



MMWRTM

Morbidity and Mortality Weekly Report

Weekly

May 30, 2003 / Vol. 52 / No. 21

Public Health and Aging

Projected Prevalence of Self-Reported Arthritis or Chronic Joint Symptoms Among Persons Aged ≥ 65 Years — United States, 2005–2030

Arthritis and other rheumatic conditions are among the most common chronic diseases, affecting 70 million U.S. adults in 2001 (1), and comprise the leading cause of disability among U.S. adults (2). Arthritis prevalence increases with age, affecting approximately 60% of the U.S. population aged ≥ 65 years (1). As a result of better identification and treatment of other chronic diseases and lower mortality from infectious diseases, U.S. adults are living longer, and the U.S. population is aging (3). For this reason, the number of persons living with nonfatal but disabling conditions such as arthritis or chronic joint symptoms (CJS) might be increasing. To estimate the projected future burden of arthritis or CJS among persons aged ≥ 65 years, CDC applied data from the 2001 Behavioral Risk Factor Surveillance System (BRFSS) to projected national population data for 2005–2030 and state population data for 2025. This report summarizes the results of that analysis, which indicate that if arthritis prevalence rates remain stable, the number of affected persons aged ≥ 65 years will nearly double by 2030. Proven public health interventions should be applied and new interventions developed to improve function, decrease pain, and delay disability among persons with arthritis, particularly those at highest risk for functional impairment and disability.

BRFSS is a state-based, random-digit-dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥ 18 years. BRFSS is administered in all 50 states, the District of Columbia, and three U.S. territories (Guam, Puerto Rico, and the U.S. Virgin Islands) (4). The median response rate in 2001 was 51.1% (range: 33.4% [New Jersey]–81.5% [Puerto Rico]). Respondents were classified as having CJS if they answered “yes” to two questions: “In the past 12 months, have you had pain, aching, stiffness, or swelling in or around a

joint?” and “Were these symptoms present on most days for at least a month?” Respondents were considered to have physician-diagnosed arthritis if they answered “yes” to the question, “Have you ever been told by a doctor that you have arthritis?” Respondents reporting either CJS or physician-diagnosed arthritis were classified as having arthritis or CJS. Respondents who did not know, were not sure, or refused to answer were classified as not having either condition. Sex-specific prevalence rates (males: 51.6%; females: 63.9%) for arthritis or CJS among persons aged ≥ 65 years were multiplied by the sex-stratified U.S. Census projections of the population aged ≥ 65 years (5) for a year and summed to produce national arthritis or CJS prevalence projections, which were reported in 5-year intervals for 2005–2030. State-specific prevalence projections also were calculated by applying 2001 BRFSS state prevalence rates to U.S. Census projections for 2025, the latest year for which state-specific projected population estimates were available.

During 2005–2030, the percentage of the U.S. population aged ≥ 65 years is expected to increase from 12.9% to 20.0% (Table 1). If sex-specific prevalence rates remain the same for this population, the number of persons aged ≥ 65 years projected to have arthritis or CJS will nearly double, from

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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].

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Notifiable Disease Morbidity and 122 Cities Mortality Data

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TABLE 1. Projected* U.S. population aged ≥ 65 years for 2005–2030 and number with arthritis or chronic joint symptoms (CJS), by year — Behavioral Risk Factor Surveillance System, United States

Year	No. (in thousands)	% U.S. population	No. with arthritis or CJS
2005	36,370	(12.6)	21,356
2010	39,715	(13.2)	23,291
2015	45,959	(14.7)	26,917
2020	53,733	(16.5)	31,439
2025	62,641	(18.5)	36,624
2030	70,319	(20.0)	41,102

* On the basis of sex-specific rates of arthritis or CJS in 50 states, the District of Columbia, and three U.S. territories (Puerto Rico, Guam, and the U.S. Virgin Islands).

21.4 million in 2005 to 41.1 million in 2030. The percentage of persons aged ≥ 65 years projected to have arthritis or CJS in 2025 varied by area (median: 56.5%; range: 34.8% [Hawaii]–70.3% [Alabama]); in 11 states and Puerto Rico, approximately 60% of persons aged ≥ 65 years will have arthritis or CJS by 2025 (Table 2).

Reported by: JM Hootman, PhD, CG Helmick, MD, G Langmaid, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report indicate that by 2030, approximately 41 million persons aged ≥ 65 years will have arthritis or CJS, with a median state-specific prevalence of 56.5% by 2025. Previous lower projections of arthritis cases by 2020 (6) were based on rates for persons of all ages and used a different case definition from the 1989–1991 National Health Interview Survey. The broader BRFSS case definition includes persons with arthritis or those with CJS indicative of arthritis whose condition might be undiagnosed.

The findings in this report are subject to at least five limitations. First, projected prevalence estimates were based on rates calculated from self-reported data that were not confirmed by a physician. Second, BRFSS excludes military personnel residing on bases, institutionalized populations, and persons without telephones. Third, the median response rate in this survey (51.1%) was low; however, BRFSS demographics mirror U.S. Census distributions. Fourth, the 2001 BRFSS case definition might include some persons with acute, self-limiting musculoskeletal injuries rather than arthritis. To improve sensitivity, the 2002 BRFSS questions were changed; studies validating these questions are under way. Finally, the projected estimates presented in this report might be conservative because the analysis assumed steady age- and sex-specific rates of arthritis, and other factors affecting the prevalence of arthritis (e.g., therapy and the obesity epidemic) were not considered.

TABLE 2. Projected number and percentage for 2025 of persons aged ≥65 years with arthritis or chronic joint symptoms, by state/area — Behavioral Risk Factor Surveillance System, United States

State/Area*	No. (in thousands)	(%)
Alabama	723	(70.3)
Alaska	476	(51.6)
Arizona	837	(61.2)
Arkansas	434	(59.4)
California	3,555	(55.3)
Colorado	594	(56.9)
Connecticut	359	(53.4)
Delaware	95	(57.3)
District of Columbia	59	(63.7)
Florida	3,083	(56.5)
Georgia	976	(58.6)
Hawaii	100	(34.8)
Idaho	207	(55.3)
Illinois	1,327	(59.4)
Indiana	783	(62.2)
Iowa	371	(54.1)
Kansas	375	(62.1)
Kentucky	601	(65.6)
Louisiana	540	(57.1)
Maine	175	(57.6)
Maryland	583	(56.7)
Massachusetts	663	(53.0)
Michigan	1,213	(66.6)
Minnesota	595	(54.1)
Mississippi	378	(61.4)
Missouri	748	(59.4)
Montana	168	(61.4)
Nebraska	221	(54.6)
Nevada	260	(53.4)
New Hampshire	146	(53.5)
New Jersey	922	(55.8)
New Mexico	244	(55.4)
New York	1,817	(55.7)
North Carolina	508	(50.6)
North Dakota	92	(55.5)
Ohio	1,281	(55.6)
Oklahoma	193	(55.6)
Oregon	583	(55.3)
Pennsylvania	1,478	(55.6)
Puerto Rico	524	(61.5)
Rhode Island	119	(55.6)
South Carolina	536	(55.7)
South Dakota	104	(55.5)
Tennessee	808	(59.6)
Texas	2,526	(57.9)
Utah	283	(57.3)
Vermont	75	(54.4)
Virginia	925	(61.1)
Washington	914	(57.8)
West Virginia	283	(61.4)
Wisconsin	734	(61.2)
Wyoming	75	(51.9)
Median		(56.5)

* Population projections not available for Guam or the U.S. Virgin Islands.

To help the large numbers of older adults manage their arthritis or CJS, viable and affordable programs should be available at the community level (7). CDC's Arthritis Program funds 36 state health departments to enhance public health activities for arthritis. State programs disseminate evidence-based interventions, including the Arthritis Foundation's PACE[®] (People with Arthritis Can Exercise) and aquatics programs, and self-management education classes such as the Arthritis Self-Help Course. These interventions have reduced the impact of arthritis or CJS by improving function and reducing pain and the need for physician visits (8). Additional information about CDC-funded state arthritis programs and evidence-based interventions is available at <http://www.cdc.gov/nccdphp/arthritis>.

The aging of the population is a critical issue facing the U.S. public health, medical, and economic systems (3,9). Arthritis contributes substantially to disability, poor health-related quality of life, and increased direct and indirect medical costs (3,10). Decreasing this impact will require effective public health interventions that improve function, decrease pain, and delay disability among persons with arthritis. Fewer than 1% of persons with arthritis who could benefit from such interventions receive them (10). Specific interventions targeted toward persons with arthritis who are at highest risk for functional impairment and disability (e.g., persons who are overweight/obese or physically inactive) also should be developed.

References

1. CDC. Prevalence of self-reported arthritis or chronic joint symptoms among adults—United States, 2001. *MMWR* 2002;51:948–50.
2. CDC. Prevalence of disabilities and associated health conditions among adults—United States, 1999. *MMWR* 2001;50:120–5.
3. CDC. Trends in aging—United States and worldwide. *MMWR* 2003;52:101–6.
4. Powell-Griner E, Anderson J, Murphy W. State- and sex-specific prevalence of selected characteristics—Behavioral Risk Factor Surveillance System, 1994 and 1995. In: CDC surveillance summaries (August 1). *MMWR* 1997;46(No. SS-3).
5. Bureau of the Census, Economics and Statistics Administration, U.S. Department of Commerce, population estimates. Available at <http://www.census.gov/population/www/projections/popproj.html>.
6. Helmick CG, Lawrence RC, Pollard RA, Lloyd E, Heyse SP. Arthritis and other rheumatic conditions: who is affected now, who will be later? *Arthritis Care Res* 1995;8:203–11.
7. Knickman J, Snell E. The 2030 problem: caring for aging baby boomers. *Health Serv Res* 2002;37:849–84.
8. Brady T, Kruger J, Helmick C, Callahan L, Boutaugh M. Intervention programs for arthritis and other rheumatic diseases. *Health Educ Behav* 2003;30:44–63.
9. Buckwalter J, Heckman J, Petrie D. An AOA critical issue: aging of the North American population: new challenges for orthopedics. *J Bone Joint Surg* 2003;85-A:748–58.
10. Arthritis Foundation, Association of State and Territorial Health Officers, CDC. National Arthritis Action Plan: a public health strategy. Atlanta, Georgia: Arthritis Foundation, 1999.

Update: Cardiac-Related Events During the Civilian Smallpox Vaccination Program — United States, 2003

During the pre-event smallpox vaccination program, the U.S. Department of Defense (DOD) and CDC have received reports of cardiac events after vaccination. A case definition for myo/pericarditis as a smallpox vaccine-associated adverse event has been developed in conjunction with DOD, the joint Smallpox Vaccine Safety Working Group of the Advisory Committee on Immunization Practices (ACIP) and the Armed Forces Epidemiology Board (AFEB), and consulting cardiologists, immunologists, and epidemiologists. The term myo/pericarditis is used for surveillance purposes to refer to patients who have myocarditis, pericarditis, or both (myopericarditis). Myo/pericarditis cases are classified into suspected, probable, and confirmed categories. Suspected cases include those that are investigated and reported, although the level of certainty for the diagnosis is lower. These definitions were used to categorize all cardiac-related reports among civilian vaccinees received through May 9, 2003; a total of 21 cases of myo/pericarditis were ascertained. All have been reported previously (1–6); however, some have been reclassified. In addition, nine cases of ischemic cardiac events (i.e., myocardial infarction [MI] or angina) among civilian vaccinees have been reported previously (1–6). This report includes the case definition of myo/pericarditis and updates information on all reports of cardiac adverse events among 36,217 civilian vaccinees since the beginning of the civilian smallpox vaccination program reported through May 9 to CDC from the Vaccine Adverse Event Reporting System (VAERS).

Myo/pericarditis

In reports about the civilian program published previously, cases classified as myopericarditis included those occurring in persons reported to have chest pain and electrocardiogram (ECG) changes (e.g., ST-segment and T-wave abnormalities) within 30 days of vaccination without evidence of other causes (1–5). However, because myocarditis, which indicates inflammation of the myocardium and/or the myocardial conduction system, might manifest with dysrhythmias, the myo/pericarditis case definition now includes dysrhythmias as a clinical criterion (Box). The seven cases of dysrhythmias reported included two persons with atrial fibrillation, one with atrial ectopy and paroxysmal atrial fibrillation, one with supraventricular tachycardia, and three with frequent or sustained premature ventricular contractions (PVCs).

Among the 21 myo/pericarditis cases reported through May 9, a total of 15 had presentations consistent with the myocarditis component of the case definition (12 suspected and three probable), and six had presentations consistent with the pericarditis component (three suspected and three probable). Of the 21 myo/pericarditis patients, 19 (90%) were known to be revaccinees, and 15 (71%) were female; the median age was 48 years (range: 29–61 years). The median interval from vaccination to symptom onset was 12 days (range: 1–42 days). Three cases occurred within 4 days of vaccination; 11 (52%) persons were hospitalized, and six (29%) were evaluated in an emergency department (ED) without subsequent hospitalization. Among 18 patients with known echocardiogram results, six (29%) had findings that were consistent with myo/pericarditis: three with pericardial effusion and three with focal hypokinesis, two of which resolved on follow-up echocardiogram. Among 16 patients who had cardiac enzyme levels determined, one patient had elevated creatine kinase myocardial band (CK-MB) fractions but normal troponin levels. No fatalities occurred, and all patients have since recovered. Two representative cases of patients with dysrhythmias are described below.

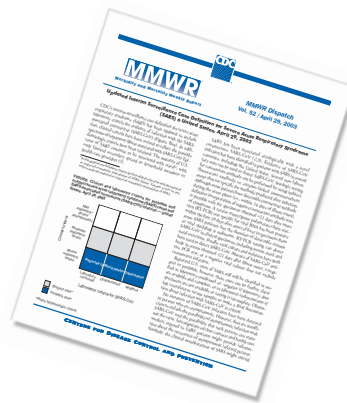
Case Reports

Case 1. On March 25, a woman aged 56 years was revaccinated; 12 days later, she had lightheadedness, fatigue, and pedal edema, and she later noted an irregular heart beat and new onset of dyspnea with exertion. She was evaluated by her primary-care physician and was found to have PVCs but an otherwise normal ECG. Ambulatory cardiac monitoring showed frequent PVCs (16% of QRS complexes) with frequent trigeminy. Symptoms worsened, and 22 days after vaccination, she was evaluated in an ED and hospitalized. She had elevated blood pressure (140/100 mm Hg). An ECG indicated nonspecific ST-segment changes. An echocardiogram revealed normal left-ventricular function (ejection fraction: 55%), and cardiac enzyme levels were normal. A thallium exercise stress test showed no evidence of ischemia or myocardial scarring. Treatment for the palpitations and hypertension was started, and the patient was discharged. As of May 27, the frequency of PVCs had decreased with no trigeminy, and the patient had returned to work.

Case 2. On March 11, a woman aged 52 years was vaccinated; 22 days after vaccination, she had a slight cough, malaise, weakness, and palpitations, and vomited twice. She had no other abdominal symptoms and reported no chest pain, shortness of breath, or diaphoresis. Medical history was positive for hypertension and hyperlipidemia controlled with

up-to-the-minute: *adj*

1 : extending up to the immediate present, including the very latest information; see also *MMWR*.



know what matters.



BOX. Case definition of myo/pericarditis for use in smallpox adverse events monitoring and response activity**Myo/pericarditis**

Myo/pericarditis is defined as a spectrum of disease caused by inflammation of the myocardium and/or pericardium. Patients might have symptoms and signs consistent with myocarditis, pericarditis, or both. For the purpose of surveillance reporting, patients with myocarditis or pericarditis will be reported as having myo/pericarditis. These categories are intended for surveillance purposes and not for use in individual diagnosis or treatment decisions.

Case Definition for Acute Myocarditis

A suspected case of acute myocarditis is defined by the following criteria and the absence of evidence of any other likely cause of symptoms or findings below:

- Presence of dyspnea, palpitations, or chest pain of probable cardiac origin in a patient with either one of the following:
 - Electrocardiogram (ECG) abnormalities beyond normal variants, not documented previously, including
 - ST-segment or T-wave abnormalities,
 - Paroxysmal or sustained atrial or ventricular arrhythmias,
 - AV nodal conduction delays or intraventricular conduction defects, or
 - Continuous ambulatory electrocardiographic monitoring that detects frequent atrial or ventricular ectopy
 - or
 - Evidence of focal or diffuse depressed left-ventricular (LV) function of indeterminate age identified by an imaging study (e.g., echocardiography or radionuclide ventriculography).

A probable case of acute myocarditis, in addition to the above symptoms and in the absence of evidence of any other likely cause of symptoms, has one of the following:

- Elevated cardiac enzymes, specifically, abnormal levels of cardiac troponin I, troponin T, or creatine kinase myocardial band (a troponin test is preferred);

- Evidence of focal or diffuse depressed LV function identified by an imaging study (e.g., echocardiography or radionuclide ventriculography) that is documented to be of new onset or of increased degree of severity (in the absence of a previous study, findings of depressed LV function are considered of new onset if, on follow-up studies, these findings resolve, improve, or worsen); or
- Abnormal result of cardiac radionuclide imaging (e.g., cardiac MRI with gadolinium or gallium-67 imaging) indicating myocardial inflammation.

A case of acute myocarditis is confirmed if histopathologic evidence of myocardial inflammation is found at endomyocardial biopsy or autopsy.

Case Definition for Acute Pericarditis

A suspected case of acute pericarditis is defined by the presence of

- Typical chest pain (i.e., pain made worse by lying down and relieved by sitting up and/or leaning forward) and
- No evidence of any other likely cause of such chest pain.

A probable case of acute pericarditis is a suspected case of pericarditis, or a case in a person with pleuritic or other chest pain not characteristic of any other disease, that, in addition, has one or more of the following:

- Pericardial rub, an auscultatory sign with one to three components per beat,
- ECG with diffuse ST-segment elevations or PR depressions without reciprocal ST depressions that are not previously documented, or
- Echocardiogram indicating the presence of an abnormal collection of pericardial fluid (e.g., anterior and posterior pericardial effusion or a large posterior pericardial effusion alone).

A case of acute pericarditis is confirmed if histopathologic evidence of pericardial inflammation is evident from pericardial tissue obtained at surgery or autopsy.

amlodipine, hydrochlorothiazide, and pravastatin. On examination in the ED, her pulse was 120 beats per minute and irregular; other vital signs and the physical examination were normal. An ECG indicated atrial fibrillation and nonspecific ST-segment and T-wave changes; the patient's rhythm converted spontaneously to normal sinus rhythm while in the

ED. Routine blood count and blood chemistries, including thyroid-stimulating hormone, were within normal limits; cholesterol level was slightly elevated. Total creatine kinase and troponin levels were normal; however, CK-MB fraction was elevated on three occasions. ECG indicated normal sinus rhythm and an echocardiogram showed normal left-ventricular

chamber size and function with mild left-ventricular hypertrophy. No wall-motion abnormalities or effusion were noted; heart valves were normal, and the ejection fraction was 55%–60%. The patient had a diagnosis of new-onset atrial fibrillation and suspected myocarditis. After 3 weeks, the patient returned to work, complaining of persistent fatigue but without recurrence of palpitations.

Ischemic Cardiac Events

As of May 9, nine cases of ischemic events had been reported; six persons had evidence of MI, and three had angina. All persons for whom information was available were revaccinees ($n =$ eight). Three were female, and the median age was 57 years (range: 46–65 years). Two female patients with MI, aged 55 and 57 years, died; both patients had been reported previously (1–2). The median interval between vaccination and symptom onset was 10 days (range: 0–26 days); seven events occurred within 3 weeks of vaccination. Six (67%) persons had histories of MI, angina, or exertional chest pain before vaccination and probably would not have been vaccinated if the exclusionary guidelines approved by the ACIP (published March 28 and revised April 4) (1,7) had been in place at the time of their vaccinations. One of the remaining three patients had a history of diabetes mellitus and hypertension, one had hypertension, and one had no known cardiac risk factors. As of May 9, no ischemic cardiac events had been reported among persons vaccinated since the new exclusionary criteria were established.

Background rates of cardiac ischemic events were used to determine if ischemic cases occurred at higher-than-expected rates. Data from three population-based cohort studies were used: the Framingham Offspring Cohort study, the Atherosclerosis Risk in Communities study, and the Coronary Artery Disease Risk Development in Young Adults study. The expected numbers of ischemic events were determined for a 3-week period, considered to be the perivaccination interval, and were based on the age and sex distributions of civilian vaccinees as of May 12. Patients who had ischemic events >3 weeks after vaccination ($n =$ two) and persons with angina who had pre-existing chest pain ($n =$ one) were excluded. Preliminary analysis indicates that the number of observed MIs ($n =$ five) was higher than the two that would be expected (95% predictive interval [PI] = 0.6–5.4) but not greater than the upper 95% PI, and that the number of patients ($n =$ one) with angina within the time interval was fewer than the 10 that would be expected (95% PI = 3.5–15.7).

Reported by: *Smallpox vaccine adverse events coordinators, Military Vaccine Agency, Army Medical Command, U.S. Dept of Defense, National Immunization Program, CDC.*

Editorial Note: The case definition for myo/pericarditis presented in this report is intended for surveillance purposes and not for use in individual diagnosis or treatment decisions. A total of 21 cases were reported by using this definition. Myo/pericarditis following smallpox vaccination is consistent with previous reports describing a likely causal association between vaccination and myo/pericarditis (1,2,8–10). The association between ischemic cardiac events and smallpox vaccination is unclear.

Reports now categorized as myo/pericarditis include patients with dysrhythmias, which have been reported previously in association with smallpox vaccination (9,10). Although the majority of patients in general clinical practice who have dysrhythmias do not have underlying myo/pericarditis, dysrhythmias can be a manifestation of myo/pericarditis and are therefore included. Among smallpox vaccinees, only cases of dysrhythmia for which alternative causes are excluded are categorized as myo/pericarditis.

The rate of myo/pericarditis reported in the civilian program, including suspected and probable cases (approximately 1:1,700 vaccinees), is higher than that reported in the military program (approximately 1:12,000 vaccinees) on the basis of one suspected case, 35 probable cases, and one confirmed case among 449,198 military vaccinees. Of the 37 cases in the military program, 36 identified by DOD manifested elevated cardiac enzymes (DOD, unpublished data, 2003). Only one of the patients with myo/pericarditis reported in the civilian program had elevated cardiac enzymes, yielding a rate of 1:36,000 vaccinees, which is closer to the rate among military vaccinees.

An investigation is in progress to determine if the ischemic cases in the civilian program are associated with vaccination. Surveillance for adverse cardiac events continues. Guidelines for evaluation and follow-up of patients with myo/pericarditis have been drafted, and studies to evaluate possible biologic mechanisms for cardiac adverse events following smallpox vaccination are being considered.

References

1. CDC. Cardiac adverse events following smallpox vaccination—United States, 2003. *MMWR* 2003;52:248–50.
2. CDC. Update: adverse events following smallpox vaccination—United States, 2003. *MMWR* 2003;52:278–82.
3. CDC. Update: adverse events following civilian smallpox vaccination—United States, 2003. *MMWR* 2003;52:313–5.
4. CDC. Update: adverse events following civilian smallpox vaccination—United States, 2003. *MMWR* 2003;52:343–5.
5. CDC. Update: adverse events following civilian smallpox vaccination—United States, 2003. *MMWR* 2003;52:360–3.
6. CDC. Update: adverse events following civilian smallpox vaccination—United States, 2003. *MMWR* 2003;52:475–7.
7. CDC. Supplemental recommendations on adverse events following smallpox vaccine in the pre-event vaccination program: recommendations of the Advisory Committee on Immunization Practices. *MMWR* 2003;52:282–4.

8. Karjalainen J, Heikkila J, Nieminen MS, et al. Etiology of mild acute infectious myocarditis. *Acta Medica Scandinavica* 1983;213:65–73.
9. Macadam DB, Whitaker W. Cardiac complication after vaccination for smallpox. *BMJ* 1962;5312:1099–100.
10. Ahlborg B, Linroth K, Nordgren B. ECG-changes without subjective symptoms after smallpox vaccination of military personnel. *Acta Medica Scandinavica* 1966;S464:127–34.

State Medicaid Coverage for Tobacco-Dependence Treatments — United States, 1994–2001

Tobacco use is the leading preventable cause of death in the United States (1). One of the national health objectives for 2010 is to increase insurance coverage of evidence-based treatment for nicotine dependence (i.e., total coverage of behavioral therapies and Food and Drug Administration [FDA]–approved pharmacotherapies) in Medicaid programs from 36 states to all states and the District of Columbia (DC) (objective 27.8) (2). To increase both the use of treatment by smokers attempting to quit and the number of smokers who quit successfully (3,4), the *Guide to Community Preventive Services* (5) recommends reducing the “out-of-pocket” cost of effective tobacco-dependence treatments (i.e., individual, group, and telephone counseling, and FDA–approved pharmacotherapies) for smokers. The 2000 Public Health Service (PHS) *Clinical Practice Guideline* supports expanded insurance coverage for tobacco-dependence treatments (6). In 2000, approximately 32 million low-income persons in the United States received their health insurance coverage through the federal-state Medicaid program (7); 11.5 million (36%) of these persons smoked (CDC, unpublished data, 2000). The amount and type of coverage for tobacco-dependence treatment offered by Medicaid has been reported for 1998 and 2000 from state surveys conducted by the Center for Health and Public Policy Studies (CHPPS) at the University of California, Berkeley (8). All states and DC were re-surveyed in 2001 about amount and type of coverage, and level of coverage since 1994. This report summarizes the results of the survey, which indicate that the number of Medicaid programs providing some coverage for tobacco-dependence counseling or medication increased from 34 in 2000 to 36 in 2001, but only one state offered coverage for all the counseling and pharmacotherapy treatments recommended by the 2000 PHS guideline. If the 2010 national health objective is to be achieved, Medicaid coverage for treatment of tobacco dependence should be increased dramatically.

In 2001, state Medicaid program directors were asked to identify staff members who were most knowledgeable about tobacco-dependence treatment coverage and programs; a

survey was faxed to the identified staff member in each state. Additional follow-up was conducted through telephone, e-mail, and fax; the response rate was 100%. The survey included 24 questions about coverage of tobacco-dependence treatments, the year coverage was first offered, treatments offered specifically to pregnant women, awareness and use of the 2000 PHS guideline (6), any program requirements related to patient co-payments for or provider coverage of tobacco-dependence treatments, and whether Medicaid recipients were notified of the availability of covered tobacco-dependence treatment. So that survey responses could be validated, all Medicaid programs were asked to submit a written copy of their coverage policies for tobacco-dependence treatments or other related documentation. Of 36 areas with programs that reported offering coverage in 2001, a total of 24 (67%) provided supporting documentation, six (17%) reported that tobacco-dependence treatments were covered under general benefits, and six (17%) did not submit any documentation.

In 2001, a total of 36 (71%) areas reported offering coverage for at least one form of tobacco-dependence treatment (Table 1), compared with 34 areas in 2000 (8); however, coverage status reported previously in 2000 was revised on the basis of additional information obtained in the 2001 survey about the source of financing and the purpose for which a treatment was covered. In 2000, Massachusetts reported coverage for tobacco-dependence treatments; in the 2001 survey, the state clarified that counseling services were covered by the Massachusetts Department of Public Health rather than by the Medicaid program and that Wellbutrin[®] was covered only as an antidepressant and not for treatment of tobacco dependence. In the 2000 survey, Utah reported not having any covered treatment; however, in 2001, the state reported having offered coverage for pregnant women since 2000. Of the 36 areas that offered any coverage in 2001, all but one covered pharmacotherapy treatments, including Zyban[®] (35 areas), Wellbutrin[®] (33), bupropion sustained release (33), nicotine nasal spray (26), nicotine inhaler (26), nicotine patch (25), and nicotine gum (24). Among the 35 areas with Medicaid programs covering any pharmacotherapy treatments, 16 (46%) required some form of patient cost sharing (range: \$0.50 to \$3.00 per prescription).

In 2001, a total of 10 states offered some form of tobacco-cessation counseling services (Table 1). Utah restricted counseling services to pregnant women only, and Rhode Island offered counseling services but did not provide coverage for any drug treatments.

In 2001, Medicaid program staff in 28 (55%) states reported being aware of the 2000 PHS guideline (Table 2), compared with 20 in 2000 (CHPPS, unpublished data, 2000).

TABLE 1. State Medicaid program coverage of tobacco-dependence treatments*, by area, type of coverage, and year coverage began — United States, 1994–2001†

Area	Year any coverage began	Medication coverage					Counseling coverage		
		Nasal spray	Inhaler	Zyban®	Gum	Patch	Group	Individual	Telephone
Arizona	1997	—	—	1997	—	—	—	—	—
Arkansas	1999	—	—	1999	—	—	—	—	—
California	1996	1996	1997	1997	1996	1996	—	—	—
Colorado	1996	1996	1997	1997	1996	1996	—	—	—
Delaware	1996	1996	1997	1997	1996	1996	—	—	—
District of Columbia	1996	1996	—	1997	—	—	—	—	—
Florida	1998	—	—	1998	1998	1998	1998	1998	—
Hawaii	1998	1999	1999	1999	—	—	—	—	—
Illinois	2000	2000	2000	2000	2000	2000	—	—	—
Indiana	1999	1999	1999	1999	1999	1999	—	1999	—
Kansas	1999	—	—	1999	—	1999	1999	1999	—
Louisiana	1996	1996	1997	1997	—	—	—	—	—
Maine	1996	1996	1996	1996	1996	1996	—	2001	—
Maryland	1996	1996	1997	1997	—	—	—	—	—
Michigan	1997	—	—	1997	1997	1997	—	—	—
Minnesota	1996	1996	1997	1997	1996	1996	1996	1996	—
Mississippi	1996	2001	2001	2001	2001	2001	—	—	—
Montana	1996	2001	2001	1997	1996	1996	—	—	—
Nevada	1996	1996	1997	1997	1996	1996	—	—	—
New Hampshire	1996	1996	1997	1997	1996	1996	—	—	—
New Jersey	1996	1996	1997	1997	1996	1996	—	—	—
New Mexico	1996	1996	1997	1997	1996	1996	—	—	—
New York	1999	1999	1999	1999	2000	2000	—	—	—
North Carolina	1996	1996	1997	1997	—	—	—	—	—
North Dakota	1996	—	—	1996	1996	1996	—	—	—
Ohio	1996	—	1998	1998	1998	1998	—	—	—
Oklahoma	1999	—	—	1999	1999	1999	—	—	—
Oregon	1998	1998	1998	1998	1998	1998	1998	1998	1998
Rhode Island	1994	—	—	—	—	—	1994	1994	—
South Dakota	2001	—	—	2001	—	—	—	—	—
Texas	1996	1996	1997	1997	1996	1997	—	—	—
Utah	2000	P [§]	P	P	P	P	P	P	P
Vermont	1999	1999	1999	1999	1999	1999	—	—	—
Virginia	1996	1996	1997	1997	—	—	—	—	—
West Virginia	2000	2000	2000	2000	2000	2000	—	2000	2000
Wisconsin	1996	1996	1997	1997	—	—	—	1999	—
Total	36	26	26	35	24	25	6	10	3

* On the basis of response to the question, "Does your state Medicaid program cover any of the following tobacco-dependence treatments?" Each state also was asked to provide documentation regarding the year each covered treatment was first offered.

† N = 36. In 2001, a total of 15 states with Medicaid programs (Alabama, Alaska, Connecticut, Georgia, Idaho, Iowa, Kentucky, Massachusetts, Missouri, Nebraska, Pennsylvania, South Carolina, Tennessee, Washington, and Wyoming) covered none of the tobacco-dependence treatments recommended in the 2000 Public Health Service *Clinical Practice Guideline*.

§ Medicaid coverage for pregnant women only.

A total of 16 (31%) states reported using the 1996 Agency for Health Care Policy and Research guideline or the 2000 PHS guideline to design tobacco-dependence treatment benefits or programs. Ten (20%) states required contracted providers or health plans to implement the brief counseling protocol recommended by the 2000 PHS guideline, six (11%) states required providers or health plans to document tobacco-use status in patients' medical charts, and 12 (24%) states supported tobacco-dependence treatment practices (e.g., by distributing materials on available treatments or self-help kits or by giving providers feedback on their performance in treating tobacco dependence). Twelve (33%) Medicaid programs

that provided coverage informed their recipients that tobacco-dependence treatment benefits were available.

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Editorial Note: The number of Medicaid programs offering any form of tobacco-dependence treatments increased from 2000 to 2001, but coverage for the 2000 PHS guideline-recommended treatments remained low. In 2001, a total of 15 areas offered no coverage for

TABLE 2. State Medicaid program awareness and use of the Public Health Service (PHS) *Clinical Practice Guideline*, Medicaid contract requirements for documentation of tobacco use and provision of PHS brief counseling protocol, and state Medicaid programs that informed beneficiaries of the availability of treatment coverage — United States, 2001*

State	Aware of PHS guideline [†]	Used guideline [§]	Required documented tobacco use [¶]	Required PHS counseling protocol ^{**}	Provided support to providers ^{††}	Informed smokers of coverage ^{§§}
Arizona	yes	yes	no	no	no	yes
California	yes	no	yes	yes	no	yes
Connecticut	no	no	no	no	no	no
Delaware	no	no	no	no	yes	yes
Florida	yes	yes	yes	yes	yes	yes
Georgia	yes	yes	no	no	no	no
Hawaii	yes	no	no	no	yes	no
Indiana	yes	yes	no	no	yes	yes
Kansas	no	no	no	no	yes	yes
Kentucky	yes	no	yes	yes ^{¶¶}	no	no
Maine	yes	yes	no	no	yes	no
Massachusetts	yes	no	no	yes ^{***}	no	no
Michigan	yes	no	no	no	no	no
Minnesota	yes	yes	no	no	yes	no
Mississippi	yes	yes	no	no	yes	yes
Montana	yes	yes	no	no	no	no
Nebraska	yes	yes	no	no	no	no
Nevada	yes	no	no	no	no	no
New Jersey	no	no	yes	yes	no	no
New Mexico	yes	no	no	no	no	no
New York	yes	yes	no	yes ^{¶¶}	yes	yes
North Carolina	no	no	no	yes ^{†††}	no	no
North Dakota	yes	no	no	no	no	yes
Oklahoma	yes	yes	no	no	no	no
Oregon	yes	yes	no	yes ^{¶¶}	yes	yes
Rhode Island	yes	no	yes	yes ^{¶¶}	no	no
South Dakota	no	no	no	no	no	no
Tennessee	yes	no	no	no	no	no
Utah	yes	yes	no	no	yes	yes
Vermont	yes	no	no	no	no	no
Virginia	yes	no	no	no	no	no
Washington	yes	yes	no	no	no	no
West Virginia	yes	yes	yes	yes	yes	yes
Wisconsin	yes	yes	no	no	no	no
Total yes responses	28	16	6	10	12	12

* N = 34. A total of 16 states with Medicaid programs (Alabama, Alaska, Arkansas, Colorado, Idaho, Illinois, Iowa, Louisiana, Maryland, Missouri, New Hampshire, Ohio, Pennsylvania, South Carolina, Texas, and Wyoming) and the District of Columbia answered "no" to all questions.

[†] On the basis of response to the question, "In June of 2000, the Surgeon General released an updated guideline published by the Public Health Service (PHS) entitled, *Clinical Practice Guideline: Treating Tobacco Use and Dependence*. Are you aware of this new guideline?"

[§] On the basis of response to the question, "Has your state Medicaid program used either the 1996 Agency for Health Care Policy and Research guideline or the 2000 PHS guideline in any way?"

[¶] On the basis of response to the question, "Does your state Medicaid program require providers or health plans with which you contract to document tobacco-use status for every patient in the medical record?"

^{**} On the basis of response to the question, "Does your state Medicaid program require providers or health plans with which you contract to carry out any of the following activities?"

^{††} On the basis of response to the question, "Does your state Medicaid program support providers' or health plans' tobacco-treatment practices in any of the following ways?"

^{§§} On the basis of response to the question, "Do you periodically inform tobacco users of the availability of covered tobacco-dependence treatment benefits under Medicaid and encourage them to use these benefits?"

^{¶¶} Required of health plan only.

^{***} Limited to early periodic screening detection and treatment population.

^{†††} Limited to ask, assess, and arrange for Maternity Care Coordination and Child Services Coordination, and required of providers only.

tobacco-dependence treatments, and only Oregon provided coverage for all treatment options recommended by the 2000 PHS guideline (6). In addition, some states that did offer coverage required patients to share the cost, which has been proven to decrease use of treatment (9). Such co-payments might be even more of a barrier for low-income populations. Because decreasing the cost of effective treatments increases

successful smoking cessation (5), cost barriers for low-income smokers should be reduced. In addition, because only one third of states that offer benefits inform their beneficiaries of these benefits, Medicaid smokers interested in quitting might not realize they can obtain financial assistance for tobacco-dependence treatment.

The findings in this report are subject to at least three limitations. First, for some states, data are self-reported, and among the 36 states with Medicaid programs that reported offering coverage, six states did not provide documentation of their policies. The absence of a written policy increases the likelihood of reporting errors. Second, these results might differ from other ratings of coverage because of interpretation of unwritten policies. Finally, the data presented in this report are current as of December 2001 and do not reflect coverage decisions made after that date.

Because Medicaid recipients have approximately 50% greater smoking prevalence than the overall U.S. adult population (8), they are disproportionately affected by tobacco-related disease and disability. Substantial action to improve coverage will be needed if the United States is to achieve the national health objective for 2010 of reducing the prevalence of smoking to 12% among adults (i.e., persons aged ≥ 18 years) (objective 27.1) (2). To help states implement evidence-based tobacco-dependence treatment and to improve Medicaid service contracts, CDC is collaborating with George Washington University in developing model purchasing specifications (10). These specifications encourage state Medicaid contracts to require that health-care providers and health plans adopt the brief counseling protocol and systems components outlined in the 2000 PHS guideline. States also are encouraged to use their contracts to track the number of Medicaid smokers and the number of smokers who receive advice to quit, brief cessation counseling, and medication. Finally, states are encouraged to cover all recommended pharmacotherapies and counseling under Medicaid and to promote their use actively.

References

1. McGinnis JM, Foege WH. Actual causes of death in the United States. *JAMA* 1993;270:2207–12.
2. 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. Department of Health and Human Services, 2000.
3. Halpin Schaffler H, McMenamin S, Olson K, Boyce-Smith G, Rideout JA, Kamil J. Variations in treatment benefits influence smoking cessation: results of a randomized controlled trial. *Tob Control* 2001;10:175–80.
4. Curry SJ, Grothaus LC, McAfee T, Pabiniak C. Use and cost-effectiveness of smoking cessation services under four insurance plans in a health maintenance organization. *N Engl J Med* 1998;339:673–9.
5. Hopkins DP, Briss PA, Ricard CJ, et al. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *Am J Prev Med* 2001;20:16S–66S.
6. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence: clinical practice guideline. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, 2000.
7. Kaiser Family Foundation. Medicaid enrollment: Kaiser Commission on Medicaid and the Uninsured. Washington, DC: Kaiser Family Foundation, 2000.

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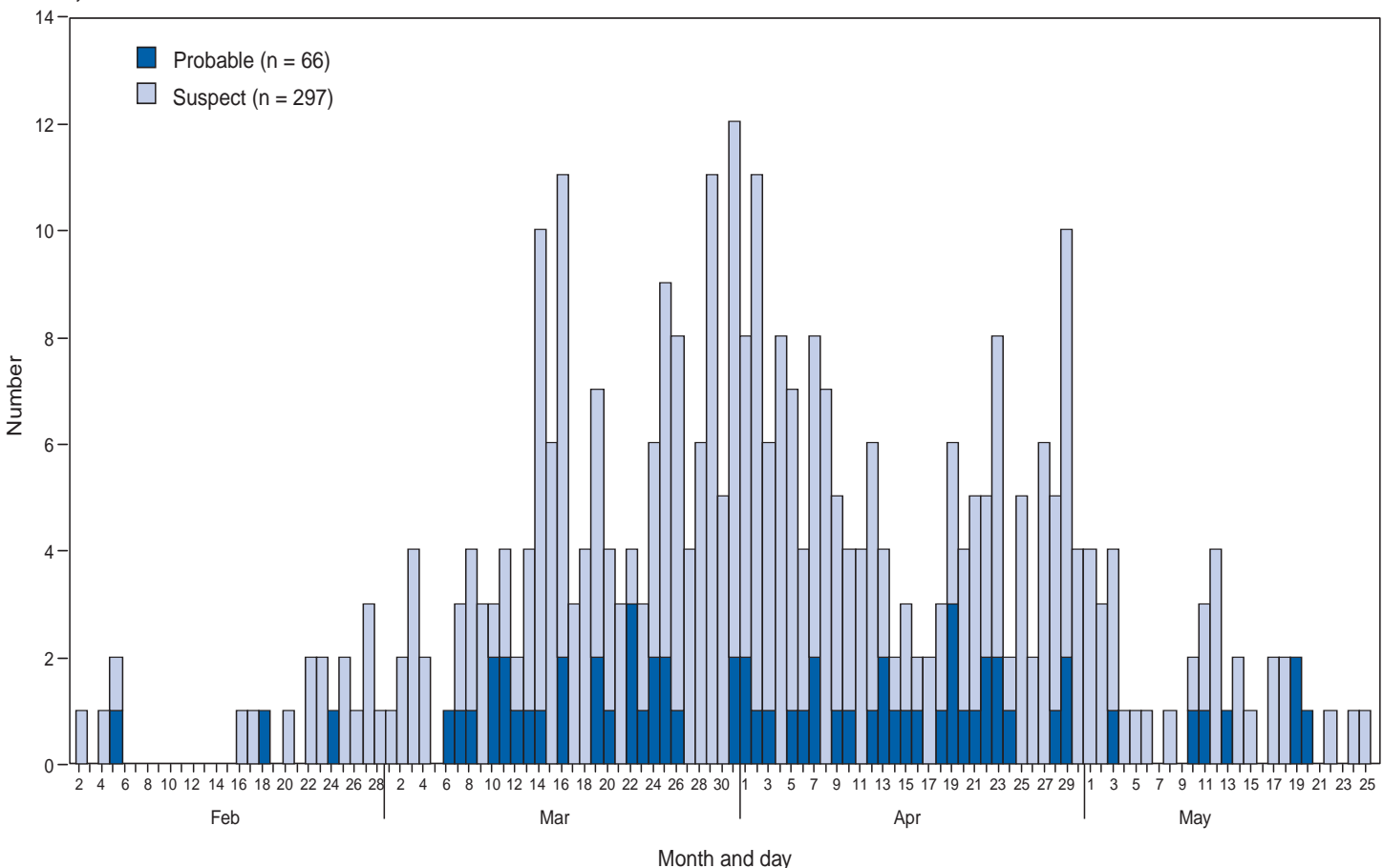
8. CDC. State Medicaid coverage for tobacco-dependence treatments—United States, 1998 and 2000. *MMWR* 2002;50:979–82.
9. Solanki G, Halpin Schauffler H. Cost-sharing and the utilization of clinical preventive services. *Am J Prev Med* 1999;17:127–33.
10. George Washington University Medical Center School of Public Health and Health Services. Sample purchasing specifications related to tobacco-use prevention and cessation: a technical assistance document. Available at <http://www.gwhealthpolicy.org/newsps/tobacco>.

Update: Severe Acute Respiratory Syndrome — United States, May 28, 2003

CDC continues to work with state and local health departments, the World Health Organization (WHO), and other partners to investigate cases of severe acute respiratory syndrome (SARS). This report updates SARS cases reported worldwide and in the United States and reports a seventh laboratory-confirmed U.S. case.

During November 1, 2002–May 28, 2003, a total of 8,240 SARS cases were reported to WHO from 28 countries, including the United States; 745 deaths (case-fatality proportion: 9.0%) have been reported (1). The 363 SARS cases identified in the United States have been reported from 41 states and Puerto Rico, with 297 (82%) cases classified as suspect SARS and 66 (18%) classified as probable SARS (more severe illnesses characterized by the presence of pneumonia or acute respiratory distress syndrome) (Figure, Table) (2). Of the 66 probable SARS patients, 43 (65%) were hospitalized, and two (3%) required mechanical ventilation. No SARS-related deaths have been reported in the United States. Of 66 probable cases, 64 (97%) were attributed to international travel to areas with documented or suspected community transmission of SARS within the 10 days before illness onset; the remaining two (3%) probable cases occurred in a health-care worker who provided care to a SARS patient and a household contact of a SARS patient. Since the last update, new cases of SARS have been reported in Toronto, Canada, and CDC has

FIGURE. Number* of reported cases of severe acute respiratory syndrome, by classification and date of illness onset — United States, 2003



* N = 363.

TABLE. Number* and percentage of reported severe acute respiratory syndrome (SARS) cases, by selected characteristics — United States, 2003

Characteristic	Probable cases† (n = 66)		Suspect cases† (n = 297)	
	No.	(%)§	No.	(%)§
Age (yrs)				
0–4	8	(12)	45	(15)
5–9	1	(2)	13	(4)
10–17	4	(6)	9	(3)
18–64	39	(59)	206	(69)
≥65	13	(20)	21	(7)
Unknown	1	(2)	3	(1)
Sex				
Female	27	(41)	143	(48)
Male	39	(59)	153	(52)
Unknown	0	(0)	1	(0)
Race				
White	29	(44)	163	(55)
Black	1	(2)	7	(2)
Asian	28	(42)	97	(33)
Other	3	(5)	6	(2)
Unknown	5	(8)	24	(8)
Exposure				
Travel¶	64	(97)	270	(91)
Close contact	1	(2)	23	(8)
Health-care worker	1	(2)	4	(1)
Hospitalized >24 hrs**				
Yes	43	(65)	75	(25)
No	23	(35)	218	(73)
Unknown	0	(0)	4	(1)
Required mechanical ventilation				
Yes	2	(3)	2	(1)
No	59	(89)	288	(97)
Unknown	5	(8)	7	(2)
SARS-associated coronavirus laboratory findings				
Confirmed	7	(11)	0	(0)
Negative	29	(44)	111	(37)
Undetermined††	30	(45)	186	(63)

* N = 363.

† CDC. Updated interim U.S. case definition of severe acute respiratory syndrome (SARS). Available at <http://www.cdc.gov/ncidod/sars/casedefinition.htm>.

§ Percentages might not total 100% because of rounding.

¶ To mainland China; Hong Kong Special Administrative Region, China; Hanoi, Vietnam; Singapore; Toronto, Canada; or Taiwan.

** As of May 28, no SARS-related deaths have been reported in the United States.

†† Collection and/or laboratory testing of specimens has not been completed.

reissued a travel alert for Toronto (3). Consequently, the surveillance case definition continues to include cases in persons whose illness is consistent with the clinical criteria and began within 10 days of travel to Toronto (2).

Serologic testing for antibody to SARS-associated coronavirus (SARS-CoV) has been performed for 32 (48%) probable cases and was positive for seven, six of which have

been described previously as laboratory-confirmed cases. For one patient, a reverse transcriptase polymerase chain reaction (RT-PCR) assay detected SARS-CoV ribonucleic acid in a sputum specimen collected 14 days after illness onset (4,5); this patient subsequently had antibody to SARS-CoV. The seventh patient, a household contact of one of the six patients with positive serology, was reported previously as a probable SARS patient on the basis of clinical and epidemiologic criteria (4). Among the seven patients, four had positive serology on or before day 12 after onset of symptoms. The other three had negative serologic tests on day 4, 6, and 14, respectively, and a positive test in the next available serum sample on day 28, 25, and 41, respectively. Serologic testing has been performed for 111 (37%) suspect cases; antibody was not detected for any of those tested.

CDC measures SARS-CoV-specific total IgG, IgM, and IgA antibodies by both enzyme-linked immunosorbent assay (ELISA) and indirect immunofluorescence antibody (IFA) (6). A serum specimen is reported as positive when both tests are positive. Antibodies against other human and nonhuman coronaviruses do not react in these assays, and tests on sera from 384 persons without SARS-CoV infection all were negative. These findings indicate that SARS-CoV has emerged recently within the population and that the serologic methods are specific for detection of antibody against SARS-CoV and have a low false-positive rate.

Rapid identification of SARS-CoV as the etiologic agent of SARS and extensive international collaboration has aided in the development of this diagnostic test. Of the 66 probable SARS cases, convalescent serum has been collected for 40 (61%). Testing of convalescent serum is invaluable in confirming infection with SARS-CoV, and every effort should be made to obtain follow-up specimens >21 days after onset of illness.

Reported by: State and local health departments. SARS Investigative Team, CDC.

References

1. World Health Organization. Cumulative number of reported cases of severe acute respiratory syndrome (SARS). Available at http://www.who.int/csr/sarscountry/2003_05_28/en.
2. CDC. Updated interim U.S. case definition of severe acute respiratory syndrome (SARS). Available at <http://www.cdc.gov/ncidod/sars/casedefinition.htm>.
3. CDC. Travel alert reinstated: Toronto, Ontario, Canada. Available at http://www.cdc.gov/travel/other/sars_can.htm.
4. CDC. Severe acute respiratory syndrome (SARS) and coronavirus testing—United States, 2003. MMWR 2003;52:297–302.
5. CDC. Update: severe acute respiratory syndrome—United States, 2003. MMWR 2003;52:357–60.
6. Ksiazek TG, Erdman D, Goldsmith CS, et al. A novel coronavirus associated with severe acute respiratory syndrome. N Engl J Med 2003;348:1953–66.

Notice to Readers

World No Tobacco Day, May 31, 2003

“Tobacco-Free Film and Fashion” is the theme designated by the World Health Organization (WHO) for this year’s World No Tobacco Day, May 31, 2003. The event is intended to raise awareness about the dangers of tobacco use and to heighten concern about the depiction of tobacco use in film and fashion. Evidence suggests that when celebrities smoke on screen, audiences, particularly young audiences, imitate them (1). Films depicting tobacco use might be increasing, and they reinforce misleading perceptions that smoking is a widespread, socially desirable, and normal behavior (2). In addition, these films seldom convey the long-term negative health consequences of tobacco use.

Through collaboration with the American Lung Association of Sacramento Emigrant Trails, and a grant from the California Department of Health Services, CDC released a video, “Scene Smoking: Cigarettes, Cinema, and the Myth of Cool.” This educational video, accompanied by a curriculum for high school and college film, theater, and fine arts students, is being disseminated to increase media literacy and encourage discussion about tobacco depiction in film (e.g., whether smoking on film is a First Amendment issue) and

other issues concerning social responsibility. CDC also provides technical assistance to writers and producers of television programming and movies to discourage tobacco use in story lines. Because of this initiative, television programming during 2002–2003 featured numerous antismoking messages, including an evening devoted to antismoking story lines in support of the American Cancer Society’s Great American Smokeout in November.

Resources for CDC’s Celebrities Against Smoking Campaign (3) are available to WHO and its partners. These items include posters, educational videos, and public service announcements featuring celebrity spokespersons. Additional information about World No Tobacco Day 2003 is available from WHO at http://www.who.dk/tobaccofree/WorldNo/20030131_1 and from CDC at <http://www.cdc.gov/tobacco>.

References

1. Tickle JJ, Sargent JD, Dalton MA, Beach ML, Heatherton TF. Favourite movie stars, their tobacco use in contemporary movies, and its association with adolescent smoking. *Tob Control* 2001;10:16–22.
2. Sargent JD, Tickle JJ, Beach ML, Dalton MA, Ahrens MB, Heatherton TF. Brand appearances in contemporary cinema films and contribution to global marketing of cigarettes. *Lancet* 2001;357:29–32.
3. CDC. Celebrities against smoking. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC. Available at <http://www.cdc.gov/tobacco/celebs.htm>.

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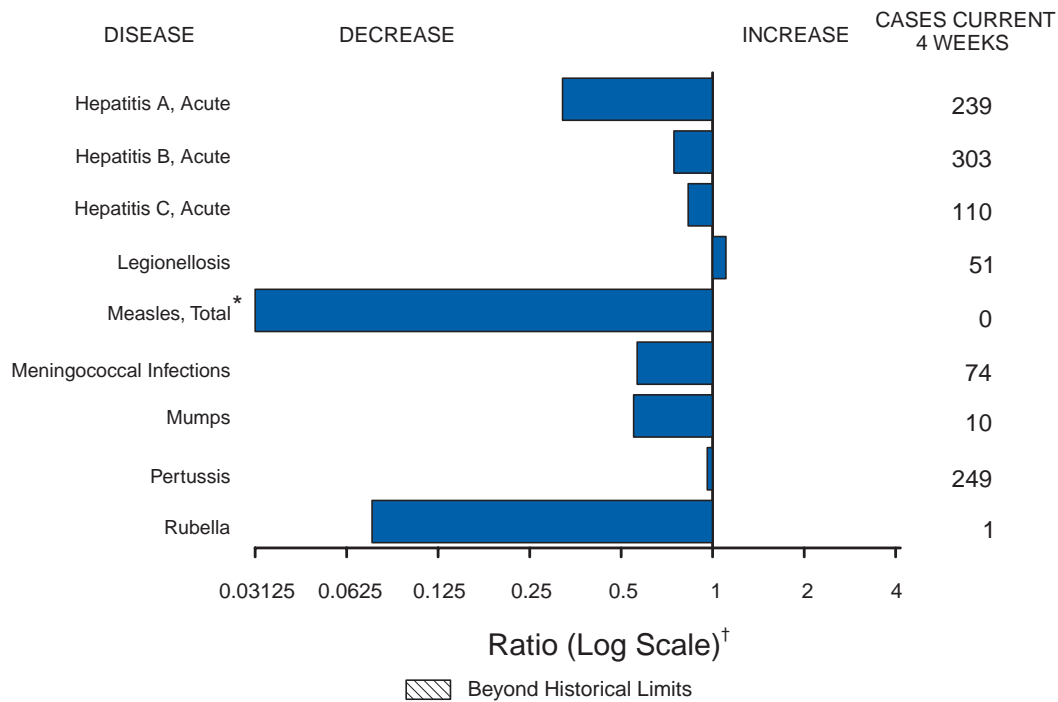
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FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals May 24, 2003, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 21 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 May 24, 2003 (21st Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	1	Hansen disease (leprosy)†	20	34
Botulism:	-	-	Hantavirus pulmonary syndrome†	6	6
foodborne	5	6	Hemolytic uremic syndrome, postdiarrheal†	45	44
infant	21	28	HIV infection, pediatric‡§	91	63
other (wound & unspecified)	8	4	Measles, total	11¶	7**
Brucellosis†	26	46	Mumps	78	120
Chancroid	14	36	Plague	-	1
Cholera	-	4	Poliomyelitis, paralytic	-	-
Cyclosporiasis†	13	56	Psittacosis†	5	11
Diphtheria	-	-	Q fever†	29	19
Ehrlichiosis:	-	-	Rabies, human	-	1
human granulocytic (HGE)†	17	37	Rubella	4	4
human monocytic (HME)†	26	15	Rubella, congenital	1	2
other and unspecified	-	2	Streptococcal toxic-shock syndrome†	78	62
Encephalitis/Meningitis:	-	-	Tetanus	2	8
California serogroup viral†	-	-	Toxic-shock syndrome	49	45
eastern equine†	-	-	Trichinosis	2	10
Powassan†	-	-	Tularemia†	8	11
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 April 27, 2003.
 ¶ Of 11 cases reported, 10 were indigenous and one was imported from another country.
 ** Of seven cases reported, four were indigenous and three were imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 24, 2003, and May 25, 2002 (21st 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	15,551	14,844	316,462	326,815	1,291	1,633	691	841	-	-
NEW ENGLAND	501	527	10,639	10,700	-	-	40	39	-	-
Maine	23	8	771	569	N	N	4	1	-	-
N.H.	12	15	561	649	-	-	3	9	-	-
Vt.	6	6	388	301	-	-	-	7	-	-
Mass.	227	311	4,307	4,275	-	-	17	12	-	-
R.I.	39	40	1,296	1,041	-	-	7	5	-	-
Conn.	194	147	3,316	3,865	N	N	2	4	-	-
MID. ATLANTIC	3,357	3,159	33,363	35,391	-	-	85	123	-	-
Upstate N.Y.	180	188	7,582	6,292	N	N	30	25	-	-
N.Y. City	1,625	1,636	12,250	12,162	-	-	27	47	-	-
N.J.	602	616	4,060	5,020	-	-	3	11	-	-
Pa.	950	719	9,471	11,917	N	N	25	40	-	-
E.N. CENTRAL	1,394	1,331	57,315	60,419	3	10	146	241	-	-
Ohio	230	262	15,826	15,504	-	-	24	55	-	-
Ind.	227	156	6,163	6,793	N	N	17	19	-	-
Ill.	595	558	16,226	19,157	-	2	16	49	-	-
Mich.	275	282	13,140	12,212	3	8	32	45	-	-
Wis.	67	73	5,960	6,753	-	-	57	73	-	-
W.N. CENTRAL	288	254	18,286	18,262	-	-	68	81	-	-
Minn.	57	45	3,623	4,303	N	N	36	29	-	-
Iowa	34	39	1,602	2,053	N	N	10	7	-	-
Mo.	137	115	6,955	5,719	-	-	6	12	-	-
N. Dak.	-	-	513	512	N	N	3	5	-	-
S. Dak.	7	2	1,011	881	-	-	11	5	-	-
Nebr.	22	21	1,711	1,851	-	-	2	17	-	-
Kans.	31	32	2,871	2,943	N	N	-	6	-	-
S. ATLANTIC	4,565	5,010	61,849	61,142	1	1	110	118	-	-
Del.	81	95	1,255	1,117	N	N	1	1	-	-
Md.	415	811	6,653	6,234	1	1	9	5	-	-
D.C.	478	206	1,006	1,333	-	-	-	3	-	-
Va.	427	340	7,195	6,677	-	-	12	1	-	-
W. Va.	33	39	1,006	993	N	N	-	1	-	-
N.C.	519	399	10,198	9,408	N	N	14	17	-	-
S.C.	316	368	5,854	5,986	-	-	2	2	-	-
Ga.	613	786	12,751	12,535	-	-	47	44	-	-
Fla.	1,683	1,966	15,931	16,859	N	N	25	44	-	-
E.S. CENTRAL	623	680	21,024	21,715	N	N	44	52	-	-
Ky.	67	109	3,197	3,594	N	N	9	1	-	-
Tenn.	270	270	7,467	6,841	N	N	11	27	-	-
Ala.	143	142	5,593	6,744	-	-	21	20	-	-
Miss.	143	159	4,767	4,536	N	N	3	4	-	-
W.S. CENTRAL	1,661	1,801	39,553	43,883	-	-	32	27	-	-
Ark.	48	122	2,885	2,851	-	-	1	4	-	-
La.	195	431	6,103	7,634	N	N	1	7	-	-
Okla.	75	95	3,976	4,193	N	N	4	3	-	-
Tex.	1,343	1,153	26,589	29,205	-	-	26	13	-	-
MOUNTAIN	586	487	18,463	20,228	926	1,099	36	47	-	-
Mont.	8	6	410	696	N	N	7	4	-	-
Idaho	10	9	1,037	961	N	N	6	15	-	-
Wyo.	3	3	409	358	-	-	1	5	-	-
Colo.	128	107	4,202	5,717	N	N	7	8	-	-
N. Mex.	44	33	2,497	3,103	-	4	-	6	-	-
Ariz.	272	179	5,972	5,930	907	1,074	3	5	-	-
Utah	27	22	1,780	930	4	5	9	1	-	-
Nev.	94	128	2,156	2,533	15	16	3	3	-	-
PACIFIC	2,576	1,595	55,970	55,075	360	523	130	113	-	-
Wash.	180	173	6,359	5,875	N	N	12	9	-	-
Oreg.	108	152	3,103	2,737	-	-	16	15	-	-
Calif.	2,246	1,237	44,457	43,286	360	523	102	88	-	-
Alaska	9	2	1,466	1,469	-	-	-	-	-	-
Hawaii	33	31	585	1,708	-	-	-	1	-	-
Guam	2	1	-	-	-	-	-	-	-	-
P.R.	437	426	483	1,245	N	N	N	N	-	-
V.I.	13	50	-	78	-	-	-	-	-	-
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 April 27, 2003.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending May 24, 2003, and May 25, 2002 (21st 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	408	572	64	28	46	5	5,406	7,000	118,860	138,759
NEW ENGLAND	23	40	9	4	5	1	392	613	2,653	3,181
Maine	3	2	1	-	-	-	47	65	87	29
N.H.	5	5	-	-	-	-	14	19	43	52
Vt.	-	1	-	-	-	-	35	47	32	42
Mass.	6	22	1	2	5	1	184	328	1,070	1,373
R.I.	1	3	-	-	-	-	44	43	389	380
Conn.	8	7	7	2	-	-	68	111	1,032	1,305
MID. ATLANTIC	24	46	2	-	12	2	972	1,527	12,811	16,494
Upstate N.Y.	17	30	1	-	8	-	314	415	2,862	3,282
N.Y. City	3	3	-	-	-	-	418	584	4,565	4,970
N.J.	4	13	-	-	-	-	56	179	2,075	3,125
Pa.	N	N	1	-	4	2	184	349	3,309	5,117
E.N. CENTRAL	93	164	8	5	7	-	908	1,211	25,886	28,975
Ohio	25	26	8	2	7	-	318	315	8,922	8,478
Ind.	12	13	-	-	-	-	-	-	2,403	2,929
Ill.	17	57	-	2	-	-	206	386	7,169	9,605
Mich.	20	28	-	1	-	-	251	318	5,374	5,644
Wis.	19	40	-	-	-	-	133	192	2,018	2,319
W.N. CENTRAL	57	73	4	5	6	-	551	666	6,147	7,066
Minn.	21	22	3	4	-	-	211	234	902	1,223
Iowa	7	17	-	-	-	-	80	94	334	469
Mo.	18	16	N	N	N	N	134	181	3,251	3,392
N. Dak.	1	-	-	-	1	-	12	6	23	28
S. Dak.	2	1	-	-	-	-	18	24	74	96
Nebr.	5	10	1	1	-	-	50	59	545	661
Kans.	3	7	-	-	5	-	46	68	1,018	1,197
S. ATLANTIC	39	49	21	10	-	-	942	1,026	30,375	35,463
Del.	-	2	N	N	N	N	14	19	488	670
Md.	-	3	-	-	-	-	46	39	3,130	3,522
D.C.	1	-	-	-	-	-	13	18	752	1,104
Va.	10	9	1	-	-	-	111	75	3,323	4,195
W. Va.	1	1	-	-	-	-	10	10	333	395
N.C.	5	9	6	-	-	-	N	N	5,874	6,454
S.C.	-	-	-	-	-	-	41	22	3,144	3,615
Ga.	10	15	2	5	-	-	365	315	6,272	6,644
Fla.	12	10	12	5	-	-	342	528	7,059	8,864
E. S. CENTRAL	22	26	-	-	4	-	118	124	10,115	12,171
Ky.	8	6	-	-	4	-	N	N	1,335	1,407
Tenn.	9	15	-	-	-	-	48	58	3,026	3,743
Ala.	4	1	-	-	-	-	70	66	3,298	4,267
Miss.	1	4	-	-	-	-	-	-	2,456	2,754
W.S. CENTRAL	38	22	11	-	8	1	92	54	16,035	19,381
Ark.	2	1	-	-	-	-	52	53	1,475	1,754
La.	-	1	-	-	-	-	3	-	3,876	4,684
Okla.	3	3	-	-	-	-	37	-	1,525	1,829
Tex.	33	17	11	-	8	1	-	1	9,159	11,114
MOUNTAIN	47	46	7	2	4	1	480	500	3,876	4,352
Mont.	1	8	-	-	-	-	24	31	29	39
Idaho	13	5	4	-	-	-	59	26	34	35
Wyo.	1	2	-	1	-	-	6	8	19	26
Colo.	16	10	1	-	4	1	139	171	971	1,420
N. Mex.	1	4	2	1	-	-	17	65	411	593
Ariz.	9	5	N	N	N	N	83	62	1,569	1,394
Utah	5	6	-	-	-	-	107	83	172	80
Nev.	1	6	-	-	-	-	45	54	671	765
PACIFIC	65	106	2	2	-	-	951	1,279	10,962	11,676
Wash.	18	10	1	-	-	-	71	152	1,176	1,189
Oreg.	9	26	1	2	-	-	126	145	387	332
Calif.	37	49	-	-	-	-	707	907	9,057	9,686
Alaska	1	4	-	-	-	-	32	32	206	244
Hawaii	-	17	-	-	-	-	15	43	136	225
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	-	-	10	5	44	198
V.I.	-	-	-	-	-	-	-	-	-	18
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 May 24, 2003, and May 25, 2002 (21st 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	623	796	5	13	94	142	15	9	2,144	4,033
NEW ENGLAND	49	55	-	-	4	7	3	1	84	156
Maine	2	1	-	-	-	-	1	-	2	6
N.H.	6	4	-	-	-	-	-	-	5	9
Vt.	6	3	-	-	-	-	-	-	4	-
Mass.	22	25	-	-	4	3	1	1	46	72
R.I.	3	8	-	-	-	-	1	-	10	19
Conn.	10	14	-	-	-	4	-	-	17	50
MID. ATLANTIC	101	150	-	1	13	24	4	-	311	506
Upstate N.Y.	44	57	-	1	7	8	-	-	42	78
N.Y. City	18	34	-	-	4	7	-	-	134	181
N.J.	16	36	-	-	2	5	-	-	36	77
Pa.	23	23	-	-	-	4	4	-	99	170
E.N. CENTRAL	83	166	1	2	15	29	-	-	227	483
Ohio	34	45	-	-	7	5	-	-	40	128
Ind.	21	20	-	1	2	5	-	-	18	22
Ill.	20	65	-	-	5	12	-	-	71	157
Mich.	8	7	1	1	1	-	-	-	77	104
Wis.	-	29	-	-	-	7	-	-	21	72
W.N. CENTRAL	46	23	-	-	6	2	5	3	70	144
Minn.	21	15	-	-	6	2	1	1	20	23
Iowa	-	1	-	-	-	-	-	-	15	28
Mo.	15	5	-	-	-	-	4	2	18	35
N. Dak.	-	-	-	-	-	-	-	-	-	1
S. Dak.	1	1	-	-	-	-	-	-	-	3
Nebr.	-	-	-	-	-	-	-	-	4	6
Kans.	9	1	-	-	-	-	-	-	13	48
S. ATLANTIC	142	172	-	2	13	23	-	1	536	1,137
Del.	-	-	-	-	-	-	-	-	4	7
Md.	34	42	-	-	4	1	-	-	59	128
D.C.	-	-	-	-	-	-	-	-	14	38
Va.	15	12	-	-	3	2	-	-	35	35
W. Va.	3	2	-	-	-	-	-	-	8	10
N.C.	10	18	-	-	-	3	-	-	26	117
S.C.	3	4	-	-	-	1	-	-	19	33
Ga.	28	41	-	-	3	8	-	-	197	237
Fla.	49	53	-	2	3	8	-	1	174	532
E. S. CENTRAL	45	28	1	1	6	8	-	-	61	127
Ky.	2	3	-	-	-	-	-	-	11	26
Tenn.	25	14	-	-	4	5	-	-	32	50
Ala.	16	5	1	1	1	2	-	-	10	22
Miss.	2	6	-	-	1	1	-	-	8	29
W.S. CENTRAL	31	29	-	2	5	6	-	-	216	380
Ark.	5	1	-	-	1	-	-	-	2	19
La.	6	3	-	-	1	1	-	-	20	35
Okla.	20	23	-	-	3	5	-	-	7	15
Tex.	-	2	-	2	-	-	-	-	187	311
MOUNTAIN	92	96	3	3	25	22	2	2	156	243
Mont.	-	-	-	-	-	-	-	-	2	7
Idaho	2	1	-	-	1	-	-	-	-	19
Wyo.	-	1	-	-	-	-	-	-	1	2
Colo.	16	17	-	-	4	2	-	-	23	36
N. Mex.	13	15	-	-	4	4	1	-	7	7
Ariz.	50	45	3	1	11	12	-	1	91	128
Utah	7	11	-	1	4	3	-	-	15	17
Nev.	4	6	-	1	1	1	1	1	17	27
PACIFIC	34	77	-	2	7	21	1	2	483	857
Wash.	3	2	-	1	2	1	1	-	25	65
Oreg.	25	28	-	-	3	3	-	-	28	34
Calif.	2	28	-	1	2	14	-	2	424	737
Alaska	-	1	-	-	-	1	-	-	5	7
Hawaii	4	18	-	-	-	2	-	-	1	14
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	9	88
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 May 24, 2003, and May 25, 2002 (21st 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	2,365	2,871	1,266	762	359	297	164	174	1,941	2,777
NEW ENGLAND	94	107	-	13	12	10	7	17	174	262
Maine	-	3	-	-	-	2	-	2	-	-
N.H.	6	6	-	-	1	1	2	2	4	20
Vt.	1	2	-	8	1	-	-	-	4	2
Mass.	76	67	-	5	3	5	3	10	15	217
R.I.	3	12	-	-	1	-	-	1	84	16
Conn.	8	17	-	-	6	2	2	2	67	7
MID. ATLANTIC	403	653	49	48	54	74	27	35	1,390	2,046
Upstate N.Y.	40	49	22	24	27	16	9	9	800	940
N.Y. City	165	354	-	-	8	15	7	10	1	28
N.J.	151	109	-	4	2	15	3	5	147	416
Pa.	47	141	27	20	17	28	8	11	442	662
E.N. CENTRAL	183	230	200	47	72	79	15	27	48	99
Ohio	62	36	5	-	37	31	3	9	13	10
Ind.	10	9	1	-	4	4	1	1	4	2
Ill.	1	40	6	10	3	11	3	6	-	11
Mich.	88	125	188	37	28	23	8	7	-	-
Wis.	22	20	-	-	-	10	-	4	31	76
W.N. CENTRAL	111	91	95	365	15	19	4	5	30	35
Minn.	14	2	2	-	2	2	2	-	19	17
Iowa	4	11	-	1	4	5	-	1	4	5
Mo.	68	52	93	360	4	6	-	2	3	10
N. Dak.	-	1	-	-	1	-	-	1	-	-
S. Dak.	1	-	-	-	-	1	-	-	-	-
Nebr.	12	15	-	4	2	5	2	-	1	1
Kans.	12	10	-	-	2	-	-	1	3	2
S. ATLANTIC	705	664	80	81	109	62	43	22	198	238
Del.	2	7	-	-	-	3	N	N	30	36
Md.	42	65	7	6	20	7	5	3	122	139
D.C.	1	7	-	-	1	2	-	-	3	6
Va.	46	88	1	-	8	4	5	1	11	8
W. Va.	7	12	1	1	N	N	1	-	-	2
N.C.	54	91	3	12	9	5	9	2	17	25
S.C.	65	36	23	3	4	5	1	3	1	2
Ga.	245	160	3	35	11	6	12	5	4	1
Fla.	243	198	42	24	56	30	10	8	10	19
E.S. CENTRAL	143	139	42	54	10	8	6	8	12	15
Ky.	33	20	7	2	-	5	-	2	3	6
Tenn.	54	59	7	13	8	-	1	3	6	2
Ala.	29	29	4	2	1	3	3	3	-	4
Miss.	27	31	24	37	1	-	2	-	3	3
W.S. CENTRAL	114	447	739	88	37	14	24	12	41	48
Ark.	2	55	-	8	-	-	-	-	-	-
La.	26	48	18	37	-	4	-	-	3	1
Okla.	16	8	-	-	2	2	1	3	-	-
Tex.	70	336	721	43	35	8	23	9	38	47
MOUNTAIN	246	196	27	17	23	12	12	12	5	4
Mont.	8	3	1	-	1	1	1	-	-	-
Idaho	-	3	-	-	2	-	-	-	1	1
Wyo.	5	11	-	3	1	-	-	-	-	-
Colo.	38	32	20	1	4	3	5	2	1	-
N. Mex.	13	47	-	1	2	1	2	1	-	1
Ariz.	137	62	3	3	6	3	4	7	-	1
Utah	19	13	-	1	5	4	-	2	2	-
Nev.	26	25	3	8	2	-	-	-	1	1
PACIFIC	366	344	34	49	27	19	26	36	43	30
Wash.	24	26	7	10	2	1	1	3	-	-
Oreg.	53	63	6	5	N	N	1	2	12	2
Calif.	281	247	21	34	25	18	24	27	30	28
Alaska	6	5	-	-	-	-	-	-	1	-
Hawaii	2	3	-	-	-	-	-	4	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	13	65	-	-	-	-	-	2	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending May 24, 2003, and May 25, 2002 (21st 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	317	435	830	937	1,855	2,552	1,652	2,281	104	182
NEW ENGLAND	7	26	38	54	193	263	169	312	-	1
Maine	1	1	5	4	2	3	15	19	-	-
N.H.	1	5	3	5	12	4	4	10	-	-
Vt.	-	1	-	4	27	42	11	52	-	-
Mass.	5	12	23	29	148	204	69	100	-	1
R.I.	-	1	2	4	4	1	22	22	-	-
Conn.	-	6	5	8	-	9	48	109	-	-
MID. ATLANTIC	65	106	64	121	149	115	174	393	8	19
Upstate N.Y.	18	16	16	27	90	78	111	216	-	-
N.Y. City	35	61	15	20	-	-	1	10	4	4
N.J.	3	16	8	18	7	-	62	55	3	5
Pa.	9	13	25	56	52	37	-	112	1	10
E.N. CENTRAL	30	66	109	140	154	303	18	26	2	5
Ohio	6	10	34	46	90	162	6	4	2	2
Ind.	-	2	20	18	24	18	2	5	-	-
Ill.	11	28	24	33	-	44	1	6	-	3
Mich.	12	19	22	20	16	32	9	7	-	-
Wis.	1	7	9	23	24	47	-	4	-	-
W.N. CENTRAL	13	31	64	77	108	231	230	188	2	22
Minn.	9	11	15	18	33	70	12	9	-	-
Iowa	2	2	10	11	23	81	24	21	1	-
Mo.	-	7	28	30	25	48	4	14	1	22
N. Dak.	-	1	-	-	1	5	23	14	-	-
S. Dak.	-	-	1	2	2	5	20	40	-	-
Nebr.	-	5	4	11	1	3	58	-	-	-
Kans.	2	5	6	5	23	19	89	90	-	-
S. ATLANTIC	90	97	139	132	162	164	815	996	77	93
Del.	-	1	7	5	1	2	19	9	-	-
Md.	25	29	12	4	19	22	2	166	16	12
D.C.	5	5	-	-	-	1	-	-	-	-
Va.	7	10	9	17	33	69	216	238	1	1
W. Va.	3	1	1	-	3	4	28	64	-	-
N.C.	6	8	16	15	62	15	283	258	47	58
S.C.	1	4	8	13	7	24	65	31	9	11
Ga.	15	13	15	15	17	12	158	160	-	9
Fla.	28	26	71	63	20	15	44	70	4	2
E.S. CENTRAL	7	7	32	40	41	68	20	130	12	26
Ky.	1	2	-	6	11	17	11	9	-	-
Tenn.	4	2	8	15	17	31	-	108	8	12
Ala.	2	1	12	10	10	13	9	13	2	2
Miss.	-	2	12	9	3	7	-	-	2	12
W.S. CENTRAL	34	15	197	131	123	612	126	42	1	14
Ark.	3	1	9	16	-	351	25	-	-	-
La.	1	2	22	21	4	4	-	-	-	-
Okla.	2	-	8	10	12	27	101	40	-	3
Tex.	28	12	158	84	107	230	-	2	1	11
MOUNTAIN	10	14	32	54	383	324	35	87	2	2
Mont.	-	-	2	2	-	2	8	4	-	-
Idaho	1	-	3	3	9	35	1	-	-	-
Wyo.	-	-	1	-	68	5	-	8	1	1
Colo.	7	7	9	17	162	151	2	-	-	-
N. Mex.	-	-	3	1	18	33	2	4	-	-
Ariz.	1	2	10	16	82	73	21	70	1	-
Utah	1	2	-	1	36	16	1	-	-	-
Nev.	-	3	4	14	8	9	-	1	-	1
PACIFIC	61	73	155	188	542	472	65	107	-	-
Wash.	10	5	13	32	124	129	-	-	-	-
Oreg.	5	3	31	26	147	46	1	-	-	-
Calif.	45	59	108	124	268	288	61	82	-	-
Alaska	-	1	1	1	-	2	3	25	-	-
Hawaii	1	5	2	5	3	7	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	1	2	2	-	2	20	30	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 May 24, 2003, and May 25, 2002 (21st Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		<i>Streptococcus pneumoniae</i> , 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	9,875	11,858	8,089	5,708	2,590	2,451	1,080	1,349	170	128
NEW ENGLAND	488	634	105	101	151	124	5	5	1	1
Maine	34	56	4	3	16	16	-	-	-	-
N.H.	30	35	3	4	11	22	-	-	N	N
Vt.	15	25	4	-	13	7	5	3	1	1
Mass.	269	366	67	73	106	72	N	N	N	N
R.I.	27	25	3	4	5	7	-	2	-	-
Conn.	113	127	24	17	-	-	-	-	-	-
MID. ATLANTIC	946	1,692	433	428	347	396	57	62	45	41
Upstate N.Y.	280	398	124	59	198	162	31	58	35	36
N.Y. City	333	454	142	174	52	94	U	U	U	U
N.J.	65	393	72	104	15	82	N	N	N	N
Pa.	268	447	95	91	82	58	26	4	10	5
E.N. CENTRAL	1,411	2,000	576	645	607	530	247	102	76	55
Ohio	437	471	107	294	173	115	164	-	54	-
Ind.	173	134	48	29	53	22	83	100	17	22
Ill.	399	756	276	214	150	170	-	2	-	-
Mich.	229	327	103	59	214	157	N	N	N	N
Wis.	173	312	42	49	17	66	N	N	5	33
W.N. CENTRAL	620	797	279	476	177	139	105	283	20	22
Minn.	186	184	36	82	88	67	-	191	19	20
Iowa	114	119	21	39	N	N	N	N	N	N
Mo.	157	293	100	53	35	31	7	4	1	1
N. Dak.	14	9	-	7	6	-	3	-	-	1
S. Dak.	26	29	8	132	13	8	-	1	-	-
Nebr.	58	54	83	111	18	13	-	24	N	N
Kans.	65	109	31	52	17	20	95	63	N	N
S. ATLANTIC	2,589	2,616	2,761	1,841	437	363	550	667	4	3
Del.	22	15	118	5	5	1	1	3	N	N
Md.	259	237	218	292	154	48	-	-	-	-
D.C.	12	27	20	21	8	4	2	29	-	1
Va.	262	263	126	359	47	36	N	N	N	N
W. Va.	23	32	-	2	19	7	29	31	4	2
N.C.	376	373	273	115	36	72	N	N	U	U
S.C.	129	149	144	24	19	25	59	106	N	N
Ga.	527	428	872	459	48	83	161	171	N	N
Fla.	979	1,092	990	564	101	87	298	327	N	N
E.S. CENTRAL	609	649	389	446	89	55	70	75	-	-
Ky.	109	104	47	58	19	7	6	8	N	N
Tenn.	193	180	119	24	70	48	64	67	N	N
Ala.	187	182	146	171	-	-	-	-	N	N
Miss.	120	183	77	193	-	-	-	-	-	-
W.S. CENTRAL	885	1,096	2,383	835	236	293	29	129	23	4
Ark.	130	146	26	75	2	3	7	5	-	-
L.a.	69	235	77	163	1	1	22	124	9	4
Okla.	90	101	284	124	42	19	N	N	14	-
Tex.	596	614	1,996	473	191	270	N	N	-	-
MOUNTAIN	708	706	343	202	286	300	16	26	1	2
Mont.	37	32	2	1	1	-	-	-	-	-
Idaho	72	51	8	2	11	5	N	N	N	N
Wyo.	40	22	1	3	1	6	3	8	-	-
Colo.	196	188	55	44	102	61	-	-	-	-
N. Mex.	56	103	67	47	63	57	13	18	-	-
Ariz.	186	179	173	80	99	158	-	-	N	N
Utah	71	50	21	13	8	13	-	-	1	2
Nev.	50	81	16	12	1	-	-	-	-	-
PACIFIC	1,619	1,668	820	734	260	251	1	-	-	-
Wash.	164	126	66	34	23	8	-	-	N	N
Oreg.	155	137	37	35	N	N	N	N	N	N
Calif.	1,228	1,289	711	643	215	218	N	N	N	N
Alaska	37	25	4	2	-	-	-	-	N	N
Hawaii	35	91	2	20	22	25	1	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	47	138	1	11	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 May 24, 2003, and May 25, 2002 (21st 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	2,607	2,522	141	177	3,307	4,695	93	125	5,751
NEW ENGLAND	76	36	1	-	92	162	6	9	968
Maine	4	-	1	-	4	6	-	-	525
N.H.	7	-	-	-	3	6	-	-	-
Vt.	-	1	-	-	-	1	-	-	356
Mass.	53	24	-	-	56	79	1	7	85
R.I.	8	1	-	-	8	22	2	-	2
Conn.	4	10	-	-	21	48	3	2	-
MID. ATLANTIC	301	267	27	25	692	797	13	32	4
Upstate N.Y.	14	10	9	1	92	122	3	3	N
N.Y. City	167	156	11	10	412	394	7	15	-
N.J.	53	52	7	13	118	196	3	9	-
Pa.	67	49	-	1	70	85	-	5	4
E. N. CENTRAL	366	506	32	29	410	456	8	15	2,909
Ohio	92	57	2	-	63	69	1	4	762
Ind.	17	25	4	1	48	43	3	1	-
Ill.	128	190	10	23	201	226	-	5	-
Mich.	121	224	16	5	87	90	4	3	1,768
Wis.	8	10	-	-	11	28	-	2	379
W. N. CENTRAL	68	41	2	-	160	212	1	6	17
Minn.	18	19	-	-	65	83	-	3	N
Iowa	4	2	-	-	10	14	1	-	N
Mo.	26	10	2	-	16	66	-	1	-
N. Dak.	-	-	-	-	-	3	-	-	17
S. Dak.	-	-	-	-	9	8	-	-	-
Nebr.	-	3	-	-	14	9	-	2	-
Kans.	20	7	-	-	46	29	-	-	-
S. ATLANTIC	694	603	28	40	682	946	24	12	1,142
Del.	4	8	-	-	-	7	-	-	9
Md.	114	65	3	5	83	90	5	2	-
D.C.	16	19	1	1	-	-	-	-	7
Va.	34	23	1	1	66	93	10	-	294
W. Va.	-	-	-	-	7	9	-	-	720
N.C.	67	126	9	9	95	122	4	-	N
S.C.	47	53	3	4	55	60	-	-	112
Ga.	144	112	2	9	87	169	3	3	-
Fla.	268	197	9	11	289	396	2	7	N
E. S. CENTRAL	135	243	10	12	257	294	3	2	-
Ky.	20	38	1	2	42	54	-	2	N
Tenn.	57	99	4	4	80	110	1	-	N
Ala.	52	79	4	4	101	88	2	-	-
Miss.	6	27	1	2	34	42	-	-	-
W. S. CENTRAL	321	322	22	42	265	763	-	13	441
Ark.	19	16	-	2	42	52	-	-	-
La.	33	49	-	-	-	-	-	-	3
Okla.	21	26	-	1	53	55	-	-	N
Tex.	248	231	22	39	170	656	-	13	438
MOUNTAIN	111	131	13	7	100	127	3	6	270
Mont.	-	-	-	-	-	4	-	-	N
Idaho	6	1	-	-	1	2	-	-	N
Wyo.	-	-	-	-	2	2	-	-	25
Colo.	7	18	2	1	25	30	3	3	-
N. Mex.	20	14	-	-	-	15	-	-	-
Ariz.	69	91	11	6	55	57	-	-	2
Utah	4	2	-	-	11	12	-	2	243
Nev.	5	5	-	-	6	5	-	1	-
PACIFIC	535	373	6	22	649	938	35	30	-
Wash.	31	19	-	1	85	89	2	2	-
Oreg.	15	5	-	-	30	37	2	2	-
Calif.	488	344	6	21	506	732	31	26	-
Alaska	-	-	-	-	22	23	-	-	-
Hawaii	1	5	-	-	6	57	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	65	91	1	13	-	33	-	-	115
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 May 24, 2003 (21st 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	458	324	81	29	15	9	41	S. ATLANTIC	1,272	793	326	89	38	26	85		
Boston, Mass.	142	89	32	10	6	5	13	Atlanta, Ga.	184	114	42	17	6	5	5		
Bridgeport, Conn.	29	20	5	2	2	-	5	Baltimore, Md.	176	110	53	4	7	2	13		
Cambridge, Mass.	24	20	4	-	-	-	4	Charlotte, N.C.	103	62	31	7	1	2	8		
Fall River, Mass.	32	24	7	1	-	-	4	Jacksonville, Fla.	120	77	30	6	3	4	6		
Hartford, Conn.	U	U	U	U	U	U	U	Miami, Fla.	122	81	27	9	2	3	9		
Lowell, Mass.	25	19	4	1	1	-	2	Norfolk, Va.	53	33	11	4	2	3	2		
Lynn, Mass.	9	4	2	3	-	-	-	Richmond, Va.	82	47	23	9	2	1	6		
New Bedford, Mass.	23	20	2	-	1	-	-	Savannah, Ga.	58	38	16	1	2	1	9		
New Haven, Conn.	U	U	U	U	U	U	U	St. Petersburg, Fla.	69	46	16	4	3	-	5		
Providence, R.I.	54	41	4	3	2	4	-	Tampa, Fla.	177	112	39	16	7	3	16		
Somerville, Mass.	6	4	-	2	-	-	-	Washington, D.C.	104	56	34	9	3	2	2		
Springfield, Mass.	37	26	7	2	2	-	3	Wilmington, Del.	24	17	4	3	-	-	4		
Waterbury, Conn.	30	21	6	2	1	-	-	E.S. CENTRAL	849	550	198	71	14	14	61		
Worcester, Mass.	47	36	8	3	-	-	10	Birmingham, Ala.	173	108	41	15	2	5	25		
MID. ATLANTIC	2,008	1,424	384	132	44	23	108	Chattanooga, Tenn.	91	65	20	4	1	1	5		
Albany, N.Y.	58	39	16	3	-	-	4	Knoxville, Tenn.	98	63	27	6	2	-	4		
Allentown, Pa.	26	22	3	1	-	-	2	Lexington, Ky.	25	18	4	3	-	-	5		
Buffalo, N.Y.	75	52	17	3	1	2	3	Memphis, Tenn.	163	98	46	13	3	3	15		
Camden, N.J.	22	15	3	3	-	1	2	Mobile, Ala.	99	69	17	10	2	1	2		
Elizabeth, N.J.	23	14	3	4	2	-	-	Montgomery, Ala.	76	42	23	9	2	-	4		
Erie, Pa.	51	40	10	1	-	-	-	Nashville, Tenn.	124	87	20	11	2	4	1		
Jersey City, N.J.	24	18	3	2	1	-	-	W.S. CENTRAL	1,385	902	288	118	45	32	105		
New York City, N.Y.	1,079	752	214	80	21	11	56	Austin, Tex.	71	45	13	6	4	3	4		
Newark, N.J.	66	40	12	7	7	-	2	Baton Rouge, La.	34	25	4	4	1	-	-		
Paterson, N.J.	19	10	6	2	-	1	2	Corpus Christi, Tex.	64	42	18	4	-	-	5		
Philadelphia, Pa.	210	151	42	11	5	1	10	Dallas, Tex.	191	109	43	25	11	3	11		
Pittsburgh, Pa. [§]	33	15	9	4	1	4	1	El Paso, Tex.	83	56	22	4	1	-	3		
Reading, Pa.	23	15	4	3	1	-	2	Ft. Worth, Tex.	117	82	23	6	1	5	11		
Rochester, N.Y.	127	104	14	4	3	2	8	Houston, Tex.	366	219	77	44	14	12	29		
Schenectady, N.Y.	22	19	2	1	-	-	1	Little Rock, Ark.	72	47	17	3	3	2	2		
Scranton, Pa.	32	29	2	-	1	-	4	New Orleans, La.	U	U	U	U	U	U	U		
Syracuse, N.Y.	56	41	12	2	1	-	8	San Antonio, Tex.	171	118	31	13	5	4	14		
Trenton, N.J.	17	12	4	-	-	1	-	Shreveport, La.	97	69	21	4	2	1	11		
Utica, N.Y.	18	16	1	1	-	-	3	Tulsa, Okla.	119	90	19	5	3	2	15		
Yonkers, N.Y.	27	20	7	-	-	-	-	MOUNTAIN	867	597	189	48	18	11	65		
E.N. CENTRAL	1,871	1,246	398	146	45	36	97	Albuquerque, N.M.	125	91	20	10	2	2	9		
Akron, Ohio	2	2	-	-	-	-	2	Boise, Idaho	52	40	11	-	1	-	4		
Canton, Ohio	39	24	11	3	1	-	2	Colo. Springs, Colo.	63	43	13	6	-	1	5		
Chicago, Ill.	339	192	94	35	13	5	22	Denver, Colo.	99	61	22	9	5	2	7		
Cincinnati, Ohio	84	67	10	6	1	-	9	Las Vegas, Nev.	211	132	56	14	3	2	12		
Cleveland, Ohio	121	66	38	11	2	4	4	Ogden, Utah	23	18	4	1	-	-	1		
Columbus, Ohio	199	137	35	14	7	6	9	Phoenix, Ariz.	U	U	U	U	U	U	U		
Dayton, Ohio	108	76	22	6	3	1	9	Pueblo, Colo.	29	23	4	1	1	-	3		
Detroit, Mich.	171	100	42	22	4	3	11	Salt Lake City, Utah	111	73	27	5	4	2	12		
Evansville, Ind.	55	43	7	3	1	1	1	Tucson, Ariz.	154	116	32	2	2	2	12		
Fort Wayne, Ind.	37	24	7	4	2	-	-	PACIFIC	2,081	1,436	433	120	64	28	149		
Gary, Ind.	22	7	7	6	2	-	1	Berkeley, Calif.	19	14	3	2	-	-	1		
Grand Rapids, Mich.	57	39	12	5	-	1	3	Fresno, Calif.	137	93	27	8	8	1	15		
Indianapolis, Ind.	219	145	45	15	6	8	3	Glendale, Calif.	57	44	10	2	1	-	2		
Lansing, Mich.	U	U	U	U	U	U	U	Honolulu, Hawaii	57	37	9	4	1	6	4		
Milwaukee, Wis.	116	85	24	4	-	3	7	Long Beach, Calif.	73	44	18	7	2	2	5		
Peoria, Ill.	45	34	9	2	-	-	5	Los Angeles, Calif.	762	530	152	44	29	7	40		
Rockford, Ill.	52	32	13	4	1	2	1	Pasadena, Calif.	19	17	1	1	-	-	2		
South Bend, Ind.	66	56	5	3	-	2	5	Portland, Ore.	116	77	30	3	6	-	5		
Toledo, Ohio	78	65	10	3	-	-	3	Sacramento, Calif.	177	124	38	8	3	4	21		
Youngstown, Ohio	61	52	7	-	2	-	-	San Diego, Calif.	167	112	35	11	6	3	14		
W.N. CENTRAL	542	370	87	45	18	22	43	San Francisco, Calif.	U	U	U	U	U	U	U		
Des Moines, Iowa	67	47	16	2	2	-	6	San Jose, Calif.	175	118	40	12	3	2	16		
Duluth, Minn.	32	24	2	4	2	-	1	Santa Cruz, Calif.	23	15	6	2	-	-	3		
Kansas City, Kans.	32	23	4	3	-	2	5	Seattle, Wash.	122	76	31	10	4	1	7		
Kansas City, Mo.	80	56	12	6	3	3	4	Spokane, Wash.	65	48	13	2	1	1	7		
Lincoln, Nebr.	35	28	3	3	-	1	4	Tacoma, Wash.	112	87	20	4	-	1	7		
Minneapolis, Minn.	72	44	12	9	4	3	9	TOTAL	11,333 [¶]	7,642	2,384	798	301	201	754		
Omaha, Nebr.	94	63	14	7	4	6	6										
St. Louis, Mo.	U	U	U	U	U	U	U										
St. Paul, Minn.	49	34	8	2	2	3	1										
Wichita, Kans.	81	51	16	9	1	4	7										

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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