MMWR™
Morbidity and Mortality Weekly Report
Weekly January 23, 2004 / Vol. 53 / No. 2

Strength Training Among Adults Aged ≥65 Years — United States, 2001

Strength training (also referred to as resistance training) enables adults to improve their overall health and fitness by increasing muscular strength, endurance, and bone density and by improving their insulin sensitivity and glucose metabolism (*1*). For older adults (i.e., persons aged ≥65 years), strength-training exercises are recommended to decrease the risk for falls and fractures (*2*) and to promote independent living (Figure) (*3*). The American College of Sports Medicine recommends that adults include strength training as part of a comprehensive physical activity program (*1*). A national health objective for 2010 is to increase to 30% the proportion of adults who perform, ≥2 days per week, physical activities that enhance and maintain muscular strength and endurance (objective 22-4) (*4*). To determine the percentage and characteristics of older adults who perform strength training consistent with this objective, CDC analyzed data from the 2001 National Health Interview Survey (NHIS). This report summarizes the results of that analysis, which indicated that approximately 12% of persons aged 65–74 years and 10% of persons aged ≥75 years met the strength-training objective. These findings underscore the need for programs that encourage older adults to incorporate strength training into their lives along with regular physical activity.

NHIS consists of face-to-face interviews that collect information on health, health care, health behaviors, and related factors. The 2001 survey used a stratified, multistage probability sample representative of the U.S. civilian, noninstitutionalized population. The overall response rate among selected adults was 73.8% (*5*). Data were collected from 6,152 respondents aged ≥65 years, and SUDAAN was used to account for the complex sampling design and sampling weights. A total of 615 respondents were excluded because of missing data on height and weight, health status, physical activity levels, and demographic characteristics; the

FIGURE. Sample strength-training exercise for older adults

Hip flexion*

Source: National Institute on Aging.

* Strengthens thigh and hip muscles and can be performed with ankle weights: 1) Stand straight to the side or behind a chair or table, holding on for balance. 2) Slowly bend one knee toward chest, without bending waist or hips. 3) Hold position for 1 second. 4) Slowly lower leg all the way down; pause. 5) Repeat with other leg. 6) Alternate legs, performing 8–15 repetitions with each leg. 7) Rest; perform a second set of 8–15 alternating repetitions.

INSIDE

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

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 2004;53:[inclusive page numbers].

Centers for Disease Control and Prevention
Julie L. Gerberding, M.D., M.P.H.
Director

Dixie E. Snider, M.D., M.P.H.
(*Acting*) *Deputy Director for Public Health Science*

Susan Y. Chu, Ph.D., M.S.P.H.
(*Acting*) *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*

Jeffrey D. Sokolow, M.A.
(*Acting*) *Lead Technical Writer/Editor*

Jude C. Rutledge
Teresa F. Rutledge
Douglas W. Weatherwax
Writers/Editors

Lynda G. Cupell
Malbea A. LaPete
Visual Information Specialists

Kim L. Bright, M.B.A.
Quang M. Doan, M.B.A.
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
Judith Allen
Felicia J. Connor
Lateka Dammond
Rosaline Dhara
Donna Edwards
Patsy A. Hall
Pearl C. Sharp

final sample size was 5,537. Respondents were asked, "How often do you do physical activities specifically designed to strengthen your muscles, such as lifting weights or doing calisthenics?" Respondents were categorized as meeting the national strength-training objective if they engaged in strength training ≥2 days per week (*4*). Multivariate logistic regression analysis was used to test for associations between meeting the strength-training objective and specific characteristics of the older adults. Models accounted for sex, age, race/ethnicity, education, marital status, body mass index (BMI), and self-reported health status.

Respondents also were asked about their participation in leisure-time physical activities (e.g., exercise, sports, and physically active hobbies) and how often they engaged for ≥10 minutes in 1) vigorous activities that caused heavy sweating or large increases in breathing or heart rate and 2) light or moderate activities that caused only light sweating or slight or moderate increases in breathing or heart rate. On the basis of the frequency and duration of their reported activities, respondents were categorized consistent with the national health objective for physical activity (objective 22-2) (*4*) as "active" (i.e., engaging in moderate-intensity physical activity for ≥30 minutes, ≥5 days per week, or in vigorous-intensity physical activity for ≥20 minutes, ≥3 days per week), "insufficiently active" (i.e., active at less than recommended levels), or "inactive" (i.e., engaging in no physical activity).

Approximately 11% of respondents aged ≥65 years reported that they engaged in strength training ≥2 days per week (Table 1). Women were less likely than men (odds ratio [OR] = 0.74; 95% confidence interval [CI] = 0.61–0.90) to meet the objective. The likelihood of meeting the objective declined with advancing age and increased with level of education. Respondents who were obese (i.e., BMI ≥30 kg/m^2) were less likely (OR = 0.59; 95% CI = 0.45–0.77) than those of healthy weight to meet the objective. Those reporting fair or poor health were less likely (OR = 0.37; 95% CI = 0.26–0.51) to meet the objective than those in excellent health.

Among older adults categorized as physically active, 24.7% engaged in strength training (Table 2). Persons categorized as inactive (OR = 0.13; 95% CI = 0.10–0.16) and persons categorized as insufficiently active (OR = 0.50; 95% CI = 0.40–0.62) were less likely to engage in strength training than persons in the physically active group. An estimated 5.6% of respondents met the national objectives for both physical activity and strength training.

Reported by: *J Kruger, PhD, DR Brown, PhD, DA Galuska, PhD, D Buchner, MD, Div of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

TABLE 1. Percentage of persons aged ≥65 years who reported meeting the 2010 national health objective for strength training*, by selected characteristics — National Health Interview Survey, United States, 2001

Characteristic	No.†	% meeting objective	OR§	(95% CI¶)
Sex				
Men	2,098	13.3	1.0	—
Women	3,439	9.5	0.74	(0.61–0.90)
Age group (yrs)				
65–74	2,938	12.1	1.0	—
≥75	2,599	9.9	0.85	(0.68–1.06)
Race/Ethnicity				
White, non-Hispanic	4,294	11.7	1.0	—
Black, non-Hispanic	608	7.1	0.80	(0.52–1.23)
Hispanic	520	5.9	0.60	(0.38–0.96)
Other**	115	17.7††	1.54	(0.78–3.05)
Education				
<High school	1,865	6.6	1.0	—
High school	1,766	8.6	1.12	(0.82–1.53)
Some college	1,075	14.5	1.93	(1.44–2.58)
College graduate	831	20.5	2.49	(1.79–3.47)
Marital status				
Currently married	2,289	12.0	1.0	—
Widowed/separated/divorced	2,921	10.1	1.09	(0.87–1.36)
Never married	327	9.5	0.79	(0.52–1.20)
Body mass index (BMI) (kg/m^2)				
Healthy (BMI <25)	2,239	12.6	1.0	—
Overweight (BMI ≥25–<30)	2,057	12.0	0.97	(0.77–1.22)
Obese (BMI ≥30)	1,241	6.9	0.59	(0.45–0.77)
Self-reported health status				
Excellent	814	20.0	1.0	—
Very good	1,456	12.8	0.67	(0.51–0.88)
Good	1,888	9.4	0.50	(0.38–0.65)
Fair or poor	1,379	6.1	0.37	(0.26–0.51)
Total	**5,537**	**11.1**	––	––

* Defined as engaging in strength training ≥2 days per week.
† Sample size.
§ Odds ratio, adjusted for all other covariates.
¶ Confidence interval.
** Includes American Indian/Alaska Native, Asian, Native Hawaiian, and other Pacific Islander.
†† Estimate might be unstable.

TABLE 2. Percentage of adults aged ≥65 years who reported meeting the 2010 national health objective for strength training*, by physical activity category† — National Health Interview Survey, United States, 2001

Physical activity category	No.§	% meeting objective	OR¶	(95% CI**)
Active	1,176	24.7	1.0	—
Insufficiently active	1,296	14.0	0.50	(0.40–0.62)
Inactive	3,065	4.0	0.13	(0.10–0.16)
Total	**5,537**	**11.1**	––	––

* Defined as engaging in strength training ≥2 days per week.
† *Active*—engaging in moderate-intensity physical activity ≥5 days per week for ≥30 minutes each time or in vigorous-intensity physical activity ≥3 days per week for ≥20 minutes each time; *insufficiently active*—active at less than recommended levels; and *inactive*—engaging in no physical activity.
§ Sample size.
¶ Odds ratio, adjusted for the following covariates: sex, age, race/ethnicity, education, marital status, body mass index, and self-reported health status.
** Confidence interval.

Editorial Note: The findings in this report indicate that, in 2001, the majority of older adults, including those who met the national objective for physical activity, did not engage in strength training. These results suggest the need for targeted programs to encourage certain older-adult populations (e.g., women and persons who are less educated, obese, or physically inactive) to increase strength training. These populations are similar to those previously identified among persons aged ≥18 years who were less likely to engage in weight lifting ≥2 days per week (*6*).

During 1998–2001, the proportion of older adults who met the national objective for strength training increased from 10% in 1998 (*4*) to 12% in 2001 among those aged 65–74 years and from 7% (*4*) to 10% among those aged ≥75 years. However, these prevalences remained less than half the 2010 national target of 30% of the adult population. To increase strength training among older adults, programs should address multiple factors, including 1) increasing awareness of fitness benefits, 2) affordability, 3) physical limitations, 4) accessibility (e.g., transportation), and 5) fear of injury. Programs can be offered at places of worship, community centers, senior centers, schools, and fitness centers (*7*). Older adults also can perform strength training in their homes by using chair exercises as described in exercise guides, videos, and free information from the Internet (Box) (*3,8*).

The findings in this report are subject to at least three limitations. First, because the data are based on the self-reports of survey participants, errors in reporting might have affected prevalence estimates. Second, because respondents were not asked to provide details about their strength training (e.g., number of repetitions or number of muscle groups exercised), the quality of the strength training could not be evaluated. Finally, because the survey did not include persons living in institutions, the results might not be generalizable to all older adults.

The majority of older adults, including even those physically active, are missing opportunities to improve their overall health and fitness through regular strength training. Because only 5.6% have met the national objectives for both physical activity and strength training, all older adults should be encouraged to incorporate both regimens into their lives. Additional information is available at http://www.nia.nih.gov/exercisebook.

BOX. Strength training recommendations for older adults

- Exercises should be performed ≥2 days per week.
- Certain exercises can be performed either standing or seated.
- Use hand and ankle weights, or resistance bands, or no weights at all.
- If weights are used, start with 1–2 pounds and gradually increase the weight over time.
- Perform exercises that involve the major muscle groups (e.g., arms, shoulders, chest, abdomen, back, hips, and legs) and exercises that enhance grip strength.
- Perform 8–15 repetitions of each exercise, then perform a second set.
- Do not hold your breath during strength exercises.
- Rest between sets.
- Avoid locking joints in arms and legs.
- Stretch after completing all exercises.
- If at any time you feel pain, stop exercising.

Source: National Institute on Aging.

References

1. American College of Sports Medicine. Position stand: the recommended quantity and quality of exercise for developing and maintaining cardiorespiratory and muscular fitness, and flexibility in healthy adults. Med Sci Sports Exerc 1998;30:975–91.
2. Christmas C, Andersen RA. Exercise and older patients: guidelines for the clinician. J Am Geriatr Soc 2000;48:318–24.
3. National Institute on Aging. Exercise: A Guide from the National Institute on Aging. Bethesda, Maryland: U.S. Department of Health and Human Services, National Institutes of Health, National Institutes on Aging, 2001. Available at http://www.nia.nih.gov/exercisebook.
4. U.S. Department of Health and Human Services. Healthy People 2010, 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, 2000.
5. U.S. Department of Health and Human Services. 2001 National Health Interview Survey (NHIS): public use data release. Hyattsville, Maryland: U.S. Department of Health and Human Services, 2003.
6. Galuska DA, Earle D, Fulton JE. The epidemiology of U.S. adults who regularly engage in resistance training. Res Q Exerc Sport 2001;73:330–4.
7. Robert Wood Johnson Foundation. National blueprint: increasing physical activity among adults age 50 and older. Princeton, New Jersey: The Robert Wood Johnson Foundation, 2001.
8. Seguin R, Epping J, Bloch R, Buchner D, Nelson M. Growing stronger: strength training for older adults. Available at http://www.cdc.gov/nccdphp/dnpa/physical/growing_stronger/growing_stronger.pdf.

Measles Mortality Reduction — West Africa, 1996–2002

The World Health Organization (WHO) estimates that, during 2000, measles accounted for approximately 777,000 deaths worldwide, of which 452,000 (58%) occurred in Africa (*1*). In response, in 2000, WHO's African Regional Office (AFRO) adopted a plan to reduce measles mortality >50% by 2005 (*2*). The plan recommended 1) increasing measles vaccination by strengthening routine health services; 2) providing a second opportunity for measles vaccination for all children, primarily through wide–age-range supplemental immunization activities (SIAs); 3) enhancing measles surveillance; and 4) improving management of measles cases. The initial wide–age-range SIA targets all children aged 9 months–14 years, regardless of history of measles disease or vaccination. Follow-up SIAs are needed 3–5 years after the initial SIA to provide a second opportunity for vaccination to children born since the previous SIA (i.e., those aged 9 months–4 years). During the 1990s, the countries of the Americas and seven countries in southern Africa used this strategy to reduce the number of measles deaths to near zero (*3–5*). This report describes the recent implementation of this strategy in three West African countries, where reported measles cases declined 83%–97% during the first year after SIAs. Successful implementation of this strategy by other African countries should result in achieving the goal of >50% reduction in measles mortality by 2005.

Routine and Supplemental Immunizations

In 2001, before use of wide–age-range SIAs, routine measles vaccination coverage was estimated to be 69% by the administrative method* in Burkina Faso, 37% by survey† in Mali, and 33% by survey in Togo (WHO/United Nations Children's Fund [UNICEF], unpublished data, 2002). During December 2001–January 2002, nationwide SIAs among children aged 9 months–14 years were conducted to give a second opportunity for measles vaccination in these three countries.

Impact

A total of 12.7 million children were targeted in the three countries. National SIA coverage was estimated to be 95%–99% by survey method and 99%–104% by administrative method (Table 1). The number of reported measles cases and deaths has decreased 91% and 84%, respectively, compared with the annual averages for 1996–2001 (Table 1). The number of deaths averted was estimated by applying the observed percentage reduction in reported measles deaths in 2002, compared with the average annual number of deaths reported during 1996–2001, to the estimated number of measles deaths

* Calculated by dividing the number of doses of vaccine administered through routine health services by the birth cohort of the previous year.
† Using either the Expanded Programme on Immunization method with 30 clusters of seven children per cluster or population-based probability surveys conducted by international organizations (e.g., MACRO International, Inc. and UNICEF).

TABLE 1. Estimated percentage reduction in reported measles cases and deaths, by country — Burkina Faso, Mali, and Togo, 1996–2001 and 2002

Country	No. children targeted	% SIA* coverage	Average annual reported no. cases during 1996–2001	Average annual reported no. deaths during 1996–2001	Reported no. cases in 2002	Reported no. deaths in 2002	% decline in reported cases (1996–2001 versus 2002)	% decline in reported deaths (1996–2001 versus 2002)
Burkina Faso	5,152,000	97	9,972	219	1,712	48	83	78
Mali	5,074,610	99	6,663	34	533	7	92	79
Togo	2,425,946	95	12,395	95	333	1	97	99
Total	**12,652,556**	**—**	**29,030**	**348**	**2,578**	**56**	**91**	**84**

*Supplemental immunization activity.

in 1998 (*6*) (Tables 1 and 2). WHO estimated the number of measles deaths in 1998 (before SIAs) by using the size of the surviving birth cohort, the reported vaccine coverage, vaccine efficacy, and a measles case-fatality ratio (CFR) of 6.0 (*6*).[§] The estimated number of deaths averted in the three countries during 2002 was 26,365 (Table 2).

Surveillance

In 2002, surveillance for measles was enhanced by starting measles case-based surveillance with laboratory confirmation and intensifying supervision of all districts by provincial surveillance supervisors. According to regional guidelines, any clinician diagnosis of measles or illnesses consistent with the case definition of rash, fever, and cough, coryza, or conjunctivitis should be reported as suspected measles. In addition, all patients in whom measles is suspected should have blood collected for serologic confirmation.

In 2002, in Burkina Faso, blood specimens were taken for 1,060 (62%) of the 1,712 suspected cases. Of the 1,029 cases with laboratory results, 709 (69%) were measles-IgM positive. Of these, 255 (36%) cases were in persons aged >15 years. A total of 319 (45%) laboratory-confirmed cases occurred in the target age group for the SIAs (i.e., ages 9 months–14 years).

[§] Measles cases (i.e., number of susceptible children) = (1 – [coverage X vaccine efficacy]) X number of surviving infants.

TABLE 2. Estimated number of measles deaths averted in the first year after SIAs*, by country — Burkina Faso, Mali, and Togo, 2002

Country	Estimated no. annual measles deaths before SIAs (1998)	% decline in reported measles deaths (1996–2001 versus 2002)	Estimated no. measles deaths averted in first year after SIAs (2002)
Burkina Faso	15,626	78	12,201
Mali	11,014	79	8,746
Togo	5,475	99	5,417
Total	**32,115**	**—**	**26,365**

*Supplemental immunization activities.

In Mali, specimens were collected for 63 (12%) of 533 suspected measles cases; 22 (35%) tested measles-IgM positive. Laboratory-confirmed measles outbreaks were detected in one northern district among a nomadic population (n = 39) and in one district along the Guinea border (n = 36). During January 2001–December 2002, in Togo, specimens were collected from 250 (75%) of 333 suspected measles cases; 23 (9%) tested measles-IgM positive. Of these, 14 (61%) were in the northeastern province of Savane, and 11 (78%) were in the Tone district bordering Burkina Faso.

Reported by: *Ministries of Health, Burkina Faso, Mali, and Togo; Country Offices for Burkina Faso, Mali, and Togo, World Health Organization. Measles Programme, Regional Office for Africa, World Health Organization, Harare, Zimbabwe. Global Immunization Div, National Immunization Program, CDC.*

Editorial Note: The measles mortality reduction strategies implemented in Burkina Faso, Mali, and Togo reduced the annual numbers of measles cases and deaths by 91% and 84%, respectively, during the first year after implementation of SIAs, compared with 6 years preceding SIAs. In 2002, an estimated 26,365 measles deaths were prevented. The Ministries of Health in Burkina Faso, Mali, and Togo were responsible for planning and conducting SIAs. Financial and technical support for implementing this strategy is being provided by a coalition of partners (The Measles Initiative) led by the American Red Cross; other partners include the United Nations Foundation, UNICEF, WHO, and CDC.

Although the reductions in cases and deaths in Burkina Faso were substantial compared with levels during 1996–2001, widespread measles transmission continued after the campaign. Widespread transmission after successful wide–age-range SIAs has not been reported in 13 other African countries (*5*; WHO, unpublished data, 2003). An outbreak investigation is under way to determine why the decline in cases in Burkina Faso was not as marked as in the other countries.

Remaining subjects of concern for the measles mortality reduction program include 1) the duration of effect of the wide–age-range SIAs, 2) the appropriate interval between the

initial wide–age-range and subsequent SIAs, and 3) the best methods for increasing routine vaccination. On the basis of experience in the Americas and southern Africa, a 4-year interval between SIAs will maintain measles mortality at near zero if the routine measles coverage remains at >80% and the SIAs achieve coverage of >90% (*3–6*). However, attaining routine coverage of >80% will be challenging for these countries. From 1998–2000 to 2002, the reported routine coverage with the third dose of combined diphtheria-pertussis-tetanus vaccine (DPT3) increased in Mali, from 32%–53% to 74%; in Burkina Faso, from 34%–57% to 75%; and in Togo, from 36%–50% to 59% (WHO, unpublished data, 2003). The low routine measles vaccination coverage in these countries will result in accumulation of susceptible children born since the 2001 SIAs. This might result in small- to moderate-sized measles outbreaks before the scheduled follow-up SIAs planned for the fall of 2004.

The findings in this report are subject to at least two limitations. First, the decline in reported measles cases and deaths might be underestimated; <50% of serologic specimens, compared with >70% in countries with widespread measles transmission, drawn from patients with measles-compatible illnesses after SIAs in Mali and Togo were confirmed as measles on the basis of positive-IgM results. These findings are consistent with those observed in southern Africa after nationwide wide–age-range SIAs (*5*). Second, the estimated number of measles deaths before implementation of SIAs assumed no herd immunity and relied on available CFRs for measles (*6*). In the absence of recent population-based studies, these CFR estimates might have changed as a result of improvements in case management and a shift in the age distribution of patients. During 1989–1991, a population-based study in rural Ghana found a measles CFR of 15%, even in an area with vitamin A supplementation (*7*); this figure is substantially higher than the 6% CFR used to estimate the number of measles deaths averted.

During the next few years, improved surveillance for measles will be important to determine the effectiveness of the measles mortality reduction strategy. An increase in population immunity to measles decreases the positive predictive value of the clinical case definition (*3,5*), thereby necessitating laboratory confirmation of suspected cases. The implementation of case-based surveillance with serologic confirmation of suspected cases will require capacity for specimen collection, transportation, testing, and reporting of results. Previous experience with case-based surveillance, specimen collection, and testing for acute flaccid paralysis cases will guide this process.

References

1. Stein C, Birmingham M, Kurian M, Duclos P, Strebel P. The global burden of measles in the year 2000—a model using country-specific indicators. J Infect Dis 2000;187(suppl 1):S8–S14.
2. African Regional Office of the World Health Organization. Plan of Action for Measles Mortality Reduction in the African Region, 2001–2005. Harare, Zimbabwe: African Regional Office of the World Health Organization, 2000.
3. de Quadros CA, Olive J-M, Hersh BS, et al. Measles elimination in the Americas—evolving strategies. JAMA 1996;275:224–9.
4. Hersh BS, Tambini G, Nogueira AC, Carrasco P, de Quadros C. Review of regional measles surveillance data in the Americas, 1996–99. Lancet 2000;355:1943–8.
5. Biellik R, Madema S, Taole A, et al. First five years of measles elimination in Southern Africa: 1996–2000. Lancet 2002;359:1564–8.
6. Otten M, Okwo-Bele JM, Kezaala R, Biellik R, Eggers R, Nshimirimana D. Impact of alternative approaches to accelerated measles control: report on the experience in the African Region, 1996–2002. J Infect Dis 2003;187(suppl 1):S36–S43.
7. Dollimore N, Cutts F, Binka FN, Ross DA, Morris SS, Smith PG. Measles incidence, case fatality, and delayed mortality in children with or without vitamin A supplementation in rural Ghana. Am J Epidemiol 1997;146:646–54.

Measles Outbreak Associated with an Imported Case in an Infant — Alabama, 2002

Local transmission of measles is rare in the United States. Since 1997, the majority of measles outbreaks have been caused by imported* cases (*1*). During October 19–November 15, 2002, an outbreak of 13 confirmed† cases of measles occurred, with exposure in Alabama; 11 cases were among day care attendees who had not yet been vaccinated for measles. This was the largest outbreak of measles in the United States since 1999 (*2*). In response to this outbreak, the Alabama Department of Public Health (ADPH) and CDC conducted an epidemiologic investigation that determined the outbreak was initiated by an imported case in an infant aged 9 months who had returned recently from the Philippines. Health-care providers should continue to include measles in differential diagnoses for febrile rash illnesses in infants, particularly those with recent travel to areas where measles is endemic.

On November 3, 2002, a consulting physician suspected measles in three infants aged 10 months who had been hospitalized with rash onsets during October 28–31; all three infants had attended the same day care center and shared the same room. ADPH confirmed measles in these infants and identified two additional cases in the infant aged 9 months and in another infant aged 10 months, both of whom also

* Acquired outside the United States, Guam, Puerto Rico, and the U.S. Virgin Islands.
† Defined as illness consistent with the clinical case definition and confirmed by laboratory test or linked epidemiologically to a confirmed case. A clinical case was defined as illness characterized by generalized rash lasting ≥3 days; a temperature of ≥101° F (≥38.3° C); and cough, coryza, or conjunctivitis.

trust•wor•thy: *adj*

('trəst-"wər-thē) 1 : worthy of belief

2 : capable of being depended upon;

see also *MMWR*.

know what matters.

MMWR™

shared the same day care center room. The infant aged 9 months was hospitalized during October 19–23 and had an initial diagnosis of dengue fever, later reclassified as a fever of unknown origin. The infant had been administered immunoglobulin before departure from the United States to the Philippines. Measles eventually was confirmed in all five infants by enzyme-linked immunosorbent assay testing.

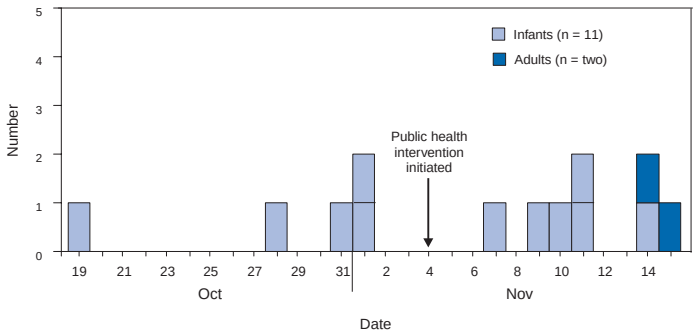
Outbreak investigators identified and interviewed persons who had been in contact with infants confirmed with measles during the 4 days before and after rash onset. An additional eight cases were identified among six infants and two adults (Figure). All 11 infants attended the same day care center and shared the same room (attack rate: 100%). Among the 11 infants, the median age was 11 months (range: 10–13 months); seven (64%) were female. The two adults, a man aged 31 years and a woman aged 50 years, were exposed to the same infant. The man had visited the infant's home before hospitalization, and the woman provided nursing care to the infant during hospitalization.

All 13 patients had rash, fever, coryza, and cough; 12 (92%) had conjunctivitis, and four (31%) were hospitalized. Nasopharyngeal and/or urine samples were collected from 10 patients (both adults and eight infants); all were positive for measles by viral culture or by polymerase chain reaction. Viral isolates were identified as the D3 measles genotype, known to be circulating in the Philippines (*3*).

Among the 11 infants, none had been vaccinated with a measles-containing vaccine (MCV). None of the infants' mothers reported ever having measles; however, all mothers had been vaccinated with ≥1 dose of MCV. Among the adults, the man had been vaccinated with 2 doses of MCV before his exposure; the woman had never been vaccinated for measles, although she knew she had a negative titer.

ADPH conducted contact tracing and identified 679 persons with known contact with the patients; 616 (91%) were exposed before ADPH was notified. ADPH determined whether exposed persons were ill, assessed vaccination status and recommended measles vaccine, and instructed contacts to monitor for fever during the 18 days after exposure to a patient. If fever occurred during this period, ADPH instructed contacts to isolate themselves and notify their doctors and local health departments. All contacts were considered susceptible unless they had documentation of adequate vaccination, physician-diagnosed measles, laboratory evidence of immunity to measles, or were born before 1957. Households were called every other day to ask about fever status.

FIGURE. Number of reported measles cases, by date of rash onset — Alabama, October 19–November 15, 2002



ADPH alerted all physicians in the affected county and provided free measles, mumps, and rubella (MMR) vaccine to attendees of the affected day care center and to the public. ADPH recommended that the day care center exclude infants with febrile rash illness until measles was ruled out in a suspected infant. ADPH also recommended a first dose of MMR for day care attendees aged 6–11 months, followed by the regular MMR 2-dose series starting at age 12–15 months (*4*). In addition, ADPH recommended a first dose of MMR for nonvaccinated infants aged 12–15 months and a second dose of MMR for infants aged >12 months who had a first dose at least 4 weeks previously.

Reported by: *JP Lofgren, MD, V Cochran, O Abbott, C Woernle, MD, Alabama Dept of Public Health. JM Hayes, DrPH, Div of Applied Public Health Training, Epidemiology Program Office, CDC.*

Editorial Note: The findings in this report illustrate the high transmissibility of measles when the virus is introduced into susceptible populations. The infant with imported measles and nine infant contacts who had measles were not in an age group recommended to receive an MCV. The Advisory Committee on Immunization Practices (ACIP) recommends that children receive their first MMR dose at age 12–15 months (*4*). The findings also highlight the need for health-care workers to follow ACIP guidelines to receive 2 doses of MCV or have proof of positive measles titer (*5*).

High immunity levels and effective control measures helped limit the spread of measles in this outbreak. Among Alabama children born during February 1998–May 2000, approximately 94% had ≥1 dose of MCV (*6*). ADPH efforts to limit exposure (<10% of contacts occurred after instituting control measures), to educate clinicians and the public about this outbreak, and to increase vaccination services in the affected county also might have helped limit measles transmission. To ensure prompt measles diagnoses, physicians who care for children need to be familiar with the clinical signs of measles.

To protect infants against measles, physicians should consider administering MMR vaccine to children aged >6 months who will be traveling outside of the United States and administer it ≥14 days before administering immunoglobulin. Measles should be included in differential diagnoses for

febrile rash illnesses in infants, particularly among those with recent travel to endemic areas. Physicians should report measles cases promptly to their state or local health departments.

Acknowledgments

Georgia Div of Public Health. Div of Applied Public Health Training, Epidemiology Program Office; Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Div of Epidemiology and Surveillance, National Immunization Program, CDC.

References

1. CDC. Epidemiology and Prevention of Vaccine-Preventable Diseases, 7th ed. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2003:96–114.
2. CDC. Measles—United States, 1999. MMWR 2000;49:557–60.
3. Rota PA, Liffick SL, Rota JS, et al. Molecular epidemiology of measles viruses in the United States, 1997–2001. Emerg Infect Dis 2002;8:902–8.
4. CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1998;47(No. RR-8).
5. CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(No. RR-18).
6. CDC. 2001 National Immunization Survey. Available at http://www.cdc.gov/nip/coverage/default.htm#NIS.

Human Death Associated with Bat Rabies — California, 2003

Rabies is a rapidly progressive, incurable viral encephalitis that is, with rare exception, transmitted by the bite of an infected mammal. On September 14, 2003, a previously healthy man aged 66 years who resided in Trinity County, California, died from rabies approximately 6 weeks after being bitten by a bat. This report summarizes the investigation by the Trinity and Shasta County Health Departments and the California Department of Health Services (CDHS). Persons should avoid direct contact with bats; however, if such contact occurs, the exposed person should visit a health-care provider immediately, and the exposure should be reported to local public health officials.

In September 2003, the patient was admitted to a hospital emergency department (ED) for assessment of atypical chest pain. He had a 2-week history of mild, nonspecific complaints (e.g., drowsiness, chronic headache, and malaise), a 5-day history of progressive right arm pain and paresthesias, and a 1-day history of right-hand weakness. The arm pain was severe enough to wake him from sleep and progressively worsened. He also described a sharp pain radiating bilaterally up the right arm to his axilla and left chest. The pain was relieved

"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

MMWR™
Continuing Education

by administering nitroglycerin in the ED. The patient reported being bitten by a bat on the right index finger while in his bed approximately 5 weeks before admission. He removed the bat from his home, and it flew away. The patient washed the wound but did not seek rabies postexposure prophylaxis (PEP) at that time. Because the patient reported to the ED at an early stage of rabies infection, with predominantly local symptoms near the bite site, rabies vaccine, rabies immune globulin, ribavirin, and interferon-alpha were administered on the day of admission; a second dose of rabies vaccine was administered 3 days later.

On admission, he was afebrile, alert, and oriented but had decreased right upper extremity strength, decreased sensation to light touch, and slight impairment in his ability to concentrate. His white blood cell (WBC) count was elevated at 13,900 cells/μL (normal: 3,700–9,400 cells/μL). All other laboratory values were within the normal range.

The patient had steady neurologic decline during the following week with confusion and disorientation. He became febrile on the fourth hospital day and was intubated for airway protection. Electromyography of his right and left upper extremities indicated distal demyelinating polyneuropathy. By the fifth hospital day, he had a right lung infiltrate, and his electroencephalogram showed diffuse slowing. Two days later, he died. Four family members and two of 40 health-care workers involved in the patient's treatment received rabies PEP as a precautionary measure. The patient's wife received PEP because she had been asleep in the same bed as the patient when the bat bit him and possibly had been exposed to the same bat.

Antemortem specimens were sent to the Viral and Rickettsial Disease Laboratory (VRDL) at CDHS and to CDC for evaluation. The specimens included multiple saliva and serum samples, nuchal skin biopsy, urine, and spinal fluid. Postmortem corneal impressions also were obtained. A nested, reverse transcription polymerase chain reaction assay performed on saliva samples was positive for evidence of rabies virus nucleic acid. Sequence analysis demonstrated 100% homology with a rabies virus variant associated with the silver-haired bat (*Lasionycteris noctivagans*).

Reported by: *A Deckert, MD, Shasta County Public Health, Redding; C Glaser, MD, Viral and Rickettsial Disease Laboratory; B Sun, DVM, Div of Communicable Disease Control, California Dept of Health Svcs. Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; L Demma, PhD, EIS Officer, CDC.*

Editorial Note: Although human rabies is rare in the United States, clinicians and public health workers should suspect rabies when a history of possible bat contact is known or when unexplained atypical progressive neuropathy or unusual febrile encephalitis is observed. Persons coming in direct contact with bats should seek consultation with their health-care providers immediately to receive PEP, if appropriate.

Rabies is an acute, progressive, and fatal disease. The only documented survivors received rabies prophylaxis before the onset of illness. However, an aggressive approach to therapy might be attempted in patients who are in an early stage of clinical disease (*1*). A combination of therapies is suggested, including rabies vaccine, rabies immune globulin, ribavirin, interferon-alpha, monoclonal antibodies, and ketamine. The patient described in this report visited the ED at an early stage with a predominant symptom of paraesthesia at the bite site. He was treated within approximately 24 hours of admission, albeit unsuccessfully, with the first four of these agents.

This fatality follows two other recent bat-associated cases of human rabies in California (in Glenn County in 2002 and in Amador County in 2000) (*2,3*). However, these cases were associated with a Mexican free-tailed bat (*Tadarida brasiliensis*) rabies virus variant, and neither patient identified a definitive bat exposure. During 1990–1998, of 22 bat-associated rabies infections, 16 (75%) were associated with the virus variant found among silver-haired and eastern pipistrelle bats (*4*). Properties of these viruses might allow infection and replication under broader conditions than those of other rabies virus variants (*5*).

During 1990–2000, a total of 24 (75%) of 32 U.S. human rabies cases were caused by bat-associated rabies virus variants. In 22 (92%) of these cases, no documentation of a bite existed; however, this does not mean that a typical bite exposure did not take place. Instead, such a history was not uncovered during presentation or case investigation.

Human rabies is preventable with the proper and timely administration of rabies PEP (*6*). However, if a patient does not recognize the risk associated with an animal bite, PEP probably will not be obtained. When a bat is found in living quarters and a strong possibility exists that an exposure might have occurred, the animal should be submitted to a local public health laboratory for diagnostic testing. However, if the animal is not available for testing, PEP should be administered when there is a strong probability of exposure.

No laboratory-confirmed cases of human-to-human transmission from patients to health-care workers or family members have been documented. Delivery of health care to a patient with rabies is not an indication for PEP unless a bite has occurred or an exposure of mucous membranes or nonintact skin to potentially infectious body fluids has occurred (*6*). Adherence to standard safety precautions for health-care workers will minimize the risk for exposure.

Public health professionals need to reemphasize effective measures to reduce animal exposure and to keep pet and live-

stock vaccinations current. Persons who are bitten by a potentially rabid animal should immediately 1) disinfect and wash the wound, 2) capture the animal safely, 3) contact the local health department, and 4) see a physician for evaluation about the need for PEP.

Acknowledgments

This report is based on data contributed by E Osvold-Doppelhauer, Trinity County Health Dept, Weaverville; C Lakmann, K Thomas, Shasta County Public Health; H Birk, MD, KK Shwe, MD, S Menezes, MD, M O'Brien, MD, L Dayton, MD, Mercy Medical Center, Redding; D Schnurr, PhD, S Honarmand, C Kohlmeier, Viral and Rickettsial Disease Laboratory, Div of Communicable Disease Control, California Dept of Health Svcs. L Orciari, MS, M Niezgoda, MS, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

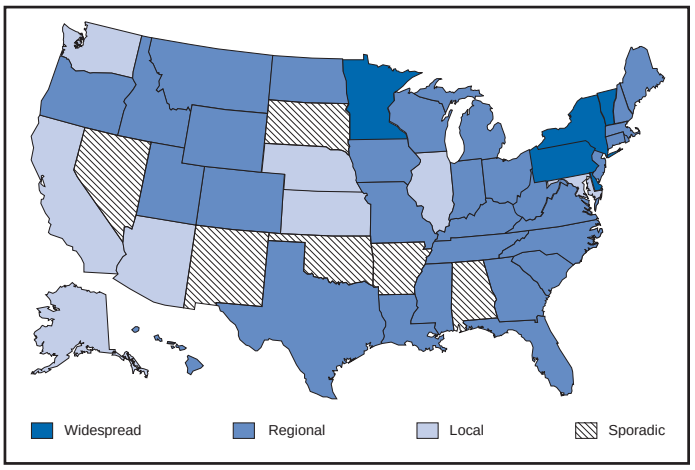
References

1. Jackson AC, Warrell MJ, Rupprecht CE, et al. Management of rabies in humans. Clin Infect Dis 2003;36:60–3.
2. CDC. Human rabies—California, 2002. MMWR 2002;51:686–8.
3. CDC. Human rabies—California, Georgia, Minnesota, New York, and Wisconsin, 2000. MMWR 2000;49:1111–5.
4. Krebs JW, Smith JS, Rupprecht CE, Childs JE. Mammalian reservoirs and epidemiology of rabies diagnosed in human beings in the United States, 1981–1998. Ann NY Acad Sci 2000;916:345–53.
5. Morimoto K, Patel M, Corisdeo S, et al. Characterization of a unique virus variant of bat rabies virus responsible for newly emerging human cases in North America. Proc Natl Acad Sci U S A 1996;93:5653–8.
6. CDC. Human rabies prevention—United States, 1999: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-1).

Update: Influenza Activity — United States, January 11–17, 2004

The number of states reporting widespread influenza activity* continued to decrease during the reporting week of January 11–17, 2004†. Health departments in five states reported widespread influenza activity. A total of 31 states and New York City reported regional activity, eight states reported local activity, and sporadic activity was reported by six states, the District of Columbia, Guam, and Puerto Rico (Figure 1). The percentage of outpatient visits for influenza-like illness (ILI)§ continued to decrease in all surveillance regions during the week ending January 17. For the first time since the reporting week ending November 8, 2003, the national percentage for ILI (2.0%) declined below the national baseline¶ of 2.5%. The percentage of specimens testing positive for influenza also decreased, but the percentage of deaths attributed to pneumonia and influenza (P&I) was unchanged.

FIGURE 1. States in which estimated influenza activity levels have been reported by state epidemiologists, by level of activity* — United States, January 11–17, 2004



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

Laboratory Surveillance

During the week ending January 17, World Health Organization (WHO) laboratories reported testing 1,544 specimens for influenza viruses, of which 123 (8.0%) were positive. Of these, 26 were influenza A (H3N2) viruses, 95 were influenza A viruses that were not subtyped, and two were influenza B viruses.

Since September 28, WHO and NREVSS laboratories have tested 76,311 specimens for influenza viruses, of which 19,968 (26.2%) were positive. Of these, 19,853 (99.4%) were influenza A viruses, and 115 (0.6%) were influenza B viruses. Of

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

† Provisional data reported as of January 14.

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

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

the 19,853 influenza A viruses, 4,652 (23.4%) have been subtyped; 4,651 (99.9%) were influenza A (H3N2) viruses, and one (0.1%) was an influenza A (H1) virus.

Antigenic Characterization

Of the 573 influenza viruses collected by U.S. laboratories since October 1, 2003, and characterized antigenically by CDC, 565 were influenza A (H3N2) viruses, two were influenza A (H1) viruses, and six were influenza B viruses. The hemagglutinin proteins of the influenza A (H1) viruses were similar antigenically to the hemagglutinin of the vaccine strain A/New Caledonia/20/99. Of the 565 influenza A (H3N2) isolates that have been characterized, 106 (18.8%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 459 (81.2%) were similar to a drift variant, A/Fujian/411/2002 (H3N2)**. Five influenza B viruses characterized were similar antigenically to B/Sichuan/379/99 and one was similar antigenically to B/Hong Kong/330/2001.

P&I Mortality Surveillance

During the week ending January 17, P&I accounted for 10.3% of all deaths reported through the 122 Cities Mortality Reporting System. This percentage is again above the epidemic threshold†† of 8.1% (Figure 2).

ILI Surveillance

The percentage of patient visits§§ to approximately 1,000 U.S. sentinel providers nationwide for ILI decreased to 2.0% for the week ending January 17, which is below the national baseline of 2.5% (Figure 3). The percentage of patient visits for ILI continued to decrease in all nine surveillance regions¶¶, ranging from 2.5% in the Pacific region to 1.1% in the New England and West North Central regions.

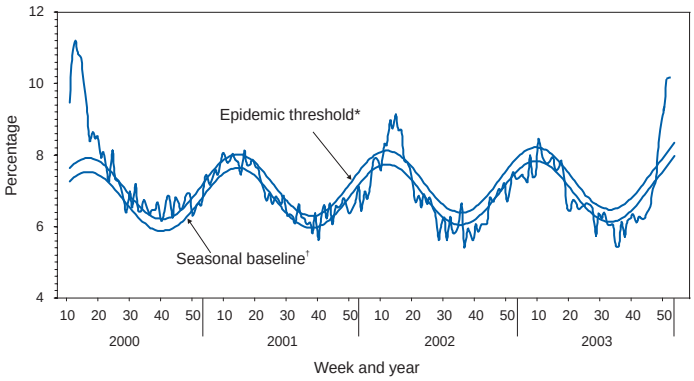
** Although vaccine effectiveness against A/Fujian/411/2002-like viruses might be less than that against A/Panama/2007/99-like viruses, the current U.S. vaccine probably will offer some cross-protective immunity against the A/Fujian/411/2002-like viruses and reduce the severity of disease.

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

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

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

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



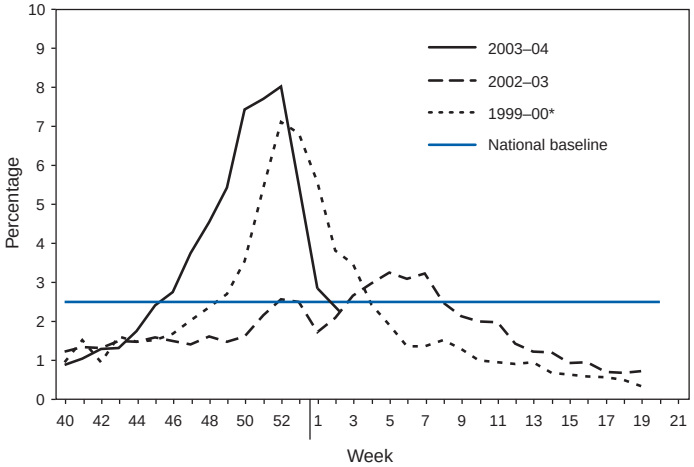
* The epidemic threshold is 1.645 standard deviations above the seasonal baseline percentage.

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

Activity Reported by State and Territorial Epidemiologists

During the week ending January 17, influenza activity was reported as widespread in five states (Delaware, Minnesota, New York, Pennsylvania, and Vermont). Regional activity was reported in 31 states (Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Mississippi, Missouri, Montana, New Hampshire, New Jersey, North Carolina, North Dakota, Ohio, Oregon, Rhode Island, South Carolina, Tennessee,

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



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

Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming) and New York City. Local activity was reported in eight states (Alaska, Arizona, California, Illinois, Kansas, Maryland, Nebraska, and Washington). Sporadic activity was reported in six states (Alabama, Arkansas, Nevada, New Mexico, Oklahoma, and South Dakota), the District of Columbia, Guam, and Puerto Rico.

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

Influenza-Associated Deaths in Children Aged <18 Years

As of January 20, 2004, CDC had received reports of 111 influenza-associated deaths in U.S. residents aged <18 years. This update is based on preliminary data reported from 33 states (Table). All patients had evidence of influenza virus infection detected by rapid-antigen testing or other laboratory tests. Among reported deaths, 56 (50.5%) were male. The median age was 4 years (range: 1 month–17 years). Of the 64 children aged <5 years, 38 were aged 6 months–23 months. Twenty-one children had high-risk medical conditions that put them at increased risk for complications from influenza. Of the children whose influenza vaccination status was reported, three were vaccinated according to recommendations (*1*), and 49 were not vaccinated.

TABLE. Number of influenza-associated deaths reported among children aged <18 years, by state — United States, 2003–04 influenza season*

State	No. deaths
Alabama	2
Alaska	1
Arkansas	1
Arizona	4
California	7
Colorado	12
Connecticut	1
Florida	4
Georgia	5
Illinois	3
Indiana	1
Iowa	4
Kansas	1
Louisiana	2
Maryland	3
Michigan	1
Missouri	4
Montana	1
New Jersey	1
New Mexico	3
New York	7
North Carolina	9
Ohio	5
Oklahoma	4
Oregon	1
South Carolina	4
South Dakota	1
Tennessee	1
Texas	12
Utah	1
Vermont	1
Wisconsin	3
Wyoming	1
Total	**111**

* As of January 20, 2004.

Reference

1. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2003;52(No. RR-8).

Notice to Readers

Updated Guidelines for the Use of Rifamycins for the Treatment of Tuberculosis Among HIV-Infected Patients Taking Protease Inhibitors or Nonnucleoside Reverse Transcriptase Inhibitors

Guidelines for managing the pharmacologic interactions that can result when patients receive protease inhibitors (PIs) and nonnucleoside reverse transcriptase inhibitors (NNRTIs) for treatment of human immunodeficiency virus (HIV) infection together with rifamycins for the treatment of tuberculosis have been published previously (*1,2*). New guidelines regarding interactions among these agents, with recommendations for their use from CDC and partners, are available at http://www.cdc.gov/nchstp/tb/tb_hiv_drugs/toc.htm. Information includes initial recommendations for the new PIs lopinavir/ritonavir, atazanavir, and fosamprenavir, and updated recommendations for other dual PI regimens and NNRTIs. The new recommendations expand the use of rifampin with these antiretroviral drugs, which is critical in regions where rifabutin is unavailable. Periodic updates will be posted to the website to provide clinicians with the latest information.

References

1. CDC. Prevention and treatment of tuberculosis among patients infected with human immunodeficiency virus: principles of therapy and revised recommendations. MMWR 1998;47(No. RR-20).
2. CDC. Updated guidelines for the use of rifabutin or rifampin for the treatment and prevention of tuberculosis among HIV-infected patients taking protease inhibitors or nonnucleoside reverse transcriptase inhibitors. MMWR 2000;49:185–9.

e ncore.

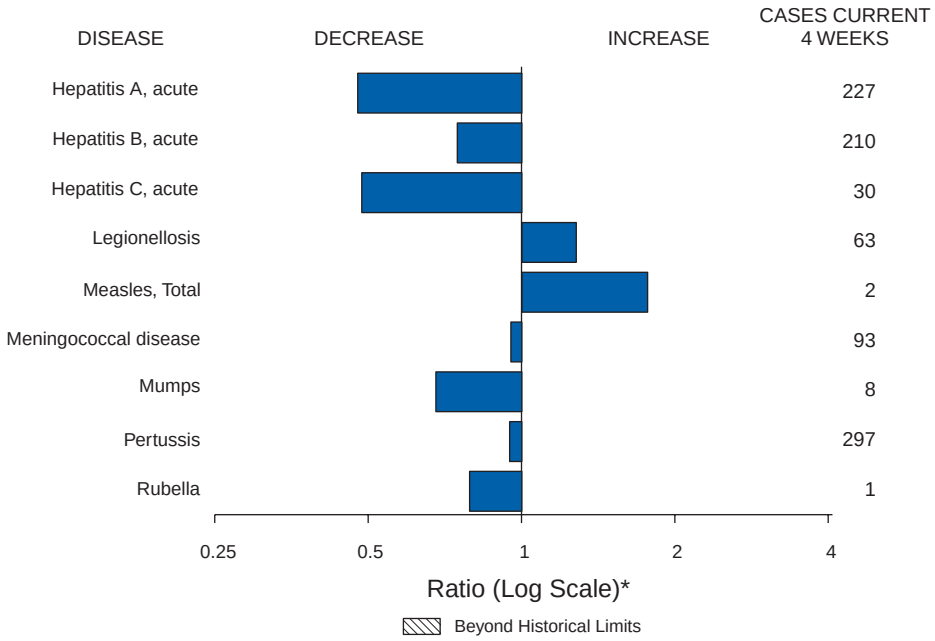
Week after week, MMWR Online plays an important role in helping you stay informed. From the latest CDC guidance to breaking health news, count on MMWR Online to deliver the news you need, when you need it.

Log on to **cdc.gov/mmwr** and enjoy MMWR performance.

know what matters.

MMWR™ Online

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals January 17, 2004, with historical data



* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending January 17, 2004 (2nd Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	-	1
Botulism:	-	-	HIV infection, pediatric†§	-	22
foodborne	-	1	Measles, total	2¶	-
infant	-	2	Mumps	6	2
other (wound & unspecified	1	-	Plague	-	-
Brucellosis†	-	3	Poliomyelitis, paralytic	-	-
Chancroid	1	1	Psittacosis†	-	1
Cholera	-	-	Q fever†	-	1
Cyclosporiasis†	-	-	Rabies, human	-	-
Diphtheria	-	-	Rubella	-	-
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	-
human granulocytic (HGE)†	2	1	SARS-associated coronavirus disease† **	-	-
human monocytic (HME)†	-	-	Smallpox† ††	-	NA
human, other and unspecified	-	-	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† ††	-	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† ††	-	NA
eastern equine†	-	-	Streptococcal toxic-shock syndrome†	4	6
Powassan†	-	-	Tetanus	-	1
St. Louis†	-	-	Toxic-shock syndrome	4	1
western equine†	-	-	Trichinosis	-	-
Hansen disease (leprosy)†	3	-	Tularemia†	-	-
Hantavirus pulmonary syndrome†	-	1	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update November 30, 2003.
¶ Of two cases reported, one was indigenous, and one was imported from another country.
** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
†† Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 2004, and January 11, 2003 (2nd Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2004§	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	-	3,016	16,669	23,949	48	84	57	41	-	-
NEW ENGLAND	-	64	739	944	-	-	2	5	-	-
Maine	-	-	-	52	N	N	-	-	-	-
N.H.	-	1	-	50	-	-	-	-	-	-
Vt.	-	-	28	18	-	-	2	1	-	-
Mass.	-	1	505	292	-	-	-	4	-	-
R.I.	-	5	206	105	-	-	-	-	-	-
Conn.	-	57	-	427	N	N	-	-	-	-
MID. ATLANTIC	-	905	2,589	2,943	-	-	7	8	-	-
Upstate N.Y.	-	51	254	122	N	N	5	-	-	-
N.Y. City	-	430	1,010	906	-	-	1	6	-	-
N.J.	-	72	585	606	-	-	-	-	-	-
Pa.	-	352	740	1,309	N	N	1	2	-	-
E.N. CENTRAL	-	278	2,477	5,229	-	1	4	10	-	-
Ohio	-	61	161	1,527	-	-	2	-	-	-
Ind.	-	42	505	635	N	N	-	-	-	-
Ill.	-	81	623	1,844	-	-	-	1	-	-
Mich.	-	89	1,149	599	-	1	2	2	-	-
Wis.	-	5	39	624	-	-	-	7	-	-
W.N. CENTRAL	-	36	562	1,530	-	-	6	4	-	-
Minn.	-	-	-	390	N	N	-	1	-	-
Iowa	-	13	-	64	N	N	1	1	-	-
Mo.	-	22	171	523	-	-	-	1	-	-
N. Dak.	-	-	7	9	N	N	-	-	-	-
S. Dak.	-	1	24	67	-	-	2	1	-	-
Nebr.¶	-	-	-	118	-	-	-	-	-	-
Kans.	-	-	360	359	N	N	3	-	-	-
S. ATLANTIC	-	643	3,530	3,734	-	-	22	9	-	-
Del.	-	-	104	111	N	N	-	-	-	-
Md.	-	12	663	461	-	-	1	1	-	-
D.C.	-	157	99	141	-	-	-	-	-	-
Va.	-	137	992	434	-	-	-	-	-	-
W. Va.	-	-	97	87	N	N	-	-	-	-
N.C.	-	3	529	808	N	N	7	-	-	-
S.C.¶	-	35	357	387	-	-	-	-	-	-
Ga.	-	155	10	355	-	-	6	7	-	-
Fla.	-	144	679	950	N	N	8	1	-	-
E.S. CENTRAL	-	17	1,317	1,680	N	N	2	2	-	-
Ky.	-	5	267	234	N	N	-	-	-	-
Tenn.	-	-	396	423	N	N	2	2	-	-
Ala.	-	12	460	416	-	-	-	-	-	-
Miss.	-	-	194	607	N	N	-	-	-	-
W.S. CENTRAL	-	572	2,566	3,135	-	-	1	-	-	-
Ark.	-	-	267	185	-	-	1	-	-	-
La.	-	-	931	147	N	N	-	-	-	-
Okla.	-	1	232	300	N	N	-	-	-	-
Tex.	-	571	1,136	2,503	-	-	-	-	-	-
MOUNTAIN	-	120	512	1,673	-	83	1	3	-	-
Mont.	-	6	-	76	N	N	-	-	-	-
Idaho	-	-	97	102	N	N	-	2	-	-
Wyo.	-	1	35	31	-	-	1	-	-	-
Colo.	-	22	35	433	N	N	-	1	-	-
N. Mex.	-	-	20	203	-	-	-	-	-	-
Ariz.	-	78	312	590	-	82	-	-	-	-
Utah	-	6	13	37	-	-	-	-	-	-
Nev.	-	7	-	201	-	1	-	-	-	-
PACIFIC	-	381	2,377	3,081	48	-	12	-	-	-
Wash.	-	31	469	391	N	N	-	-	-	-
Oreg.	-	35	-	210	-	-	1	-	-	-
Calif.	-	312	1,806	2,235	48	-	11	-	-	-
Alaska	-	3	91	49	-	-	-	-	-	-
Hawaii	-	-	11	196	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	50	19	N	N	N	N	-	-
V.I.	-	-	-	13	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

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

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

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update November 30, 2003.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 2004, and January 11, 2003 (2nd Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	17	28	-	5	1	1	267	464	6,393	10,397
NEW ENGLAND	-	3	-	-	-	-	18	31	179	292
Maine	-	-	-	-	-	-	-	3	-	3
N.H.	-	-	-	-	-	-	-	-	-	6
Vt.	-	-	-	-	-	-	2	5	-	1
Mass.	-	3	-	-	-	-	16	23	135	76
R.I.	-	-	-	-	-	-	-	-	44	36
Conn.	-	-	-	-	-	-	-	-	-	170
MID. ATLANTIC	1	6	-	-	-	1	46	83	868	1,351
Upstate N.Y.	-	-	-	-	-	-	11	3	88	73
N.Y. City	-	-	-	-	-	-	4	38	368	385
N.J.	-	2	-	-	-	-	6	15	187	383
Pa.	1	4	-	-	-	1	25	27	225	510
E.N. CENTRAL	5	13	-	-	1	-	38	80	915	2,568
Ohio	2	4	-	-	1	-	21	42	86	871
Ind.	-	-	-	-	-	-	-	-	200	256
Ill.	-	-	-	-	-	-	1	10	227	945
Mich.	3	4	-	-	-	-	16	16	387	265
Wis.	-	5	-	-	-	-	-	12	15	231
W.N. CENTRAL	1	3	-	-	-	-	14	43	234	575
Minn.	-	-	-	-	-	-	2	-	-	133
Iowa	-	-	-	-	-	-	8	10	-	9
Mo.	-	2	-	-	-	-	-	26	96	289
N. Dak.	-	-	-	-	-	-	-	-	-	1
S. Dak.	-	-	-	-	-	-	1	-	5	1
Nebr.	-	1	-	-	-	-	-	3	-	27
Kans.	1	-	-	-	-	-	3	4	133	115
S. ATLANTIC	2	-	-	3	-	-	76	120	1,687	2,073
Del.	-	-	N	N	N	N	-	2	46	53
Md.	-	-	-	-	-	-	4	6	350	321
D.C.	-	-	-	-	-	-	-	-	80	92
Va.	-	-	-	-	-	-	-	-	374	219
W. Va.	-	-	-	-	-	-	-	-	39	31
N.C.	-	-	-	2	-	-	N	N	284	404
S.C.	-	-	-	-	-	-	-	-	171	265
Ga.	-	-	-	-	-	-	34	89	11	164
Fla.	2	-	-	1	-	-	38	23	332	524
E.S. CENTRAL	-	-	-	-	-	-	2	10	701	976
Ky.	-	-	-	-	-	-	N	N	121	122
Tenn.	-	-	-	-	-	-	2	6	203	249
Ala.	-	-	-	-	-	-	-	4	281	293
Miss.	-	-	-	-	-	-	-	-	96	312
W.S. CENTRAL	-	1	-	1	-	-	3	-	1,081	1,425
Ark.	-	-	-	-	-	-	3	-	116	132
La.	-	-	-	-	-	-	-	-	475	159
Okla.	-	-	-	-	-	-	-	-	105	127
Tex.	-	1	-	1	-	-	-	-	385	1,007
MOUNTAIN	2	2	-	1	-	-	11	30	144	432
Mont.	-	-	-	-	-	-	1	1	-	6
Idaho	1	-	-	-	-	-	5	4	3	6
Wyo.	-	-	-	-	-	-	-	2	2	2
Colo.	-	1	-	-	-	-	-	13	35	135
N. Mex.	-	-	-	1	-	-	-	1	4	51
Ariz.	-	1	N	N	N	N	-	5	94	175
Utah	1	-	-	-	-	-	5	1	6	4
Nev.	-	-	-	-	-	-	-	3	-	53
PACIFIC	6	-	-	-	-	-	59	67	584	705
Wash.	-	-	-	-	-	-	-	-	73	74
Oreg.	1	-	-	-	-	-	12	9	-	20
Calif.	5	-	-	-	-	-	46	54	497	565
Alaska	-	-	-	-	-	-	1	3	13	9
Hawaii	-	-	-	-	-	-	-	1	1	37
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	1	2	1
V.I.	-	-	-	-	-	-	-	-	-	4
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 2004, and January 11, 2003 (2nd Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	38	34	-	1	-	-	4	4	123	147
NEW ENGLAND	1	3	-	-	-	-	-	-	14	3
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	1	-	-	-	-	-	-	-	-	-
Mass.	-	1	-	-	-	-	-	-	13	3
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	2	-	-	-	-	-	-	1	-
MID. ATLANTIC	15	9	-	-	-	-	1	1	19	32
Upstate N.Y.	3	-	-	-	-	-	-	-	1	-
N.Y. City	2	4	-	-	-	-	1	1	1	22
N.J.	-	2	-	-	-	-	-	-	3	4
Pa.	10	3	-	-	-	-	-	-	14	6
E.N. CENTRAL	5	4	-	-	-	-	2	1	9	21
Ohio	3	1	-	-	-	-	1	1	1	4
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	2	-	-	-	-	-	-	3	4
Mich.	2	-	-	-	-	-	1	-	5	10
Wis.	-	1	-	-	-	-	-	-	-	3
W.N. CENTRAL	-	1	-	-	-	-	-	-	4	3
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	2	2
Mo.	-	1	-	-	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-
Kans.	-	-	-	-	-	-	-	-	2	-
S. ATLANTIC	14	6	-	-	-	-	1	-	39	63
Del.	-	-	-	-	-	-	-	-	-	1
Md.	4	4	-	-	-	-	-	-	5	8
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	-	-	-	-	-	-
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	6	2	-	-	-	-	1	-	21	34
Fla.	4	-	-	-	-	-	-	-	13	20
E.S. CENTRAL	1	3	-	-	-	-	-	1	-	3
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	1	1	-	-	-	-	-	-	-	-
Ala.	-	2	-	-	-	-	-	1	-	2
Miss.	-	-	-	-	-	-	-	-	-	1
W.S. CENTRAL	1	1	-	-	-	-	-	-	1	13
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	1	-	-	-	-	-	-	-	1
Okla.	1	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	-	-	-	-	1	12
MOUNTAIN	-	6	-	-	-	-	-	1	1	7
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	1	-
Colo.	-	2	-	-	-	-	-	-	-	1
N. Mex.	-	-	-	-	-	-	-	-	-	-
Ariz.	-	3	-	-	-	-	-	-	-	4
Utah	-	1	-	-	-	-	-	1	-	-
Nev.	-	-	-	-	-	-	-	-	-	2
PACIFIC	1	1	-	1	-	-	-	-	36	2
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	1	-	-	-	-	-	-	-	1	2
Calif.	-	1	-	1	-	-	-	-	35	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 2004, and January 11, 2003 (2nd Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	90	192	15	85	32	33	12	12	143	191
NEW ENGLAND	2	16	-	-	-	3	-	1	1	9
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	1	-	-	-	-	-	-	-	1
Mass.	2	10	-	-	-	2	-	1	1	8
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	5	U	U	-	1	-	-	-	-
MID. ATLANTIC	5	23	3	3	7	6	2	5	122	148
Upstate N.Y.	1	-	1	-	1	1	-	-	58	-
N.Y. City	-	7	-	-	-	1	-	2	-	-
N.J.	3	10	-	-	1	-	1	-	9	55
Pa.	1	6	2	3	5	4	1	3	55	93
E.N. CENTRAL	3	22	3	6	10	11	1	1	-	4
Ohio	1	9	-	-	5	7	1	1	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	-	-	2	-	-	-	-	-	-
Mich.	2	7	3	4	5	4	-	-	-	-
Wis.	-	6	-	-	-	-	-	-	U	4
W.N. CENTRAL	-	11	-	6	1	1	-	1	2	1
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-
Mo.	-	10	-	6	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	1	-	-	-	-	-
Nebr.	-	1	-	-	-	-	-	1	-	-
Kans.	-	-	-	-	-	1	-	-	2	-
S. ATLANTIC	62	85	7	3	10	5	5	1	14	21
Del.	-	-	-	-	-	-	N	N	-	5
Md.	5	3	1	1	1	3	2	-	11	12
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	-	1	-	1	3	1	1	1	-	3
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	33	72	2	1	-	1	1	-	-	-
Fla.	24	9	4	-	6	-	1	-	3	1
E.S. CENTRAL	-	10	-	5	-	1	1	2	-	3
Ky.	-	1	-	-	-	-	1	-	-	-
Tenn.	-	2	-	2	-	1	-	-	-	-
Ala.	-	2	-	-	-	-	-	2	-	-
Miss.	-	5	-	3	-	-	-	-	-	3
W.S. CENTRAL	-	4	-	58	-	6	-	1	-	4
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	2	-	2	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	2	-	56	-	6	-	1	-	4
MOUNTAIN	2	14	-	2	1	-	-	-	-	1
Mont.	-	1	-	-	-	-	-	-	-	-
Idaho	1	-	-	-	-	-	-	-	-	-
Wyo.	1	1	-	-	1	-	-	-	-	-
Colo.	-	1	-	2	-	-	-	-	-	-
N. Mex.	-	1	-	-	-	-	-	-	-	-
Ariz.	-	7	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	3	-	-	-	-	-	-	-	1
PACIFIC	16	7	2	2	3	-	3	-	4	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	2	6	1	1	N	N	-	-	-	-
Calif.	14	-	1	-	3	-	3	-	4	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	1	-	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	2	-	-	-	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 2004, and January 11, 2003 (2nd Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	18	20	69	40	70	188	86	100	6	5
NEW ENGLAND	1	2	1	3	6	41	4	12	-	-
Maine	-	1	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	11	-	2	-	-
Mass.	1	1	1	2	6	29	4	5	-	-
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	1	-	1	-	5	-	-
MID. ATLANTIC	1	4	8	7	25	14	13	24	1	-
Upstate N.Y.	-	-	4	1	14	2	13	8	-	-
N.Y. City	-	3	1	2	-	-	-	1	-	-
N.J.	-	1	-	1	-	4	-	6	-	-
Pa.	1	-	3	3	11	8	-	9	1	-
E.N. CENTRAL	-	4	11	6	9	17	-	-	-	-
Ohio	-	1	6	3	5	9	-	-	-	-
Ind.	-	-	-	1	-	-	-	-	-	-
Ill.	-	1	-	-	-	-	-	-	-	-
Mich.	-	1	5	1	4	2	-	-	-	-
Wis.	-	1	-	1	-	6	-	-	-	-
W.N. CENTRAL	-	1	3	6	7	9	4	17	-	-
Minn.	-	-	-	1	-	-	-	1	-	-
Iowa	-	1	1	2	4	-	2	-	-	-
Mo.	-	-	-	3	-	6	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	1	-	-	-	-	2	-	-
Nebr.	-	-	-	-	-	-	-	2	-	-
Kans.	-	-	1	-	3	3	2	12	-	-
S. ATLANTIC	13	3	14	3	5	22	58	39	4	5
Del.	-	-	-	-	-	-	-	-	-	-
Md.	5	2	2	2	3	3	11	11	3	2
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	2	-	-	8	-	-
W. Va.	-	-	-	-	-	-	3	1	-	-
N.C.	-	-	-	1	-	6	14	16	-	3
S.C.	-	-	-	-	-	-	-	2	-	-
Ga.	1	1	3	-	-	13	30	-	1	-
Fla.	7	-	9	-	-	-	-	1	-	-
E.S. CENTRAL	-	-	2	3	2	3	2	3	1	-
Ky.	-	-	-	-	-	1	1	1	-	-
Tenn.	-	-	2	1	2	-	1	1	1	-
Ala.	-	-	-	2	-	2	-	1	-	-
Miss.	-	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	-	3	2	8	-	-	2	1	-	-
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	3	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	2	1	-	-
Tex.	-	3	2	5	-	-	-	-	-	-
MOUNTAIN	-	-	2	2	4	26	2	4	-	-
Mont.	-	-	-	-	-	-	-	1	-	-
Idaho	-	-	1	-	2	-	-	-	-	-
Wyo.	-	-	1	-	1	-	-	-	-	-
Colo.	-	-	-	-	-	10	-	-	-	-
N. Mex.	-	-	-	1	-	3	-	-	-	-
Ariz.	-	-	-	1	-	11	2	3	-	-
Utah	-	-	-	-	1	-	-	-	-	-
Nev.	-	-	-	-	-	2	-	-	-	-
PACIFIC	3	3	26	2	12	56	1	-	-	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	3	6	2	12	5	-	-	-	-
Calif.	3	-	20	-	-	51	1	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	1	1	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 2004, and January 11, 2003 (2nd Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	527	844	207	755	162	152	122	69	1	14
NEW ENGLAND	25	25	6	10	3	19	-	7	-	-
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	N	N
Vt.	2	1	-	-	-	1	-	1	-	-
Mass.	23	24	6	10	3	9	N	N	N	N
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	9	-	6	U	U
MID. ATLANTIC	40	98	19	67	15	34	5	3	1	1
Upstate N.Y.	8	2	12	2	7	2	1	-	1	-
N.Y. City	3	30	-	18	-	4	U	U	U	U
N.J.	5	29	3	27	1	10	N	N	N	N
Pa.	24	37	4	20	7	18	4	3	-	1
E.N. CENTRAL	51	105	17	42	34	32	12	15	-	11
Ohio	16	46	3	11	13	5	11	15	-	6
Ind.	-	-	-	-	-	-	1	-	-	-
Ill.	16	27	9	13	-	5	-	-	-	-
Mich.	19	10	5	13	21	12	N	N	N	N
Wis.	-	22	-	5	-	10	N	N	-	5
W.N. CENTRAL	23	30	10	23	5	9	6	13	-	-
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	6	3	2	-	N	N	N	N	N	N
Mo.	-	15	-	16	-	6	-	-	-	-
N. Dak.	1	-	1	-	-	-	-	-	-	-
S. Dak.	3	4	-	1	1	1	-	-	-	-
Nebr.	-	1	-	3	-	-	-	-	N	N
Kans.	13	7	7	3	4	2	6	13	N	N
S. ATLANTIC	214	309	103	401	64	9	95	25	-	-
Del.	-	-	1	13	-	-	-	-	N	N
Md.	19	26	5	42	7	2	-	-	-	-
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	N	N	N	N
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	18	54	10	35	-	1	N	N	U	U
S.C.	1	1	-	-	1	1	-	2	N	N
Ga.	68	140	36	180	43	4	57	19	N	N
Fla.	108	88	51	131	13	1	38	4	N	N
E.S. CENTRAL	13	59	1	32	10	2	2	1	-	-
Ky.	2	2	-	3	-	1	-	-	N	N
Tenn.	11	10	1	3	10	1	2	1	N	N
Ala.	-	30	-	18	-	-	-	-	N	N
Miss.	-	17	-	8	-	-	-	-	-	-
W.S. CENTRAL	21	80	13	82	4	28	1	4	-	2
Ark.	5	3	-	-	-	-	1	-	-	-
La.	-	10	-	15	-	-	-	4	-	-
Okla.	16	-	10	4	1	1	N	N	-	-
Tex.	-	67	3	63	3	27	N	N	-	2
MOUNTAIN	20	38	1	23	6	17	1	1	-	-
Mont.	3	2	-	-	-	-	-	-	-	-
Idaho	12	4	-	-	1	1	N	N	N	N
Wyo.	1	-	1	1	2	-	1	-	-	-
Colo.	-	17	-	4	-	6	-	-	-	-
N. Mex.	-	4	-	9	3	5	-	1	-	-
Ariz.	-	3	-	7	-	5	-	-	N	N
Utah	4	-	-	1	-	-	-	-	-	-
Nev.	-	8	-	1	-	-	-	-	-	-
PACIFIC	120	100	37	75	21	2	-	-	-	-
Wash.	-	1	-	-	-	-	-	-	N	N
Oreg.	7	2	2	2	N	N	N	N	N	N
Calif.	103	88	34	70	19	-	N	N	N	N
Alaska	6	2	-	-	-	-	-	-	N	N
Hawaii	4	7	1	3	2	2	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	5	-	-	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 2004, and January 11, 2003 (2nd Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Primary & secondary		Congenital							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	123	228	2	19	87	141	2	2	327	448
NEW ENGLAND	2	3	-	-	3	2	-	-	42	52
Maine	-	-	-	-	-	-	-	-	-	36
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	42	2
Mass.	2	1	-	-	2	-	-	-	-	14
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	2	-	-	1	2	-	-	-	-
MID. ATLANTIC	9	17	1	4	-	36	-	1	3	-
Upstate N.Y.	1	-	1	1	-	-	-	-	-	-
N.Y. City	3	9	-	1	-	35	-	1	-	-
N.J.	4	4	-	2	-	-	-	-	-	-
Pa.	1	4	-	-	-	1	-	-	3	-
E.N. CENTRAL	20	35	1	4	33	4	1	-	180	258
Ohio	6	7	-	1	-	2	1	-	34	77
Ind.	6	1	-	1	2	2	-	-	-	-
Ill.	1	19	-	2	31	-	-	-	-	-
Mich.	7	7	1	-	-	-	-	-	146	143
Wis.	-	1	-	-	-	-	-	-	-	38
W.N. CENTRAL	-	14	-	-	-	5	-	-	7	-
Minn.	-	3	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	N	N
Mo.	-	6	-	-	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	6	-
S. Dak.	-	-	-	-	-	1	-	-	1	-
Nebr.	-	-	-	-	-	-	-	-	-	-
Kans.	-	5	-	-	-	4	-	-	-	-
S. ATLANTIC	52	53	-	6	1	12	-	1	61	81
Del.	1	-	-	-	-	-	-	-	-	-
Md.	11	4	-	2	-	-	-	1	-	-
D.C.	8	2	-	-	-	-	-	-	-	-
Va.	1	4	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	1	-	-	-	61	81
N.C.	1	4	-	-	-	-	-	-	-	-
S.C.	2	3	-	2	-	-	-	-	-	-
Ga.	-	4	-	1	-	12	-	-	-	-
Fla.	28	32	-	1	-	-	-	-	-	-
E.S. CENTRAL	8	14	-	-	4	4	-	-	-	-
Ky.	4	3	-	-	-	-	-	-	-	-
Tenn.	3	7	-	-	-	-	-	-	-	-
Ala.	1	4	-	-	4	4	-	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	24	19	-	2	3	60	-	-	-	57
Ark.	-	-	-	-	1	-	-	-	-	-
La.	3	-	-	-	-	-	-	-	-	1
Okla.	1	1	-	-	2	-	-	-	-	-
Tex.	20	18	-	2	-	60	-	-	-	56
MOUNTAIN	4	14	-	1	1	2	-	-	34	-
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	3	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	1	-	-	7	-
Colo.	-	1	-	-	-	1	-	-	-	-
N. Mex.	-	5	-	1	-	-	-	-	-	-
Ariz.	1	7	-	-	-	-	-	-	-	-
Utah	-	1	-	-	1	-	-	-	27	-
Nev.	-	-	-	-	-	-	-	-	-	-
PACIFIC	4	59	-	2	42	16	1	-	-	-
Wash.	-	-	-	-	6	4	-	-	-	-
Oreg.	-	1	-	-	2	1	-	-	-	-
Calif.	4	58	-	2	32	10	1	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	2	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	2	1	-	-	-	-	-	-	-	3
V.I.	-	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE III. Deaths in 122 U.S. cities,* week ending January 17, 2004 (2nd Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	553	416	96	21	10	10	82
Boston, Mass.	163	110	38	7	3	5	28
Bridgeport, Conn.	34	27	4	1	2	-	7
Cambridge, Mass.	17	16	1	-	-	-	1
Fall River, Mass.	36	30	5	1	-	-	9
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	35	29	6	-	-	-	6
Lynn, Mass.	11	7	4	-	-	-	2
New Bedford, Mass.	39	30	8	1	-	-	4
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	73	58	10	4	-	1	7
Somerville, Mass.	1	1	-	-	-	-	-
Springfield, Mass.	50	34	12	3	-	1	4
Waterbury, Conn.	25	21	2	1	1	-	5
Worcester, Mass.	69	53	6	3	4	3	9
MID. ATLANTIC	2,247	1,665	399	135	23	24	174
Albany, N.Y.	66	49	10	4	-	3	7
Allentown, Pa.	25	21	4	-	-	-	2
Buffalo, N.Y.	89	71	16	1	1	-	8
Camden, N.J.	43	28	13	2	-	-	4
Elizabeth, N.J.	26	22	4	-	-	-	-
Erie, Pa.	63	54	9	-	-	-	10
Jersey City, N.J.	27	20	2	4	1	-	-
New York City, N.Y.	987	713	187	67	10	9	55
Newark, N.J.	56	27	16	7	5	1	1
Paterson, N.J.	32	16	6	6	-	4	2
Philadelphia, Pa.	350	272	51	26	1	-	22
Pittsburgh, Pa.§	22	14	8	-	-	-	1
Reading, Pa.	36	33	2	-	1	-	6
Rochester, N.Y.	170	131	30	3	2	4	25
Schenectady, N.Y.	24	17	5	2	-	-	2
Scranton, Pa.	37	30	6	1	-	-	2
Syracuse, N.Y.	114	84	21	8	1	-	20
Trenton, N.J.	32	25	4	-	1	2	2
Utica, N.Y.	17	12	5	-	-	-	4
Yonkers, N.Y.	31	26	-	4	-	1	1
E.N. CENTRAL	2,834	2,023	551	151	41	60	306
Akron, Ohio	71	50	12	5	-	4	16
Canton, Ohio	49	37	11	-	1	-	16
Chicago, Ill.	452	270	106	40	13	15	38
Cincinnati, Ohio	110	82	21	6	1	-	16
Cleveland, Ohio	306	234	50	16	1	5	11
Columbus, Ohio	251	181	47	12	4	7	32
Dayton, Ohio	168	135	27	4	2	-	25
Detroit, Mich.	231	135	65	18	8	5	18
Evansville, Ind.	75	60	14	1	-	-	10
Fort Wayne, Ind.	87	66	15	4	1	1	7
Gary, Ind.	35	21	10	2	1	1	2
Grand Rapids, Mich.	60	36	14	3	-	7	11
Indianapolis, Ind.	306	227	55	15	3	6	33
Lansing, Mich.	U	U	U	U	U	U	U
Milwaukee, Wis.	159	115	32	9	1	2	23
Peoria, Ill.	82	65	9	3	2	3	15
Rockford, Ill.	71	54	11	4	-	2	7
South Bend, Ind.	55	45	8	2	-	-	8
Toledo, Ohio	170	127	32	6	3	2	16
Youngstown, Ohio	96	83	12	1	-	-	2
W.N. CENTRAL	775	544	160	36	16	18	95
Des Moines, Iowa	68	56	9	3	-	-	16
Duluth, Minn.	31	23	6	2	-	-	4
Kansas City, Kans.	43	30	9	1	2	1	7
Kansas City, Mo.	149	101	31	4	7	5	11
Lincoln, Nebr.	42	31	9	1	1	-	8
Minneapolis, Minn.	64	35	18	7	2	2	5
Omaha, Nebr.	127	91	27	4	1	4	17
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	94	68	19	4	1	2	9
Wichita, Kans.	157	109	32	10	2	4	18
S. ATLANTIC	1,497	976	324	119	39	39	147
Atlanta, Ga.	203	127	42	17	6	11	15
Baltimore, Md.	287	155	72	47	10	3	31
Charlotte, N.C.	165	104	40	10	4	7	29
Jacksonville, Fla.	222	153	53	7	4	5	18
Miami, Fla.	77	52	14	5	4	2	1
Norfolk, Va.	45	33	7	2	-	3	5
Richmond, Va.	79	48	17	9	2	3	10
Savannah, Ga.	82	52	23	5	1	1	7
St. Petersburg, Fla.	74	57	14	2	1	-	4
Tampa, Fla.	245	181	39	14	7	4	24
Washington, D.C.	U	U	U	U	U	U	U
Wilmington, Del.	18	14	3	1	-	-	3
E.S. CENTRAL	931	646	193	59	20	12	71
Birmingham, Ala.	287	201	60	17	7	1	27
Chattanooga, Tenn.	84	59	16	4	1	4	9
Knoxville, Tenn.	172	123	30	12	4	3	1
Lexington, Ky.	102	72	22	5	1	2	12
Memphis, Tenn.	133	89	31	7	4	2	9
Mobile, Ala.	107	70	26	8	3	-	6
Montgomery, Ala.	46	32	8	6	-	-	7
Nashville, Tenn.	U	U	U	U	U	U	U
W.S. CENTRAL	1,260	828	278	83	36	35	88
Austin, Tex.	84	61	18	4	-	1	12
Baton Rouge, La.	6	4	1	1	-	-	-
Corpus Christi, Tex.	U	U	U	U	U	U	U
Dallas, Tex.	274	171	65	22	11	5	26
El Paso, Tex.	97	74	14	5	3	1	4
Ft. Worth, Tex.	193	127	43	16	3	4	13
Houston, Tex.	426	256	109	26	14	21	27
Little Rock, Ark.	85	63	14	3	3	2	3
New Orleans, La.	39	32	7	-	-	-	-
San Antonio, Tex.	U	U	U	U	U	U	U
Shreveport, La.	56	40	7	6	2	1	3
Tulsa, Okla.	U	U	U	U	U	U	U
MOUNTAIN	954	643	216	57	20	18	89
Albuquerque, N.M.	136	88	32	8	4	4	6
Boise, Idaho	42	30	8	4	-	-	9
Colo. Springs, Colo.	138	92	30	9	3	4	7
Denver, Colo.	104	69	21	5	3	6	7
Las Vegas, Nev.	327	212	85	20	9	1	28
Ogden, Utah	31	25	4	-	1	1	3
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	34	26	6	1	-	1	5
Salt Lake City, Utah	142	101	30	10	-	1	24
Tucson, Ariz.	U	U	U	U	U	U	U
PACIFIC	3,368	2,542	561	163	60	41	433
Berkeley, Calif.	9	7	1	-	-	1	2
Fresno, Calif.	253	189	43	15	4	2	25
Glendale, Calif.	87	80	5	2	-	-	13
Honolulu, Hawaii	84	69	9	4	1	1	9
Long Beach, Calif.	106	76	23	5	2	-	21
Los Angeles, Calif.	1,738	1,309	285	88	33	23	231
Pasadena, Calif.	47	37	6	2	1	1	10
Portland, Oreg.	185	134	39	7	1	4	15
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	298	217	56	15	6	3	48
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	203	154	33	7	6	3	29
Santa Cruz, Calif.	U	U	U	U	U	U	U
Seattle, Wash.	151	104	28	14	4	1	12
Spokane, Wash.	64	54	6	3	1	-	9
Tacoma, Wash.	143	112	27	1	1	2	9
TOTAL	14,419¶	10,283	2,778	824	265	257	1,485

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.

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.

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.

☆U.S. Government Printing Office: 2004-633-140/69167 Region IV ISSN: 0149-2195