by customs, border, and regulatory agencies.

Acknowledgments

This report is based on data provided by N Besbelli, MD, World Health Organization, Geneva, Switzerland. J Blondell, PhD, U.S. Environmental Protection Agency, Washington, DC. A Buchwald, MD, D McNutt, MD, County of Santa Cruz Health Svcs Agency, Santa Cruz, California. M Mostin, MD, Centre Antipoisons-Antigifcentrum, Brussels, Belgium. D Rise, U.S. Environmental Protection Agency, Helena, Montana. D Sudakin, MD, National Pesticide Medical Monitoring Program, Oregon State Univ, Corvallis, Oregon. W Temple, MD, National Poisons Centre, New Zealand. R Imtiaz, MD, Div of International Health, Epidemiology Program Office, CDC.

References

1. Guan FY, Liu YT, Liu Y, et al. GC/MS identification of tetramine in samples from human alimentary intoxication and evaluation of artificial carbonic kidneys for the treatment of the victims. *J Anal Toxicol* 1993;17:199–201.
2. International Program on Chemical Safety. The WHO recommended classification of pesticides by hazard and guidelines to classification 2000–2002. Available at <http://www.who.int/pcs/docs/Classification%20of%20Pesticides%202000-01.pdf>.
3. National Poisons Centre. TOXINZ database. Dunedin, New Zealand: Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, 2002.
4. Sun J, Zhong-shan Y, Jing-zhen Z, Heng-zhi Z. Determination of tetramine in postmortem specimens by GC-NPD. *J Anal Toxicol* 1994;18:275–7.
5. Junting L, Chuichang F, Guohua W (letter). *J Forensic Sci* 1993;38:236–8.

6. Gallagher EJ. Neurologic principles. In: Goldfrank L, Flomenbaum N, Lewin N, et al., eds. *Goldfrank's Toxicologic Emergencies*, 7th ed. New York, New York: McGraw Hill, 2002.
7. Qiu Z, Lan H, Zhang S, Xia Y, Huang S. Antidotal effects of vitamin B(6) and sodium dimercaptopropane sulfonate on acute poisoning with tetramethylenedisulfotetramine in animals. *Zhonghua Nei Za Zhi* 2002;41:186–8.

Smallpox Vaccine Adverse Events Among Civilians — United States, March 4–10, 2003

During the civilian smallpox vaccination program, CDC, the Food and Drug Administration, and state health departments are conducting surveillance for vaccine-associated adverse events. In the first stage of the program, active surveillance is being conducted for potentially life-threatening, moderate-to-severe, and other serious adverse events and for vaccinia transmission to contacts of vaccinees (1) (Table). Nonserious events are reported through passive surveillance and are expected to be underreported. This report summarizes smallpox vaccine adverse events reported among civilians vaccinated as of March 7, 2003, and among contacts of vaccinees, received by CDC from the Vaccine Adverse Event Reporting System (VAERS) as of March 10.

Potentially life-threatening and moderate-to-severe events are classified on the basis of evidence in support of the reported diagnoses. For probable cases, possible alternative etiologies are investigated, and supportive information is available. Events are classified as suspected if they have clinical features compatible with the diagnosis but either further investigation is required or additional investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis. CDC and state and local health departments also receive reports of other events that are associated temporally with smallpox vaccination. Reported adverse events are not necessarily associated with vaccination, and some or all of these events might be coincidental.

During January 24–March 7, smallpox vaccine was administered to 16,919 civilian health-care and public health workers in 50 jurisdictions. No potentially life-threatening adverse events of a type known previously to be caused by smallpox vaccination have been reported as of March 10.

During March 4–10, three moderate-to-severe adverse events were reported (Table). All were cases of inadvertent inoculation and were traced to contact with military personnel who received smallpox vaccine.

e asy.

MMWR Online makes it possible for you to access vital public health reports and news as soon as CDC publishes them. Get the information you want, when you need it, from a trusted source.

Visit cdc.gov/mmwr and stay current on important public health topics—the easy way.

know what matters.



TABLE. Number of cases* of adverse events after smallpox vaccination among civilians, by type — United States, January 24–March 10, 2003

Adverse events	No. new cases (March 4–10)		Total no. cases (January 24–March 10)	
	Suspected	Probable	Suspected	Probable
Potentially life-threatening events				
Eczema vaccinatum	—†	—	—	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—	—	—
Fetal vaccinia	—	—	—	—
Post-vaccinial encephalitis or encephalomyelitis	—	—	—	—
Progressive vaccinia	—	—	—	—
Moderate-to-severe events§				
Generalized vaccinia	—	—	1	—
Inadvertent inoculation, non-ocular	1	2	1	2
Ocular vaccinia	—	—	—	2
Pyogenic infection of vaccination site	—	—	—	—
Other events of concern				
	No. new cases		Total no. cases	
Other serious adverse events¶	4		8	
Other nonserious adverse events**	30		76	
Vaccinia immune globulin release	0		1	
Vaccinia transmission to contacts	0††		0	

* Under investigation or completed as of March 10, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.

† No cases reported.

§ Three patients with inadvertent inoculation, non-ocular, and two patients who were contacts of military vaccinees.

¶ Events that result in hospitalization, permanent disability, life-threatening illness, or death; these events are associated temporally with smallpox vaccination but are not necessarily associated causally with vaccination.

** Include expected self-limited responses to smallpox vaccination (e.g., fatigue, headache, pruritis, local reaction at vaccination site, regional lymphadenopathy, lymphangitis, fever, myalgia and chills, and nausea); additional events are associated temporally with smallpox vaccination but are not necessarily associated causally with vaccination.

†† No cases of transmission from civilian vaccinees have been reported. Five cases of transmission from military personnel to civilian contacts have been reported.

On February 15, a man aged 23 years with no history of smallpox vaccination wrestled with a military recruit who had recently received smallpox vaccine and who had no covering in place over his inoculation site. On February 17, the patient noted a small pimple on his chest. A few days later, he noted a pustular lesion on his right shoulder. On March 3, the patient was assessed by local health authorities, who observed a 1.5 cm lesion on the patient's chest, with a well-defined scab and indurated center. A second 1.0 cm lesion was noted on the patient's face just below the nose and above his lip. The patient reported mild malaise but was otherwise well. Right axillary lymphadenopathy was noted on physical examination. On March 4, a swab specimen obtained from a pustular lesion tested positive for vaccinia DNA by real-time polymerase chain reaction (RT-PCR); confirmatory testing at CDC is pending.

On March 4, a woman aged 18 years with no history of smallpox vaccination reported to a local health department with a 0.5 cm pustular lesion on her right forearm, surrounded by a nearly 6.0 cm area of erythema. The lesion had developed during the previous 4 days after close physical

contact with her partner, a military vaccinee who was vaccinated on February 10. The vaccinee had maintained a small adhesive bandage over the lesion at all times, and the patient reported no sharing of towels or clothing; however, considerable oozing through the bandage was reported, which might have contaminated shared sheets and bedding. On March 6, a swab specimen from the pustular lesion tested positive for vaccinia DNA by RT-PCR.

On March 5, a woman aged 25 years with no history of smallpox vaccination was seen in an emergency department with three vesicular lesions on the proximal lateral aspect of her right arm. The patient was otherwise well. She reported close physical contact with a military vaccinee during February 14–17, 2003. Swab specimens were obtained from the vesicular lesions for viral culture and direct fluorescent antibody testing for vaccinia, herpes zoster, and herpes simplex virus; results are pending.

Four other serious adverse events were reported during March 4–10 (Table). None of these events was of a type known to be associated causally with vaccination.

On February 16, a woman aged 43 years was hospitalized 4 days after vaccination with chest pain and dyspnea. Cardiac catheterization revealed a pre-existing coronary artery anomaly. Angina considered to be related to this condition was diagnosed, and she was discharged the following day.

On February 26, a woman aged 53 years was hospitalized 8 days after vaccination with vomiting and diarrhea. Her symptoms improved after treatment with intravenous fluids and an antibiotic, and she was discharged the following day.

On February 28, a woman aged 57 years with a history of chronic obstructive pulmonary disease (COPD) was hospitalized 6 days after vaccination with an exacerbation of COPD, diarrhea, and dehydration. She was treated with intravenous fluids and was discharged the following day.

On February 28, a woman aged 45 years with a history of smallpox vaccination had sharp left shoulder pain and chest pain 2 days after vaccination. Her symptoms resolved after treatment with a nonsteroidal anti-inflammatory medication.

Approximately 2 weeks before vaccination, she had onset of influenza-like illness (ILI) with fever, chill, myalgias, malaise, and cough, which were resolving at the time of vaccination after 1 week away from work. On March 3, she complained again of exertional chest pain and was hospitalized the following day with dyspnea and exertional chest pain that radiated to her neck. An echocardiogram on March 5 demonstrated a small pericardial effusion, left ventricular wall motion abnormality, and a mild decrease in left ventricular function. Cardiac catheterization found no evidence of coronary artery narrowing. Viral myocarditis judged to be associated with the antecedent ILI was diagnosed. On March 6, the patient was discharged after 2 days of hospitalization.

Among the 76 vaccinees with reported other nonserious adverse events during January 24–March 10 (Table), the most common signs and symptoms were rash ($n = 20$), fever ($n = 18$), pruritus ($n = 17$), and pain ($n = 12$). All of these commonly reported events are consistent with mild expected reactions following receipt of smallpox vaccine. Some vaccinees reported multiple signs and symptoms.

Surveillance for adverse events during the civilian smallpox vaccination program is ongoing; regular surveillance reports will be published in *MMWR*.

Reference

1. CDC. Smallpox Vaccine Adverse Events Monitoring and Response System for the first stage of the smallpox vaccination program. *MMWR* 2002;52:88–9.

Notice to Readers

National Vaccine Advisory Committee Report on Strengthening the Vaccine Supply

The National Vaccine Advisory Committee has released a report entitled “Strengthening the Supply of Routinely Recommended Vaccines in the United States: A Report of the National Vaccine Advisory Committee.” The report describes the immediate and contributing factors leading to the 2001–2002 vaccine supply shortages and outlines 12 recommendations to prevent future shortages. The report is available at <http://www.cdc.gov/od/nvpo/nvac-vsr.htm>.

Notice to Readers

Satellite Broadcast on HIV Prevention

CDC and the Public Health Training Network will present a satellite broadcast and web cast, “Update on Rapid Testing for HIV,” on Thursday, April 24, 2003, beginning at 1 p.m., EST. The 2-hour forum describes rapid tests for human immunodeficiency virus (HIV) including availability,

administration, benefits and limitations, implementation considerations for counseling and testing, confirmatory testing for positive test results, quality assurance and training, and resources for updates on rapid testing. A panel of experts will address viewers’ questions and comments, which can be sent by fax before, during, and after the program.

Additional information is available at <http://www.cdcnpi.org/broadcast> and through CDC’s Fax Information System, telephone 888-232-3299, by entering document number 130039 and a return fax number. Organizations are responsible for setting up their own viewing sites and are encouraged to register their sites as soon as possible so persons who want to view the broadcast can access information online. Directions for establishing and registering a viewing are available on the website. The broadcast also can be viewed live or later on computers with Internet and Real Player capability through a link at <http://www.phppo.cdc.gov/phtn>. Videotapes of the broadcast can be ordered while supplies last by telephone, 800-458-5231.

Notice to Readers

FDA Licensure of Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Hepatitis B (Recombinant), and Poliovirus Vaccine Combined, (PEDIARIX™) for Use in Infants

On December 13, 2002, the U.S. Food and Drug Administration (FDA) licensed a combined diphtheria and tetanus toxoids and acellular pertussis adsorbed (DTaP), hepatitis B (HepB) (recombinant) and inactivated poliovirus vaccine (IPV), DTaP-HepB-IPV (PEDIARIX™, SmithKline Beecham Biologicals, Rixensart, Belgium) for use in infants ages 2, 4, and 6 months. All components in the combined vaccine are recommended for routine use by the Advisory Committee on Immunization Practices (ACIP), the Committee on Infectious Diseases of the American Academy of Pediatrics, and the American Academy of Family Physicians (1,2). Combination vaccines decrease the number of vaccine injections (3).

Each dose of DTaP-HepB-IPV contains the type and amount of diphtheria and tetanus toxoids and pertussis antigens and hepatitis B virus antigens as the DTaP and pediatric formulation of hepatitis B vaccine from the same manufacturer (INFANRIX® and ENGERIX-B®, respectively). The poliovirus component of DTaP-HepB-IPV contains the same strains and quantity of inactivated poliovirus Types 1, 2, and 3 as IPV from a different manufacturer (IPOL®, Aventis Pasteur, South Africa) (4).

The immunologic responses following 3 doses of DTaP-HepB-IPV were generally similar to those following 3 doses of separately administered INFANRIX[®], ENGERIX-B[®], and oral poliovirus vaccine (5). Immunogenicity data from simultaneous administration of DTaP-HepB-IPV, with both *Haemophilus influenzae* type b (Hib) conjugate vaccine and pneumococcal conjugate vaccine (PCV), are unavailable (4).

Except for fever, the rates of most solicited local and systemic adverse events following DTaP-HepB-IPV were comparable to rates observed following separately administered U.S.-licensed vaccines. In comparative studies, administration of DTaP-HepB-IPV and Hib vaccine was associated with higher rates of fever relative to separately administered vaccines (5,6). In an ongoing study, infants who received the first dose of DTaP-HepB-IPV with Hib vaccine and PCV had higher rates of fever compared with infants who received separately administered vaccines (4).

ACIP Approval of DTaP-HepB-IPV for the Vaccine for Children Program

ACIP has approved the use of PEDIARIX[™] for the Vaccine for Children program and recommends that, in addition to FDA-approved uses, 3 doses of PEDIARIX[™] can be administered to an infant who is born to a woman who is hepatitis B surface antigen (HBsAg)-positive or whose HBsAg status is unknown. ACIP also approved a minimum interval of 4 weeks between the first and second doses when used in an accelerated vaccination schedule; the third dose should not be given before age 24 weeks.

Indications and Usage

Primary series

1. DTaP-HepB-IPV is approved for the primary series at ages 2, 4, and 6 months. The vaccine should not be administered to any infant aged <6 weeks or any person aged ≥7 years. The recommended interval between doses is 6–8 weeks (preferably 8 weeks) (4).
2. DTaP-HepB-IPV can be used to complete the primary series in infants and children who have received INFANRIX[®] (DTaP) and are scheduled to receive the other components of the combination. Data are limited on the safety and immunogenicity of interchanging currently used DTaP vaccines from different manufacturers (7). ACIP recommends that, whenever feasible, the same brand of DTaP should be used for the primary series but that vaccination should not be deferred because the type of DTaP previously administered is unavailable or unknown (7).

3. All infants should receive a single antigen HepB vaccine soon after birth and before hospital discharge; the first dose can be given by age 2 months if the infant's mother is HbsAg-negative (1). For optimal prevention of perinatal infection, infants born to women who are HBsAg-positive must receive their first dose of single antigen HepB vaccine and hepatitis B immune globulin (HBIG) within 12 hours of birth and ≥3 doses of HepB vaccine by 6 months of age. Women of unknown HBsAg status who give birth should be tested for HBsAg immediately and their infants administered single antigen HepB vaccine within 12 hours of birth; these infants also should receive HBIG if the woman is found to be HBsAg-positive. Except for doses administered at age <6 weeks of age, DTaP-HepB-IPV can be used in a HepB vaccine series for any infant. However, infants born to HBsAg-positive women should begin DTaP-HepB-IPV beginning by age 6–8 weeks after receiving single antigen vaccine at birth. Use of DTaP-HepB-IPV after single antigen HepB vaccine is administered at birth will result in a 4-dose HepB vaccine series (1); this is considered acceptable by ACIP (3).
4. DTaP-HepB-IPV and HepB vaccine from a different manufacturer are interchangeable for HepB vaccination (3). DTaP-HepB-IPV and IPV from a different manufacturer are interchangeable for poliovirus vaccination (4).
5. DTaP-HepB-IPV combination can be administered with Hib and PCV vaccines at separate injection sites (7).

Boosters

1. The DTaP-HepB-IPV combination is not approved for the fourth dose of IPV or the fourth and fifth dose of DTaP (4).

References

1. CDC. Recommended childhood immunization schedule—United States, 2003. MMWR 2003;52:Q1-Q4.
2. Pickering LK, ed. 2000 Red Book: Report of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, Illinois: Academy of Pediatrics, 2000.
3. CDC. Combination vaccines for childhood immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP). MMWR 1999;48(No. RR-5).
4. PEDIARIX[™] [Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Hepatitis B (Recombinant) and Inactivates Poliovirus Vaccine Combined] Prescribing information. SmithKline Beecham Biologicals, Rixensart, Belgium, December 2002.
5. Yeh SH, Ward JI, Partridge S, et al. Safety immunogenicity of a pentavalent diphtheria, tetanus, pertussis, hepatitis B and polio combination vaccine in infants. *Pediatr Infect Dis J* 2001;20:973–80.
6. Zepp F, Schuind A, Meyer C, Sanger R, Kaufhold A, Willems P. Safety and reactogenicity of a novel DTPa-HBV-IPV combined vaccine given along with commercial Hib vaccines in comparison with separate concomitant administration of DTPa, Hib, and OPV vaccines in infants. *Pediatrics* 2002;109:58.
7. CDC. General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the American Academy of Family Physicians (AAFP). MMWR 2002;51(No. RR-2).

Errata: Vol. 52, No. RR-1

In the *MMWR Recommendations and Reports*, “Prevention and Control of Infections with Hepatitis Viruses in Correctional Settings,” published on January 24, 2003, an error occurred on page 4 in the second sentence of the paragraph under Occupational Exposures. The sentence should read, “Occupational transmission of HBV infection among hospital-based workers has been linked to percutaneous and

mucous membrane exposures, and HCV infection has been primarily associated with percutaneous exposure.”

On page 12, in Box 6, the fourth item under Type of Exposure should read, “Household (e.g., cell or dormitory) contact — to person with chronic HBV infection.”

On page 2, errors occurred in Table 1, and on page 20, errors occurred in Table 5. The correct tables follow.

TABLE 1. Estimated chronic infections with hepatitis viruses among inmates and releasees — United States, 1997

Chronic infection	Number and percent of jail and prison inmates with condition*	Number and percent among noninmate population with condition	Number among total U.S. population with condition	Number of releasees with condition and as percentage of U.S. population with condition†
Hepatitis B virus	34,000 (2%)§	1 million–1.25 million (0.5%)¶	1.036 million–1.29 million	155,000 (12%–15%)
Hepatitis C virus	255,000 (15%)**	2.7 million (1.3%)††	2.97 million	1.16 million (39%)

Source: Adapted from National Commission on Correctional Health Care. The health status of soon-to-be-released inmates: a report to Congress. Chicago, IL: National Commission on Correctional Health Care, 2002. Available at http://www.ncchc.org/pubs_stbr.html.

* Based on 1.7 million inmates in prisons and jails, 1997 (15).

† Based on estimated 7.75 million unduplicated released inmates (2); A. Beck, Ph.D. Bureau of Justice Statistics, personal communication, 2002.

§ (31, 83, 84, 85, 86, 88, 89, 90, 92, 94).

¶ Data from CDC, National Center for Health Statistics, National Health and Nutrition Examination Survey (NHANES III), adjusted to include persons of Asian origin (76).

** (88, 121, 122); L. Wang, Ph.D., New York State Department of Health, personal communication, 2001; D. Lau, M.D., University of Texas Medical Branch—Galveston, personal communication, 2001.

†† Based on data from NHANES III (107).

TABLE 5. Postexposure prophylaxis for exposure to hepatitis B virus in correctional settings

Vaccination and antibody response status of exposed person*	Treatment when source is found to be		
	HBsAg† positive	HBsAg negative	HBsAg unknown or not available for testing§
Unvaccinated	HBIG¶ x 1, and initiate HB vaccine series**	Initiate HB vaccine series	Initiate HB vaccine series
Previously vaccinated			
Known responder††	No treatment	No treatment	No treatment
Known nonresponder§§	HBIG x 2, or HBIG x 1 and initiate re-vaccination¶¶	No treatment	Treat as if source were HBsAg positive§
Antibody response unknown	Test exposed person for anti-HBs*** 1. If adequate, no treatment is necessary.†† 2. If inadequate, administer HBIG x 1 and vaccine booster.†††	No treatment	Treat as if source were HBsAg positive§

Source: Adapted from CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. *MMWR* 2001;50 (No. RR-11):1–52.

* Persons who have previously been infected with HBV are immune to reinfection and do not require postexposure prophylaxis.

† Hepatitis B surface antigen.

§ Inmates should be considered persons at probable high risk.

¶ Hepatitis B immune globulin; dose is 0.06 mL/kg body weight intramuscularly.

** Hepatitis B vaccine.

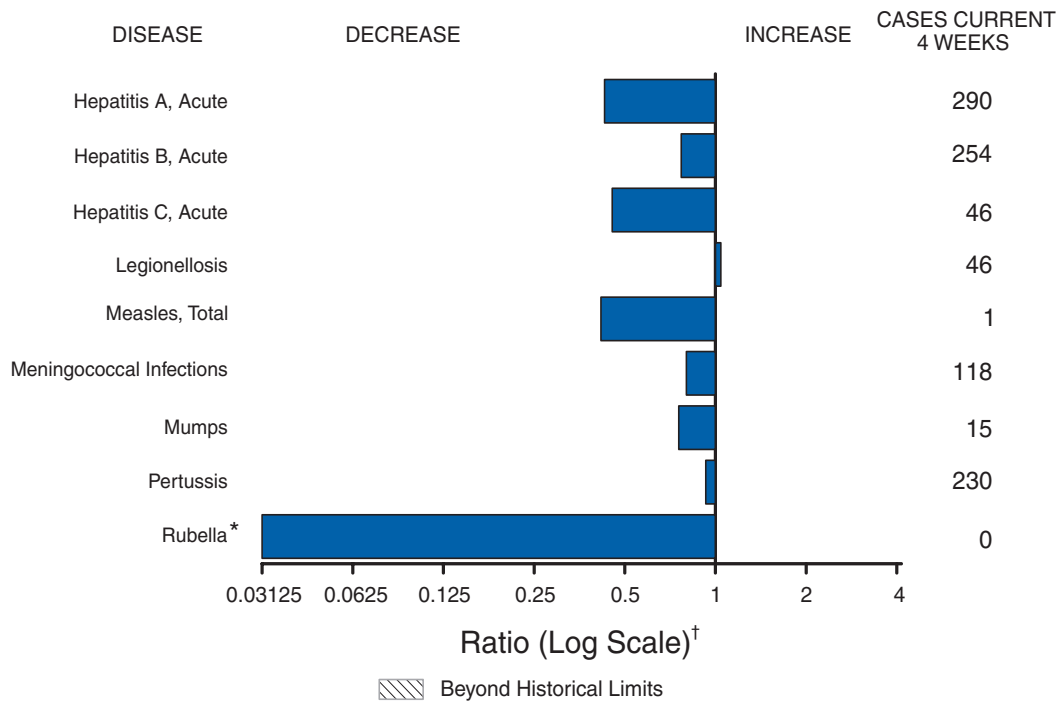
†† A responder is a person with adequate levels of serum antibody to HBsAg (i.e., anti-HBs \geq 10 mIU/mL).

§§ A nonresponder is a person with inadequate response to vaccination (i.e., anti-HBs <10 mIU/mL).

¶¶ The option of administering one dose of HBIG and reinitiating the vaccine series is preferred for nonresponders who have not completed a second 3-dose vaccine series. For persons who previously completed a second vaccine series but failed to respond, 2 doses of HBIG are preferred.

*** Antibody to HBsAg.

††† For persons with ongoing exposure, such as health-care workers, recheck anti-HBs level in 1 month.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending March 8, 2003, with historical data

* No rubella cases were reported for the current 4-week period yielding a ratio for week 10 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 March 8, 2003 (10th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	1	Hansen disease (leprosy) [†]	8	11
Botulism:	-	-	Hantavirus pulmonary syndrome [†]	3	-
foodborne	1	4	Hemolytic uremic syndrome, postdiarrheal [†]	16	18
infant	9	13	HIV infection, pediatric [§]	49	28
other (wound & unspecified)	3	5	Measles, total	3 [¶]	5 ^{**}
Brucellosis [†]	10	16	Mumps	33	51
Chancroid	7	9	Plague	-	-
Cholera	-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis [†]	8	21	Psittacosis [†]	2	10
Diphtheria	-	-	Q fever [†]	8	5
Ehrlichiosis:	-	-	Rabies, human	1	-
human granulocytic (HGE) [†]	7	10	Rubella	-	1
human monocytic (HME) [†]	6	2	Rubella, congenital	-	1
other and unspecified	-	-	Streptococcal toxic-shock syndrome [†]	22	18
Encephalitis/Meningitis:	-	-	Tetanus	1	3
California serogroup viral [†]	-	-	Toxic-shock syndrome	14	24
eastern equine [†]	-	-	Trichinosis	1	2
Powassan [†]	-	-	Tularemia [†]	4	4
St. Louis [†]	-	-	Yellow fever	-	-
western equine [†]	-	-			

-: 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 (NCHSTP). Last update February 23, 2003.

[¶] Of three cases reported, two were indigenous and one was imported from another country.

** Of five cases reported, four were indigenous and one was imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 8, 2003, and March 9, 2002 (10th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiomycosis		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	6,085	6,339	124,017	146,274	608	756	208	390	-	-
NEW ENGLAND	209	205	4,459	5,008	-	-	16	14	-	-
Maine	-	1	163	244	N	N	1	-	-	-
N.H.	3	4	260	300	-	-	-	2	-	-
Vt.	5	4	201	140	-	-	2	1	-	-
Mass.	49	132	1,570	1,930	-	-	8	5	-	-
R.I.	21	21	526	508	-	-	3	3	-	-
Conn.	131	43	1,739	1,886	N	N	2	3	-	-
MID. ATLANTIC	1,622	1,364	8,362	15,740	-	-	16	37	-	-
Upstate N.Y.	73	70	2,808	1,921	N	N	10	6	-	-
N.Y. City	962	857	761	5,495	-	-	2	23	-	-
N.J.	179	257	2,109	2,720	-	-	2	3	-	-
Pa.	408	180	2,684	5,604	N	N	2	5	-	-
E.N. CENTRAL	617	664	23,019	26,862	1	4	48	125	-	-
Ohio	99	152	6,346	7,049	-	-	9	34	-	-
Ind.	95	84	2,655	3,168	N	N	4	11	-	-
Ill.	239	333	5,481	7,499	-	-	5	23	-	-
Mich.	156	66	5,628	5,950	1	4	14	21	-	-
Wis.	28	29	2,909	3,196	-	-	16	36	-	-
W.N. CENTRAL	115	105	7,701	8,162	-	-	25	30	-	-
Minn.	14	19	1,241	2,010	N	N	13	10	-	-
Iowa	18	22	770	623	N	N	5	3	-	-
Mo.	71	34	3,074	2,721	-	-	2	7	-	-
N. Dak.	-	-	85	222	N	N	-	2	-	-
S. Dak.	3	1	458	382	-	-	4	2	-	-
Nebr.	1	13	777	765	-	-	1	4	-	-
Kans.	8	16	1,296	1,439	N	N	-	2	-	-
S. ATLANTIC	1,157	1,963	27,325	26,800	-	-	52	80	-	-
Del.	27	45	573	517	N	N	1	-	-	-
Md.	47	250	2,918	2,870	-	-	7	3	-	-
D.C.	164	87	658	670	-	-	-	1	-	-
Va.	197	155	2,768	2,826	-	-	4	1	-	-
W. Va.	3	11	476	453	N	N	-	1	-	-
N.C.	75	134	4,500	3,728	N	N	4	9	-	-
S.C.	132	136	2,568	2,736	-	-	1	1	-	-
Ga.	218	472	5,636	5,477	-	-	24	41	-	-
Fla.	294	673	7,228	7,523	N	N	11	23	-	-
E.S. CENTRAL	237	258	10,021	10,269	-	-	13	17	-	-
Ky.	8	31	1,530	1,722	N	N	-	1	-	-
Tenn.	119	115	3,254	3,285	N	N	5	5	-	-
Ala.	45	57	2,846	3,169	-	-	6	10	-	-
Miss.	65	55	2,391	2,093	N	N	2	1	-	-
W.S. CENTRAL	804	726	18,615	20,497	-	-	2	8	-	-
Ark.	23	35	1,133	1,390	-	-	1	2	-	-
La.	49	182	3,104	3,532	N	N	-	1	-	-
Okla.	40	33	1,562	1,652	N	N	1	1	-	-
Tex.	692	476	12,816	13,923	-	-	-	4	-	-
MOUNTAIN	293	194	7,480	8,959	508	536	17	18	-	-
Mont.	6	4	356	438	N	N	1	-	-	-
Idaho	-	4	494	409	N	N	5	5	-	-
Wyo.	1	2	210	159	-	-	-	1	-	-
Colo.	56	34	1,501	2,614	N	N	3	4	-	-
N. Mex.	21	7	250	1,375	-	2	-	-	-	-
Ariz.	145	78	3,030	2,679	501	525	2	4	-	-
Utah	38	13	630	155	1	2	4	2	-	-
Nev.	26	52	1,009	1,130	6	7	2	2	-	-
PACIFIC	1,031	860	17,035	23,977	99	216	19	61	-	-
Wash.	68	82	2,830	2,638	N	N	-	10	-	-
Oreg.	46	90	1,279	1,220	-	-	5	7	-	-
Calif.	908	675	11,527	18,712	99	216	14	44	-	-
Alaska	6	2	561	624	-	-	-	-	-	-
Hawaii	3	11	838	783	-	-	-	-	-	-
Guam	1	-	-	-	-	-	-	-	-	-
P.R.	58	165	173	5	N	N	N	N	-	-
V.I.	1	45	-	42	-	-	-	-	-	-
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 February 23, 2003.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 8, 2003, and March 9, 2002 (10th Week)*

Reporting area	<i>Escherichia coli</i> , 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	155	221	11	11	7	1	1,917	2,542	51,125	64,532
NEW ENGLAND	10	14	-	1	-	-	124	293	1,192	1,549
Maine	-	-	-	-	-	-	18	29	6	13
N.H.	2	1	-	-	-	-	11	11	21	21
Vt.	-	-	-	-	-	-	12	20	19	23
Mass.	4	7	-	1	-	-	64	161	381	673
R.I.	-	2	-	-	-	-	18	18	180	173
Conn.	4	4	-	-	-	-	1	54	585	646
MID. ATLANTIC	7	16	-	-	1	-	334	517	3,604	7,292
Upstate N.Y.	4	11	-	-	1	-	112	134	1,135	1,036
N.Y. City	-	1	-	-	-	-	166	194	345	2,364
N.J.	3	4	-	-	-	-	31	93	1,155	1,501
Pa.	N	N	-	-	-	-	25	96	969	2,391
E.N. CENTRAL	38	78	1	-	3	-	361	570	11,503	13,694
Ohio	13	13	1	-	3	-	145	162	3,972	3,941
Ind.	4	7	-	-	-	-	-	-	1,040	1,409
Ill.	5	23	-	-	-	-	80	169	2,646	4,254
Mich.	8	15	-	-	-	-	120	150	2,772	2,998
Wis.	8	20	-	-	-	-	16	89	1,073	1,092
W.N. CENTRAL	25	32	3	3	2	-	237	243	2,806	3,459
Minn.	10	7	3	3	-	-	70	67	356	607
Iowa	3	7	-	-	-	-	37	46	153	195
Mo.	4	9	N	N	N	N	61	67	1,550	1,662
N. Dak.	1	-	-	-	1	-	7	3	2	13
S. Dak.	2	1	-	-	-	-	8	10	22	47
Nebr.	4	5	-	-	-	-	32	24	232	291
Kans.	1	3	-	-	1	-	22	26	491	644
S. ATLANTIC	24	27	3	5	-	-	402	453	14,171	15,836
Del.	-	1	-	-	-	-	10	10	263	331
Md.	-	-	-	-	-	-	21	19	1,489	1,601
D.C.	-	-	-	-	-	-	-	11	513	557
Va.	2	2	-	-	-	-	35	16	1,380	1,727
W. Va.	-	-	-	-	-	-	4	3	158	183
N.C.	6	6	-	-	-	-	N	N	2,582	2,768
S.C.	-	-	-	-	-	-	4	3	1,490	1,569
Ga.	8	17	-	4	-	-	168	115	2,921	3,021
Fla.	8	1	3	1	-	-	160	276	3,375	4,079
E. S. CENTRAL	9	3	-	-	-	-	50	49	5,094	5,851
Ky.	1	-	-	-	-	-	N	N	649	665
Tenn.	4	3	-	-	-	-	20	19	1,482	1,870
Ala.	3	-	-	-	-	-	30	30	1,761	2,078
Miss.	1	-	-	-	-	-	-	-	1,202	1,238
W.S. CENTRAL	1	3	-	-	-	1	37	15	7,911	9,345
Ark.	1	-	-	-	-	-	25	15	674	871
La.	-	-	-	-	-	-	1	-	1,974	2,289
Okla.	-	-	-	-	-	-	11	-	628	713
Tex.	-	3	-	-	-	1	-	-	4,635	5,472
MOUNTAIN	17	15	3	1	1	-	237	227	1,737	2,141
Mont.	-	2	-	-	-	-	4	12	26	26
Idaho	2	1	2	-	-	-	24	5	16	17
Wyo.	-	-	-	1	-	-	3	2	11	14
Colo.	4	2	-	-	1	-	68	79	433	755
N. Mex.	-	2	1	-	-	-	9	24	52	271
Ariz.	8	3	N	N	N	N	53	42	851	696
Utah	3	3	-	-	-	-	56	34	59	14
Nev.	-	2	-	-	-	-	20	29	289	348
PACIFIC	24	33	1	1	-	-	135	175	3,107	5,365
Wash.	9	5	-	-	-	-	25	38	537	594
Oreg.	4	7	1	1	-	-	61	93	168	178
Calif.	9	20	-	-	-	-	20	-	2,149	4,351
Alaska	-	-	-	-	-	-	14	17	87	127
Hawaii	2	1	-	-	-	-	15	27	166	115
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	1	-	19	3
V.I.	-	-	-	-	-	-	-	-	-	16
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 March 8, 2003, and March 9, 2002 (10th Week)*

Reporting area	<i>Haemophilus influenzae</i> , invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years						A	
	All serotypes		Serotype B		Non-serotype B		Unknown serotype		Cum.	Cum.
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	2003	2002
UNITED STATES	258	364	2	3	33	66	9	3	790	1,896
NEW ENGLAND	21	34	-	-	1	5	1	-	24	83
Maine	1	1	-	-	-	-	-	-	1	3
N.H.	4	4	-	-	-	-	-	-	3	3
Vt.	4	2	-	-	-	-	-	-	1	-
Mass.	8	17	-	-	1	3	1	-	15	44
R.I.	-	-	-	-	-	-	-	-	2	4
Conn.	4	10	-	-	-	2	-	-	2	29
MID. ATLANTIC	36	60	-	1	4	8	2	-	97	211
Upstate N.Y.	17	26	-	1	3	3	1	-	16	31
N.Y. City	6	17	-	-	1	4	-	-	58	94
N.J.	8	14	-	-	-	1	-	-	15	38
Pa.	5	3	-	-	-	-	1	-	8	48
E.N. CENTRAL	21	58	1	-	4	7	-	-	98	226
Ohio	11	24	-	-	3	3	-	-	26	51
Ind.	6	6	-	-	1	1	-	-	3	10
Ill.	-	26	-	-	-	3	-	-	25	89
Mich.	4	2	1	-	-	-	-	-	36	47
Wis.	-	-	-	-	-	-	-	-	8	29
W.N. CENTRAL	18	10	-	-	3	1	2	1	35	72
Minn.	8	7	-	-	3	1	-	-	4	5
Iowa	-	1	-	-	-	-	-	-	11	16
Mo.	6	2	-	-	-	-	2	1	6	16
N. Dak.	-	-	-	-	-	-	-	-	1	-
S. Dak.	1	-	-	-	-	-	-	-	-	2
Nebr.	-	-	-	-	-	-	-	-	4	4
Kans.	3	-	-	-	-	-	-	-	9	29
S. ATLANTIC	58	82	-	-	4	18	-	-	263	475
Del.	-	-	-	-	-	-	-	-	1	5
Md.	12	17	-	-	1	-	-	-	37	75
D.C.	-	-	-	-	-	-	-	-	-	20
Va.	2	5	-	-	-	1	-	-	2	9
W. Va.	1	1	-	-	-	-	-	-	4	3
N.C.	3	10	-	-	-	1	-	-	15	68
S.C.	1	2	-	-	-	-	-	-	6	10
Ga.	15	27	-	-	2	10	-	-	112	64
Fla.	24	20	-	-	1	6	-	-	86	221
E.S. CENTRAL	24	16	-	1	3	4	-	-	27	77
Ky.	2	1	-	-	-	-	-	-	5	15
Tenn.	10	6	-	-	2	2	-	-	12	34
Ala.	11	5	-	1	1	2	-	-	7	7
Miss.	1	4	-	-	-	-	-	-	3	21
W.S. CENTRAL	15	17	-	1	1	4	-	-	24	166
Ark.	2	1	-	-	-	-	-	-	-	12
La.	4	1	-	-	-	-	-	-	6	5
Okla.	9	14	-	-	1	4	-	-	4	9
Tex.	-	1	-	1	-	-	-	-	14	140
MOUNTAIN	49	46	1	-	9	9	3	1	62	149
Mont.	-	-	-	-	-	-	-	-	-	5
Idaho	-	1	-	-	-	-	-	-	-	9
Wyo.	-	1	-	-	-	-	-	-	-	2
Colo.	8	10	-	-	1	1	-	-	5	21
N. Mex.	5	10	-	-	1	4	2	-	1	4
Ariz.	29	17	1	-	5	3	-	-	42	79
Utah	5	4	-	-	2	-	-	-	5	11
Nev.	2	3	-	-	-	1	1	1	9	18
PACIFIC	16	41	-	-	4	10	1	1	160	437
Wash.	2	-	-	-	1	-	1	-	9	18
Oreg.	10	22	-	-	2	3	-	-	19	27
Calif.	1	9	-	-	1	6	-	1	129	389
Alaska	-	1	-	-	-	1	-	-	1	3
Hawaii	3	9	-	-	-	-	-	-	2	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 8, 2003, and March 9, 2002 (10th 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	902	1,134	190	350	135	139	52	68	612	814
NEW ENGLAND	31	38	-	9	7	5	4	8	7	77
Maine	-	-	-	-	-	-	-	1	-	-
N.H.	2	3	-	-	-	1	1	2	-	10
Vt.	1	2	-	4	1	-	-	-	3	1
Mass.	26	26	-	5	2	2	2	3	1	62
R.I.	-	-	-	-	1	-	-	-	3	3
Conn.	2	7	-	-	3	2	1	2	-	1
MID. ATLANTIC	162	262	8	18	15	28	8	8	492	590
Upstate N.Y.	9	16	4	11	9	6	2	3	316	329
N.Y. City	50	152	-	-	3	1	3	2	-	20
N.J.	98	59	-	3	2	10	2	-	65	135
Pa.	5	35	4	4	1	11	1	3	111	106
E.N. CENTRAL	85	95	25	23	34	51	5	12	6	24
Ohio	28	16	4	-	19	27	2	6	4	4
Ind.	-	4	-	-	1	4	1	-	2	2
Ill.	-	9	2	4	-	-	-	1	-	-
Mich.	45	58	19	19	14	14	2	2	-	-
Wis.	12	8	-	-	-	6	-	3	U	18
W.N. CENTRAL	49	43	42	147	3	7	2	2	15	8
Minn.	2	1	-	-	-	1	1	-	13	2
Iowa	4	6	-	1	1	-	-	-	2	3
Mo.	31	21	40	143	1	2	-	1	-	3
N. Dak.	-	-	-	-	-	-	-	1	-	-
S. Dak.	-	-	-	-	-	1	-	-	-	-
Nebr.	10	8	2	3	-	3	1	-	-	-
Kans.	2	7	-	-	1	-	-	-	-	-
S. ATLANTIC	316	326	37	16	54	19	17	8	69	77
Del.	1	2	-	3	-	3	-	-	10	12
Md.	20	32	4	2	12	6	2	1	42	54
D.C.	-	2	-	-	-	-	-	-	-	3
Va.	6	22	-	-	3	2	-	-	-	-
W. Va.	1	6	-	-	N	N	-	-	-	-
N.C.	18	36	3	3	5	3	5	1	9	5
S.C.	-	5	-	1	-	2	1	2	-	1
Ga.	164	132	3	1	7	3	4	3	2	-
Fla.	106	89	27	6	27	-	5	1	6	2
E.S. CENTRAL	50	71	18	44	2	4	4	3	2	3
Ky.	8	7	2	1	-	2	-	-	-	1
Tenn.	11	30	-	7	2	-	-	2	2	-
Ala.	16	17	2	2	-	2	3	1	-	-
Miss.	15	17	14	34	-	-	1	-	-	2
W.S. CENTRAL	19	58	41	70	4	4	1	7	2	13
Ark.	1	27	-	5	-	-	-	-	-	-
La.	16	7	11	2	-	1	-	-	2	1
Okla.	-	1	-	-	2	-	1	2	-	-
Tex.	2	23	30	63	2	3	-	5	-	12
MOUNTAIN	100	78	10	6	10	6	9	5	4	2
Mont.	3	2	-	-	-	1	1	-	-	-
Idaho	-	-	-	-	1	-	-	-	1	-
Wyo.	1	3	-	2	1	-	-	-	-	-
Colo.	13	13	7	1	2	2	5	1	-	-
N. Mex.	3	15	-	-	-	1	-	-	-	1
Ariz.	58	33	2	-	3	-	3	3	-	1
Utah	7	5	-	-	2	2	-	1	2	-
Nev.	15	7	1	3	1	-	-	-	1	-
PACIFIC	90	163	9	17	6	15	2	15	15	20
Wash.	8	9	1	2	1	-	-	1	-	-
Oreg.	26	29	3	7	N	N	1	1	5	1
Calif.	53	122	5	8	5	15	1	13	10	19
Alaska	2	2	-	-	-	-	-	-	-	-
Hawaii	1	1	-	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 8, 2003, and March 9, 2002 (10th 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	116	197	282	391	704	1,093	545	998	39	49
NEW ENGLAND	5	15	13	29	125	182	67	104	1	-
Maine	1	1	1	2	-	3	6	5	-	-
N.H.	1	4	1	3	7	1	3	1	-	-
Vt.	-	-	-	3	16	28	5	21	-	-
Mass.	3	6	9	18	102	145	27	31	1	-
R.I.	-	-	-	2	-	-	1	6	-	-
Conn.	-	4	2	1	-	5	25	40	-	-
MID. ATLANTIC	22	46	15	40	58	58	48	123	1	4
Upstate N.Y.	8	7	5	12	44	48	46	82	-	-
N.Y. City	9	25	5	7	-	5	-	5	-	-
N.J.	2	10	3	8	5	-	-	20	1	-
Pa.	3	4	2	13	9	5	2	16	-	4
E.N. CENTRAL	9	27	40	57	72	131	4	2	1	2
Ohio	5	7	18	22	55	80	-	1	1	2
Ind.	-	-	6	9	4	8	2	1	-	-
Ill.	1	9	-	7	-	13	-	-	-	-
Mich.	3	7	13	12	10	13	2	-	-	-
Wis.	-	4	3	7	3	17	-	-	-	-
W.N. CENTRAL	4	18	24	28	49	101	71	57	2	2
Minn.	2	7	4	4	27	26	6	5	-	-
Iowa	2	2	4	5	6	26	9	5	1	-
Mo.	-	4	14	13	9	29	-	1	1	2
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	2	1	5	6	18	-	-
Nebr.	-	2	1	2	1	2	-	-	-	-
Kans.	-	3	1	2	5	13	38	28	-	-
S. ATLANTIC	42	44	69	54	78	58	300	337	31	38
Del.	-	1	6	1	1	1	-	3	-	-
Md.	16	18	5	1	14	10	2	63	4	8
D.C.	-	2	-	-	-	-	-	-	-	-
Va.	3	3	4	4	1	15	89	88	-	1
W. Va.	2	-	1	-	-	1	9	22	-	-
N.C.	4	5	5	8	36	10	104	87	27	26
S.C.	-	2	-	10	-	18	13	11	-	3
Ga.	4	12	10	8	14	2	63	47	-	-
Fla.	13	1	38	22	12	1	20	16	-	-
E.S. CENTRAL	5	4	16	19	17	40	8	111	1	2
Ky.	1	-	-	3	3	9	3	3	-	-
Tenn.	2	1	2	4	4	22	-	108	1	2
Ala.	2	1	5	9	8	2	5	-	-	-
Miss.	-	2	9	3	2	7	-	-	-	-
W.S. CENTRAL	5	2	30	58	1	219	17	204	-	1
Ark.	1	-	2	7	-	131	-	-	-	-
La.	1	2	11	4	1	1	-	-	-	-
Okla.	-	-	3	6	-	7	17	21	-	-
Tex.	3	-	14	41	-	80	-	183	-	1
MOUNTAIN	5	7	14	31	159	123	12	23	1	-
Mont.	-	-	-	1	-	2	1	-	-	-
Idaho	-	-	-	-	2	12	-	-	-	-
Wyo.	-	-	-	-	7	3	-	1	-	-
Colo.	4	2	4	9	73	71	-	-	-	-
N. Mex.	-	-	2	1	13	18	-	-	-	-
Ariz.	1	2	6	10	44	9	11	22	1	-
Utah	-	2	-	1	14	6	-	-	-	-
Nev.	-	1	2	9	6	2	-	-	-	-
PACIFIC	19	34	61	75	145	181	18	37	1	-
Wash.	4	1	8	11	29	53	-	-	-	-
Oreg.	5	-	20	15	49	12	-	-	-	-
Calif.	10	30	31	46	67	111	17	20	1	-
Alaska	-	1	-	1	-	1	1	17	-	-
Hawaii	-	2	2	2	-	4	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	U	U	-	U	-	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 March 8, 2003, and March 9, 2002 (10th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		Streptococcus pneumoniae, invasive			
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Drug resistant, all ages		Age <5 years	
							Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	3,597	5,136	2,746	2,545	839	893	483	395	67	36
NEW ENGLAND	155	243	49	42	45	47	2	1	-	1
Maine	9	38	2	2	4	6	-	-	-	-
N.H.	9	7	-	2	5	12	-	-	N	N
Vt.	3	9	-	-	6	1	2	1	-	1
Mass.	90	135	30	34	30	28	N	N	N	N
R.I.	10	5	2	-	-	-	-	-	-	-
Conn.	34	49	15	4	-	-	-	-	-	-
MID. ATLANTIC	265	597	161	145	110	141	13	21	14	10
Upstate N.Y.	75	109	42	18	73	60	13	21	14	10
N.Y. City	111	196	51	73	12	34	U	U	U	U
N.J.	27	194	45	34	10	41	N	N	N	N
Pa.	52	98	23	20	15	6	-	-	-	-
E.N. CENTRAL	530	892	197	342	208	227	90	33	35	19
Ohio	192	247	48	167	73	37	72	-	32	-
Ind.	38	44	15	10	7	7	18	31	3	5
Ill.	169	382	82	106	41	87	-	2	-	-
Mich.	89	118	39	32	86	62	N	N	N	N
Wis.	42	101	13	27	1	34	N	N	-	14
W.N. CENTRAL	265	367	142	243	71	44	66	75	8	5
Minn.	76	72	11	25	24	5	-	21	8	4
Iowa	65	50	7	17	-	-	N	N	N	N
Mo.	67	164	42	31	17	19	3	1	-	1
N. Dak.	4	5	-	-	3	-	2	-	-	-
S. Dak.	13	17	8	95	8	3	-	1	-	-
Nebr.	14	17	62	54	10	6	12	16	N	N
Kans.	26	42	12	21	9	11	49	36	N	N
S. ATLANTIC	1,166	1,348	1,396	945	151	153	271	206	2	1
Del.	4	11	66	3	2	-	-	3	N	N
Md.	111	97	124	107	61	17	-	-	-	-
D.C.	-	14	-	7	-	3	-	11	-	1
Va.	72	82	43	188	1	11	N	N	N	N
W. Va.	3	6	-	2	1	-	10	6	2	-
N.C.	226	182	158	49	22	38	N	N	U	U
S.C.	39	62	14	9	1	8	9	40	N	N
Ga.	295	330	515	365	16	50	97	100	N	N
Fla.	416	564	476	215	47	26	155	46	N	N
E.S. CENTRAL	268	265	146	183	25	29	20	40	-	-
Ky.	45	30	23	40	5	5	1	3	-	N
Tenn.	84	83	40	14	20	24	19	37	N	N
Ala.	91	85	60	52	-	-	-	-	N	N
Miss.	48	67	23	77	-	-	-	-	-	-
W.S. CENTRAL	144	314	259	178	35	61	15	7	8	-
Ark.	49	53	6	25	1	-	3	2	-	-
La.	31	40	32	20	1	1	12	5	6	-
Okla.	33	44	104	39	18	11	N	N	2	-
Tex.	31	177	117	94	15	49	N	N	-	-
MOUNTAIN	306	310	196	84	143	67	6	12	-	-
Mont.	14	5	-	-	-	-	-	-	-	-
Idaho	15	17	2	2	6	1	N	N	N	N
Wyo.	4	11	1	1	-	3	1	6	-	-
Colo.	92	86	28	21	46	27	-	-	-	-
N. Mex.	23	45	27	11	33	31	5	6	-	-
Ariz.	114	82	123	35	53	-	-	-	N	N
Utah	26	24	6	7	5	5	-	-	-	-
Nev.	18	40	9	7	-	-	-	-	-	-
PACIFIC	498	800	200	383	51	124	-	-	-	-
Wash.	55	26	24	11	-	16	-	-	N	N
Oreg.	48	53	11	27	N	N	N	N	N	N
Calif.	354	667	153	332	33	90	N	N	N	N
Alaska	17	14	2	1	-	-	-	-	N	N
Hawaii	24	40	10	12	18	18	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	1	-	-	-	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 8, 2003, and March 9, 2002 (10th Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)
	Primary & secondary		Congenital		Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002					
UNITED STATES	1,061	1,108	50	78	972	1,700	22	52	2,232
NEW ENGLAND	26	14	-	-	20	58	1	4	495
Maine	-	-	-	-	-	2	-	-	262
N.H.	1	-	-	-	3	1	-	-	-
Vt.	-	-	-	-	-	-	-	-	186
Mass.	21	8	-	-	8	17	-	3	47
R.I.	4	2	-	-	3	14	-	-	-
Conn.	-	4	-	-	6	24	1	1	-
MID. ATLANTIC	119	102	6	10	218	291	3	12	1
Upstate N.Y.	3	4	4	1	20	33	1	1	N
N.Y. City	65	58	1	3	177	159	2	6	-
N.J.	33	23	1	6	-	64	-	5	-
Pa.	18	17	-	-	21	35	-	-	1
E. N. CENTRAL	146	217	16	12	159	155	2	8	1,254
Ohio	33	36	1	-	20	21	-	3	310
Ind.	4	11	3	-	23	17	1	1	-
Ill.	41	65	9	11	82	79	-	1	-
Mich.	66	99	3	1	31	30	1	2	928
Wis.	2	6	-	-	3	8	-	1	16
W. N. CENTRAL	25	16	-	-	60	84	-	2	5
Minn.	6	6	-	-	26	34	-	1	N
Iowa	2	-	-	-	5	-	-	-	-
Mo.	10	5	-	-	8	30	-	1	-
N. Dak.	-	-	-	-	-	-	-	-	5
S. Dak.	-	-	-	-	8	5	-	-	-
Nebr.	-	2	-	-	2	1	-	-	-
Kans.	7	3	-	-	11	14	-	-	-
S. ATLANTIC	296	268	6	18	136	316	4	10	461
Del.	1	4	-	-	-	-	-	-	1
Md.	43	27	-	2	26	28	1	1	-
D.C.	7	10	1	-	-	-	-	-	-
Va.	14	7	1	-	25	37	-	-	101
W. Va.	-	-	-	-	2	6	-	-	354
N.C.	29	66	1	6	22	41	1	-	N
S.C.	25	25	1	2	18	21	-	-	5
Ga.	61	37	-	4	30	45	-	5	-
Fla.	116	92	2	4	13	138	2	4	-
E. S. CENTRAL	70	127	8	6	102	117	-	-	-
Ky.	12	12	-	2	13	17	-	-	N
Tenn.	31	50	4	2	32	57	-	-	N
Ala.	24	46	4	-	49	34	-	-	-
Miss.	3	19	-	2	8	9	-	-	-
W. S. CENTRAL	148	147	5	21	25	297	-	3	2
Ark.	9	8	-	-	11	4	-	-	-
La.	14	25	-	-	-	-	-	-	2
Okla.	9	15	-	-	14	11	-	-	N
Tex.	116	99	5	21	-	282	-	3	-
MOUNTAIN	42	51	7	4	31	43	2	2	14
Mont.	-	-	-	-	-	-	-	-	N
Idaho	-	1	-	-	-	-	-	-	N
Wyo.	-	-	-	-	1	1	-	-	2
Colo.	3	3	1	1	11	13	2	1	-
N. Mex.	3	5	-	-	-	8	-	-	-
Ariz.	33	41	6	3	18	12	-	-	-
Utah	1	-	-	-	1	5	-	1	12
Nev.	2	1	-	-	-	4	-	-	-
PACIFIC	189	166	2	7	221	339	10	11	-
Wash.	12	11	-	-	45	38	-	-	-
Oreg.	11	4	-	-	14	16	2	2	-
Calif.	162	150	2	7	133	250	8	9	-
Alaska	-	-	-	-	9	15	-	-	-
Hawaii	4	1	-	-	20	20	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	18	-	1	-	-	-	-	-	3
V.I.	-	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 March 8, 2003 (10th Week)

Reporting Area	All causes, by age (years)							P&I [†] Total	Reporting Area	All causes, by age (years)							P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
NEW ENGLAND	553	394	100	38	10	11	71	S. ATLANTIC	1,093	701	255	81	31	24	80		
Boston, Mass.	164	102	36	13	7	6	21	Atlanta, Ga.	U	U	U	U	U	U	U		
Bridgeport, Conn.	28	23	4	-	-	1	2	Baltimore, Md.	137	87	35	11	4	-	17		
Cambridge, Mass.	21	13	4	4	-	-	3	Charlotte, N.C.	113	75	23	9	4	1	7		
Fall River, Mass.	35	28	5	2	-	-	3	Jacksonville, Fla.	146	91	33	18	3	1	11		
Hartford, Conn.	U	U	U	U	U	U	U	Miami, Fla.	163	101	39	14	5	4	-		
Lowell, Mass.	25	13	7	4	-	1	5	Norfolk, Va.	53	35	11	2	2	3	1		
Lynn, Mass.	14	13	1	-	-	-	2	Richmond, Va.	64	37	18	6	2	1	7		
New Bedford, Mass.	30	25	3	2	-	-	7	Savannah, Ga.	56	36	16	1	1	2	6		
New Haven, Conn.	46	33	6	4	2	1	10	St. Petersburg, Fla.	49	38	7	2	1	1	9		
Providence, R.I.	50	37	13	-	-	-	-	Tampa, Fla.	195	137	33	14	6	5	18		
Somerville, Mass.	3	3	-	-	-	-	1	Washington, D.C.	100	51	36	4	3	6	2		
Springfield, Mass.	55	38	11	5	1	-	6	Wilmington, Del.	17	13	4	-	-	-	2		
Waterbury, Conn.	19	14	3	1	-	1	-	E.S. CENTRAL	780	511	171	56	21	20	60		
Worcester, Mass.	63	52	7	3	-	1	11	Birmingham, Ala.	179	119	39	12	2	6	11		
MID. ATLANTIC	2,404	1,663	518	151	38	32	145	Chattanooga, Tenn.	77	55	13	4	3	2	5		
Albany, N.Y.	42	32	7	1	-	2	2	Knoxville, Tenn.	85	60	14	8	1	2	4		
Allentown, Pa.	29	22	5	1	1	-	1	Lexington, Ky.	51	32	13	1	4	1	4		
Buffalo, N.Y.	96	69	17	3	3	4	11	Memphis, Tenn.	114	73	29	8	3	1	9		
Camden, N.J.	33	16	14	2	1	-	2	Mobile, Ala.	67	38	16	8	2	3	5		
Elizabeth, N.J.	20	13	4	2	1	-	-	Montgomery, Ala.	50	34	12	2	-	2	7		
Erie, Pa.	50	41	5	3	1	-	4	Nashville, Tenn.	157	100	35	13	6	3	15		
Jersey City, N.J.	54	38	12	3	1	-	-	W.S. CENTRAL	1,662	1,035	353	150	83	40	120		
New York City, N.Y.	1,290	897	278	84	21	8	68	Austin, Tex.	99	61	25	9	2	2	3		
Newark, N.J.	58	27	23	6	-	2	2	Baton Rouge, La.	48	29	16	2	-	1	3		
Paterson, N.J.	23	9	8	5	-	1	1	Corpus Christi, Tex.	50	36	8	1	3	2	4		
Philadelphia, Pa.	250	156	64	22	2	6	12	Dallas, Tex.	239	138	63	25	6	7	21		
Pittsburgh, Pa. [§]	40	26	8	2	2	2	2	El Paso, Tex.	118	78	28	8	3	1	4		
Reading, Pa.	19	17	2	-	-	-	1	Ft. Worth, Tex.	151	108	27	14	-	2	18		
Rochester, N.Y.	134	103	21	7	1	2	10	Houston, Tex.	500	266	93	61	60	20	35		
Schenectady, N.Y.	24	16	6	1	1	-	4	Little Rock, Ark.	94	70	18	5	1	-	2		
Scranton, Pa.	29	26	2	-	1	-	2	New Orleans, La.	U	U	U	U	U	U	U		
Syracuse, N.Y.	122	92	22	6	2	-	18	San Antonio, Tex.	202	142	36	17	4	3	13		
Trenton, N.J.	52	37	8	2	-	5	4	Shreveport, La.	U	U	U	U	U	U	U		
Utica, N.Y.	19	14	5	-	-	-	-	Tulsa, Okla.	161	107	39	8	4	2	17		
Yonkers, N.Y.	20	12	7	1	-	-	1	MOUNTAIN	918	638	174	70	17	18	95		
E.N. CENTRAL	2,044	1,387	427	114	45	38	164	Albuquerque, N.M.	108	77	21	8	2	-	13		
Akron, Ohio	54	44	7	2	1	-	9	Boise, Idaho	35	22	9	2	1	1	6		
Canton, Ohio	39	29	10	-	-	-	6	Colorado Springs, Colo.	78	53	13	10	1	1	11		
Chicago, Ill.	317	187	78	32	13	7	21	Denver, Colo.	114	70	30	6	2	6	14		
Cincinnati, Ohio	104	72	26	2	1	3	14	Las Vegas, Nev.	234	162	47	20	2	2	17		
Cleveland, Ohio	137	91	29	9	5	3	5	Ogden, Utah	30	23	6	1	-	-	4		
Columbus, Ohio	251	163	59	18	6	5	14	Phoenix, Ariz.	U	U	U	U	U	U	U		
Dayton, Ohio	133	98	24	8	2	1	11	Pueblo, Colo.	19	18	-	-	1	-	1		
Detroit, Mich.	191	106	54	17	4	7	14	Salt Lake City, Utah	115	71	23	15	3	3	18		
Evansville, Ind.	46	32	14	-	-	-	5	Tucson, Ariz.	185	142	25	8	5	5	11		
Fort Wayne, Ind.	52	38	11	1	1	1	6	PACIFIC	1,727	1,242	335	101	26	23	164		
Gary, Ind.	9	7	2	-	-	-	-	Berkeley, Calif.	19	12	6	1	-	-	2		
Grand Rapids, Mich.	85	68	11	1	3	2	8	Fresno, Calif.	105	76	18	10	-	1	14		
Indianapolis, Ind.	216	155	40	14	3	4	10	Glendale, Calif.	14	11	3	-	-	-	-		
Lansing, Mich.	48	33	13	1	-	1	7	Honolulu, Hawaii	94	73	16	1	3	1	9		
Milwaukee, Wis.	116	74	8	1	1	2	14	Long Beach, Calif.	75	53	15	6	1	-	12		
Peoria, Ill.	64	53	10	1	-	-	3	Los Angeles, Calif.	326	242	65	14	3	2	20		
Rockford, Ill.	48	35	9	2	2	-	7	Pasadena, Calif.	19	15	3	1	-	-	5		
South Bend, Ind.	40	28	6	3	2	1	5	Portland, Ore.	148	99	32	13	3	1	11		
Toledo, Ohio	94	74	16	2	1	1	5	Sacramento, Calif.	203	155	31	10	4	3	33		
Youngstown, Ohio	U	U	U	U	U	U	U	San Diego, Calif.	165	113	31	11	4	6	15		
W.N. CENTRAL	522	353	102	39	15	13	38	San Francisco, Calif.	U	U	U	U	U	U	U		
Des Moines, Iowa	U	U	U	U	U	U	U	San Jose, Calif.	203	151	34	16	1	1	20		
Duluth, Minn.	35	25	6	3	1	-	5	Santa Cruz, Calif.	36	25	9	2	-	-	4		
Kansas City, Kans.	39	23	9	3	2	2	5	Seattle, Wash.	152	93	45	5	3	6	7		
Kansas City, Mo.	87	65	14	7	1	-	5	Spokane, Wash.	56	46	5	4	-	1	6		
Lincoln, Nebr.	49	36	11	2	-	-	3	Tacoma, Wash.	112	78	22	7	4	1	6		
Minneapolis, Minn.	82	52	14	7	2	7	6	TOTAL	11,703 [¶]	7,924	2,435	800	286	219	937		
Omaha, Nebr.	91	63	23	3	-	2	7										
St. Louis, Mo.	U	U	U	U	U	U	U										
St. Paul, Minn.	51	32	13	4	-	2	5										
Wichita, Kans.	88	57	12	10	9	-	2										

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.

All *MMWR* references are available on the Internet at <http://www.cdc.gov/mmwr>. Use the search function to find specific articles.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at <http://www.cdc.gov/mmwr> or from CDC's file transfer protocol server at <ftp://ftp.cdc.gov/pub/publications/mmwr>. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone 888-232-3228.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

☆U.S. Government Printing Office: 2003-533-155/69101 Region IV