



# MMWR<sup>TM</sup>

## Morbidity and Mortality Weekly Report

Weekly

May 2, 2003 / Vol. 52 / No. 17

### World Asthma Day, May 6, 2003

The fifth annual World Asthma Day will be May 6, 2003, and will mark the beginning of Asthma and Allergy Month. On World Asthma Day, CDC, in collaboration with its worldwide partners, will help raise awareness about asthma through various activities, including proclamations by government officials and presentations by health-care officials.

During 1980–1996, the prevalence of asthma in the United States increased among all age, sex, and racial groups. In 2001, an estimated 31.3 million persons reported ever having asthma diagnosed, and 20.3 million persons currently had asthma. Each year, approximately 14 million days of school absences and approximately 100 million days of restricted activity are attributed to asthma.

Additional information about CDC's National Asthma Control Program and its public and private partners is available at <http://www.cdc.gov/asthma>.

### Self-Reported Asthma Prevalence and Control Among Adults — United States, 2001

Asthma is a chronic illness that has been increasing in prevalence in the United States since 1980 (1). In 2000, asthma accounted for 4,487 deaths, approximately 465,000 hospitalizations, an estimated 1.8 million emergency department (ED) visits, and approximately 10.4 million physician office visits among persons of all ages (2). To provide prevalence data for state and local health department asthma programs, the Behavioral Risk Factor Surveillance System (BRFSS) collects data each year from the 50 states, the District of Columbia, and three U.S. territories. This report summarizes asthma

prevalence data for adults collected from the 2001 BRFSS survey and from the eight states that used the adult asthma history module. Findings from BRFSS indicate that approximately 7.2% of U.S. adults have current asthma. ED visits for asthma varied more than any other characteristic among the eight states that used the adult asthma history module. In Mississippi, 67.3% of respondents with current asthma reported no ED visits during the preceding 12 months, compared with 87.6% in Washington state. Continued use of the BRFSS asthma prevalence questions and the asthma history module will allow state health departments to monitor trends in asthma prevalence and control and to direct public health asthma interventions.

BRFSS is a state-based, random-digit-dialed survey of the noninstitutionalized civilian U.S. population aged  $\geq 18$  years; the survey collects information about modifiable risk factors for chronic diseases and other leading causes of death (3). In 2001, two asthma questions were used as part of the core survey by the 50 states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. Lifetime asthma was defined as answering "yes" to the question, "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?" Current asthma was defined as answering "yes" to the lifetime question and to the question, "Do you still have asthma?" Weighted prevalence estimates and 95% confidence intervals (CIs) were calculated by using SUDAAN to account for the complex survey design (4).

#### INSIDE

- 386 Women with Smallpox Vaccine Exposure During Pregnancy Reported to the National Smallpox Vaccine in Pregnancy Registry — United States, 2003
- 388 Update: Severe Acute Respiratory Syndrome — United States, 2003
- 391 Updated Interim Surveillance Case Definition for Severe Acute Respiratory Syndrome (SARS) — United States, April 29, 2003

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

### SUGGESTED CITATION

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

#### Centers for Disease Control and Prevention

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

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

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

#### Epidemiology Program Office

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

#### Office of Scientific and Health Communications

John W. Ward, M.D.  
*Director*

*Editor, MMWR Series*

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

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

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

Lynda G. Cupell  
Malbea A. Heilman  
*Visual Information Specialists*

Quang M. Doan  
Erica R. Shaver  
*Information Technology Specialists*

#### Division of Public Health Surveillance and Informatics

##### Notifiable Disease Morbidity and 122 Cities Mortality Data

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

The median response rate for all 54 BRFSS reporting areas was 51.1% (range: 33.3% [New Jersey]–81.5% [Puerto Rico]) (5). The overall prevalence of lifetime asthma among adults was 11.0% (95% CI = 10.8%–11.2%) (n = 204,797). Lifetime asthma prevalence from all 54 reporting areas ranged from 7.5% in Guam to 19.6% in Puerto Rico. Among the 50 states, lifetime asthma ranged from 8.4% in Nebraska to 13.3% in Nevada. During 2001, an estimated 15.1 million adults in the United States and the District of Columbia had current asthma; the overall prevalence was 7.2% (95% CI = 7.0%–7.4%). Current asthma prevalence from all 54 reporting areas ranged from 3.5% in Guam to 9.5% in Puerto Rico (Table 1). Among the 50 states, current asthma prevalence ranged from 5.3% (Louisiana and South Dakota) to 9.5% (Massachusetts). Current asthma was higher among persons who were multiple race and non-Hispanic (12.2%), followed by non-Hispanic blacks (8.5%), non-Hispanic whites (7.2%), other race and non-Hispanic (5.9%), and Hispanics (5.7%).

For this report, seven questions (of the nine questions in the asthma history module) were used to measure the level of asthma control in respondents with current asthma. Respondents were asked to report the number of visits to an ED, urgent (unscheduled) doctor visits, or routine check-ups; the number of days they could not perform their usual activities, had trouble with sleep, or had asthma symptoms; and whether they had an asthma attack or episode during the preceding 12 months.

The overall current asthma prevalence for the eight states that used the module was 7.7% (95% CI = 7.3%–8.1%) (Table 2). Current asthma prevalence varied from 5.3% (South Dakota) to 9.0% (Michigan). Among respondents with current asthma, 82.7% reported no visits to an ED during the preceding 12 months; 71.0% reported no urgent visits to a physician; and 54.4% reported routine check-ups for asthma during the preceding 12 months. An estimated 71.6% of respondents with current asthma reported no days of activity limitation, 60.9% reported no days of disturbed sleep, and 21.8% reported having no symptoms during the preceding 30 days. An estimated 47.2% of respondents with current asthma reported no asthma attack or episode during the preceding 12 months. The control characteristics presented were configured so high values represent positive aspects of asthma management. Over time, improved asthma management would result in increased values on each of the seven control characteristics.

On each of the seven asthma-control questions, several states were above or below the CI for the eight-state total. South Dakota was above the CI on six of seven questions, indicating above-average asthma control. Michigan, with the highest current asthma prevalence in the eight states, was within the eight-state total CI on all questions, indicating an average level of asthma control among residents with current asthma.

**TABLE 1. Prevalence of lifetime\* and current† asthma among survey respondents, by area — Behavioral Risk Factor Surveillance System, United States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands, 2001**

Area	Lifetime asthma			Current asthma		
	No.‡	(%)	(95% CI¶)	No.	(%)	(95% CI)
Alabama	2,792	9.7	(8.5–10.9)	2,788	6.3	(5.4–7.3)
Alaska	2,871	11.5	(9.7–13.3)	2,866	7.3	(5.8–8.8)
Arizona	3,261	12.4	(10.7–14.1)	3,249	8.3	(6.8–9.8)
Arkansas	2,927	10.6	(9.3–11.9)	2,922	7.0	(5.9–8.1)
California	4,170	12.4	(11.3–13.6)	4,162	7.2	(6.3–8.0)
Colorado	2,030	12.1	(10.6–13.7)	2,019	8.0	(6.7–9.3)
Connecticut	7,745	12.3	(11.4–13.2)	7,719	7.9	(7.1–8.6)
Delaware	3,510	12.0	(10.5–13.5)	3,505	7.5	(6.3–8.8)
District of Columbia	1,886	12.0	(10.3–13.7)	1,881	7.4	(6.0–8.8)
Florida	4,675	9.9	(8.9–10.8)	4,666	5.8	(5.0–6.5)
Georgia	4,530	11.0	(9.8–12.2)	4,516	7.2	(6.2–8.3)
Hawaii	4,492	12.2	(10.8–13.5)	4,483	7.3	(6.2–8.4)
Idaho	4,830	11.7	(10.6–12.8)	4,821	8.0	(7.1–8.8)
Illinois	4,007	11.3	(10.2–12.4)	4,001	7.9	(6.9–8.8)
Indiana	3,991	11.3	(10.2–12.4)	3,985	7.5	(6.7–8.4)
Iowa	3,629	9.7	(8.6–10.8)	3,623	6.7	(5.8–7.7)
Kansas	4,593	11.7	(10.6–12.8)	4,583	8.1	(7.1–9.1)
Kentucky	7,518	10.9	(9.9–11.9)	7,503	8.3	(7.5–9.2)
Louisiana	4,999	9.1	(8.2–10.0)	4,994	5.3	(4.6–6.0)
Maine	2,413	12.6	(11.1–14.2)	2,413	9.4	(8.1–10.7)
Maryland	4,464	11.1	(9.8–12.4)	4,450	7.1	(5.9–8.2)
Massachusetts	8,614	13.1	(12.2–13.9)	8,589	9.5	(8.7–10.3)
Michigan	3,823	12.4	(11.1–13.7)	3,814	9.0	(7.9–10.2)
Minnesota	3,958	10.1	(9.1–11.2)	3,942	6.6	(5.8–7.4)
Mississippi	3,040	9.2	(8.0–10.4)	3,034	5.5	(4.6–6.5)
Missouri	4,175	12.0	(10.6–13.3)	4,167	8.2	(7.0–9.3)
Montana	3,334	11.8	(10.3–13.3)	3,329	8.0	(6.7–9.3)
Nebraska	3,696	8.4	(7.3–9.6)	3,693	5.8	(4.8–6.7)
Nevada	2,571	13.3	(11.5–15.1)	2,566	8.3	(6.8–9.7)
New Hampshire	4,063	12.5	(11.3–13.7)	4,051	8.4	(7.4–9.4)
New Jersey	6,009	9.4	(8.5–10.3)	5,998	6.2	(5.5–7.0)
New Mexico	3,618	10.8	(9.6–12.0)	3,605	6.9	(5.9–7.9)
New York	3,894	11.1	(9.9–12.3)	3,884	7.3	(6.4–8.3)
North Carolina	6,201	10.1	(8.8–11.3)	6,191	6.4	(5.4–7.4)
North Dakota	2,509	9.1	(7.9–10.3)	2,505	6.8	(5.8–7.9)
Ohio	3,431	9.8	(8.7–10.9)	3,424	7.3	(6.3–8.2)
Oklahoma	4,545	10.1	(9.0–11.2)	4,538	6.9	(6.1–7.8)
Oregon	2,529	13.0	(11.6–14.4)	2,524	8.1	(7.0–9.2)
Pennsylvania	3,658	10.7	(9.5–11.9)	3,652	7.3	(6.4–8.3)
Rhode Island	4,109	12.1	(10.9–13.3)	4,099	9.4	(8.3–10.5)
South Carolina	3,196	10.8	(9.5–12.0)	3,192	6.5	(5.5–7.6)
South Dakota	5,109	7.7	(6.9–8.6)	5,101	5.3	(4.6–6.0)
Tennessee	2,921	9.3	(8.1–10.5)	2,919	6.9	(5.8–7.9)
Texas	5,911	9.6	(8.8–10.5)	5,904	6.1	(5.4–6.8)
Utah	3,649	10.7	(9.4–12.0)	3,646	7.0	(5.9–8.1)
Vermont	4,292	12.1	(11.0–13.2)	4,285	8.8	(7.8–9.8)
Virginia	2,937	11.4	(10.0–12.7)	2,924	6.4	(5.5–7.4)
Washington	4,193	12.0	(10.9–13.1)	4,177	7.7	(6.8–8.5)
West Virginia	3,091	12.5	(11.2–13.8)	3,086	9.3	(8.2–10.4)
Wisconsin	3,350	10.9	(9.6–12.2)	3,336	7.8	(6.7–8.9)
Wyoming	3,038	11.6	(10.3–12.9)	3,035	8.3	(7.1–9.4)
<b>Total**</b>	<b>204,797</b>	<b>11.0</b>	<b>(10.8–11.2)</b>	<b>204,359</b>	<b>7.2</b>	<b>(7.0–7.4)</b>
Guam	871	7.5	(5.6–9.4)	870	3.5	(2.2–4.9)
Puerto Rico	4,234	19.6	(17.8–21.4)	4,234	9.5	(8.3–10.8)
Virgin Islands	2,263	9.2	(7.5–10.8)	2,260	4.9	(3.7–6.1)

\* Persons who answered “yes” to the question, “Have you ever been told by a doctor, nurse or other health professional that you had asthma?”

† Persons who answered “yes” to the questions, “Have you ever been told by a doctor, nurse or other health professional that you had asthma?” and “Do you still have asthma?”

‡ Unweighted sample size.

¶ Confidence interval.

\*\* 50 states and the District of Columbia.

**Reported by:** L Rhodes, MPH, JE Moorman, MS, SC Redd, MD, DM Mannino, MD, Div of Environmental Hazards and Health Effects, National Center for Environmental Health, CDC.

**Editorial Note:** Asthma is a multifactorial lung disease that causes wheezing, shortness of breath, coughing, and chest tightness. It is often associated with familial, allergenic, socioeconomic, psychological, and environmental factors (6,7). Asthma affects proportionately more children than adults, women than men, and nonwhites than whites (1). Morbidity and mortality can be partly preventable with better medical, environmental, and self management.

The 2001 BRFSS lifetime prevalence estimate (11.0%) was slightly higher than the 2000 BRFSS lifetime estimate (10.5%). This difference might be an actual increase in prevalence or might be associated with a minor change in question wording in 2001. The current asthma prevalence in 2001 (7.2%) was the same as in 2000. The findings in this report indicate no consistent regional pattern in asthma prevalence and some variability among the states. Possible reasons for this variability include demographic, socioeconomic (e.g., income and education levels), and environmental factors (e.g., outdoor air pollution and climate), physician diagnostic procedures, or data-collection practices. In 2001, current asthma prevalence estimates were comparable with 2000 BRFSS estimates for whites, blacks, and persons of other races. However, the change in the positioning of the race and ethnicity questions on the BRFSS core survey and the addition of a multiple race question could have affected the asthma prevalence estimates when both race and ethnicity are considered.

The findings in this report are subject to at least three limitations. First, the median response rate for BRFSS was low (51.1%); however, asthma prevalence is similar to estimates in other surveys with higher response rates (e.g., National Health Interview Survey). Second, BRFSS does not measure asthma prevalence among institutionalized adults, the military, children aged

**TABLE 2. Percentage of respondents with current\* asthma, by selected control characteristics and state — Behavioral Risk Factor Surveillance System, eight states, 2001**

State	Current prevalence		No ED <sup>†</sup> visits	No urgent visits	Routine visits	No activity limitation	Sleep not disturbed	No symptoms	No attacks
	No. <sup>§</sup>	(%)							
Indiana	327	(7.5)	81.9	69.3	53.2	68.9	55.5	19.0	44.1
Iowa	241	(6.7)	83.0	76.7	56.4	78.6	65.3	17.4	44.9
Michigan	335	(9.0)	81.7	72.0	54.1	72.1	60.6	21.9	45.3
Mississippi	174	(5.5)	67.3	65.4	56.3	64.4	53.9	20.0	42.7
Missouri	333	(8.2)	81.1	74.9	54.8	71.8	59.9	26.0	47.0
Pennsylvania	284	(7.3)	84.8	66.1	58.3	71.6	64.2	21.1	53.4
South Dakota	269	(5.3)	87.3	76.2	46.9	81.1	70.0	29.2	55.3
Washington	334	(7.7)	87.6	75.4	46.7	71.4	60.5	23.3	43.7
<b>Total</b>	<b>2,297</b>	<b>(7.7)</b>	<b>82.7<sup>¶</sup></b>	<b>71.0<sup>**</sup></b>	<b>54.4<sup>††</sup></b>	<b>71.6<sup>§§</sup></b>	<b>60.9<sup>¶¶</sup></b>	<b>21.8<sup>***</sup></b>	<b>47.2<sup>†††</sup></b>
Lower 95% CI <sup>§§§</sup>	—	(7.3)	80.6	68.3	51.3	68.9	58.0	19.4	44.3
Upper 95% CI	—	(8.1)	84.9	73.7	57.5	74.4	63.7	24.2	50.2

\* Persons who answered "yes" to the questions, "Have you ever been told by a doctor, nurse or other health professional that you had asthma?" and "Do you still have asthma?"

<sup>†</sup> Emergency department.

<sup>§</sup> Unweighted number of respondents with current asthma.

<sup>¶</sup> Excludes 68 "Don't know/refused" responses and one outlier (>50 visits).

<sup>\*\*</sup> Excludes 98 "Don't know/refused" responses and three outliers.

<sup>††</sup> Excludes 87 "Don't know/refused" responses and four outliers.

<sup>§§</sup> Excludes 139 "Don't know/refused" responses and 131 "missing" responses.

<sup>¶¶</sup> Excludes 99 "Don't know/refused" responses; includes 474 responses of "no asthma symptoms."

<sup>\*\*\*</sup> Excludes 125 "Don't know/refused" responses.

<sup>†††</sup> Excludes 72 "Don't know/refused" responses.

<sup>§§§</sup> Confidence interval.

<18 years, and residents without telephones; the percentage of households with telephones ranged from 87% (Mississippi) to 98% (Massachusetts) (8). Asthma prevalence in households without telephones might be different than in those with telephones. Finally, the validity of self-reported asthma status in BRFSS is unknown. BRFSS case definitions include respondents who have been told by a physician they have asthma; either the physician's diagnosis or the respondent's recall of that diagnosis might be inaccurate. A 1993 review of asthma questionnaires reported a mean sensitivity of 68% (range: 48%–100%) and a mean specificity of 94% (range: 78%–100%) when self-reported asthma was compared with a clinical diagnosis of asthma (9).

Use of BRFSS asthma lifetime and current prevalence questions allows state health departments to monitor trends in asthma prevalence and to direct asthma management. Combined with the existing adult asthma history module, health departments can examine detailed asthma characteristics within their states. BRFSS remains the only comprehensive source of state-level surveillance data for asthma and other chronic diseases.

#### Acknowledgment

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

#### References

1. Mannino DM, Homa DM, Akinbami LJ, et al. Surveillance for asthma—United States, 1980–1999. In: CDC surveillance summaries (March 29). MMWR 2002;51(No. SS-1).
2. CDC, National Center for Health Statistics. Asthma prevalence, health care use and mortality, 2000–2001. Available at <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/asthma/asthma.htm>.
3. CDC. Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2001.
4. Shah BV, Barnwell BG, Bieler GS. SUDAAN user's manual. Release 7.5. Research Triangle Park, North Carolina: Research Triangle Institute, 1997.
5. CDC. 2000 BRFSS summary data quality report. National Center for Chronic Disease Prevention and Health Promotion, Division of Adult and Community Health, Behavioral Surveillance Branch. Available at <http://www.cdc.gov/brfss/ti-quality-req2000.htm>.
6. Weiss KB, Gergen PJ, Wagener DK. Breathing better or wheezing worse? The changing epidemiology of asthma morbidity and mortality. *Annu Rev Public Health* 1993;14:491–513.
7. Barbee RA, Dodge R, Lebowitz ML, Burrows B. The epidemiology of asthma. *Chest* 1985;87:21S–25S.
8. CDC. Behavioral Risk Factor Surveillance System user's guide. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 1999.
9. Toren K, Brisman J, Jarvholm B. Asthma and asthma-like symptoms in adults assessed by questionnaires: a literature review. *Chest* 1993;104:600–8.

rec·om·men·da·tion: *n*

(rek-ə-mən-'dā-shən) 1 : something, such as a course of action, that is recommended; see also *MMWR*.



know what matters.



## Women with Smallpox Vaccine Exposure During Pregnancy Reported to the National Smallpox Vaccine in Pregnancy Registry — United States, 2003

In the absence of circulating smallpox, pregnant women should not be exposed to live vaccinia virus contained in the smallpox vaccine. The smallpox vaccine should not be administered to women who are pregnant or might become pregnant within 4 weeks after vaccination because of the risk for fetal vaccinia, a rare but serious infection of the fetus. In addition, persons who have close contact (e.g., household contact or sexual contact) with pregnant women are advised to forego vaccination (1,2). To prevent inadvertent exposure of pregnant women to vaccinia virus, screening for pregnancy is a component of pre-event smallpox vaccination programs. To monitor outcomes of pregnancy in women exposed to smallpox vaccines, CDC, in collaboration with the Department of Defense (DoD) and the Food and Drug Administration (FDA), has established the National Smallpox Vaccine in Pregnancy Registry. This report summarizes data from the registry about these exposures. CDC and the Advisory Committee on Immunization Practices (ACIP) recommendations to screen for pregnancy as a contraindication to smallpox vaccination (1) appear to be effective at preventing inadvertent exposures.

The registry includes women found to be pregnant when vaccinated, those who became pregnant within 28 days of vaccination, and those who, while pregnant, were in close contact with a person vaccinated within 28 days (3). Cases of women inadvertently exposed to smallpox vaccine during pregnancy are reported to the registry by state health departments, health-care providers, CDC's Clinician Information Line, DoD, FDA, and through the Vaccine Adverse Event Reporting System (VAERS). Women reported to the registry will be monitored frequently during each trimester and at the conclusion of the pregnancy to document pregnancy outcomes. Outcomes will be tabulated by trimester and reported.

During November 5, 2001–April 24, 2003, women of reproductive age (18–44 years) were vaccinated against smallpox in three populations: military personnel, U.S. civilian health-care and public health workers, and some clinical research study volunteers. Overall, 103 women have inadvertently received smallpox vaccine while pregnant or have conceived within 4 weeks of vaccination.

### DoD Vaccination Program

During December 13, 2002–April 22, 2003, a total of 62,222 women of reproductive age were screened for small-

pox vaccination, and 52,185 were vaccinated in the military program; 85 were inadvertently exposed to smallpox vaccine during pregnancy. Of the 75 women with known vaccination status, 66 were primary vaccinees. The median age was 22 years (range: 18–35 years). On the basis of the estimated date of conception, 62 women conceived before vaccination and 23 conceived during the 4 weeks after vaccination.

### Civilian Health-Care and Public Health Workers

During January 24–April 24, 2003, a total of 6,174 women of reproductive age were vaccinated through the civilian program. Six were inadvertently exposed to smallpox vaccine during pregnancy. Three of the women were primary vaccinees. The median age was 31 years (range: 26–38 years). On the basis of the estimated date of conception, two women conceived within 1 week before vaccination and four conceived during the 4 weeks after vaccination. Two of the women had miscarriages during early pregnancy. An additional two pregnant civilian women were in close contact with persons recently vaccinated against smallpox. Neither of these women have had known signs or symptoms of vaccinia exposure.

### Clinical Studies

During November 2001–April 24, 2003, a total of 12 women from clinical studies who had inadvertent exposure to smallpox vaccines during pregnancy have been reported to the registry. The denominator for women of reproductive age for this population is not available. The median age was 28 years (range: 18–42 years). Each of the women had a negative pregnancy test on the day of vaccination.

**Reported by:** M Ryan, MD, JD Grabenstein, PhD, U.S. Dept of Defense. Smallpox Vaccine and Pregnancy Registry Team; K Broder, MD, EIS Officer, CDC.

**Editorial Note:** Smallpox vaccine can cause fetal vaccinia, a rare but serious complication of exposure to the vaccine during pregnancy that often results in fetal or neonatal death and premature birth (4,5). Fetal vaccinia, which is postulated to occur following maternal viremia, is manifested by skin lesions and internal organ involvement (4,6). Approximately 50 cases of fetal vaccinia have ever been reported in the world and three have been reported in the United States. In 1924, an infant was born prematurely at 6 months' estimated gestational age (EGA) 4 weeks after the mother's vaccination during a smallpox epidemic; the infant had vaccinia-like skin lesions and died shortly after delivery (4). In 1959, vaccinia-like skin lesions were observed in a fetus aborted spontaneously at 4.5–5.0 months EGA; the mother was vaccinated at 9 weeks' EGA (6). In 1968, a premature infant born at 32

weeks' EGA to a mother who was vaccinated at 2 months' EGA had vaccinia-like scars but was otherwise healthy and developed normally (2). Affected pregnancies have been reported among women vaccinated in all three trimesters and among first-time vaccinees, revaccinees, and among unvaccinated close contacts of vaccinees (5). No validated prenatal test is available for clinical diagnosis of fetal vaccinia during pregnancy (2).

Except for fetal vaccinia, smallpox vaccine has not been clearly shown to cause serious birth defects or other adverse events for the fetus or neonate, including premature birth, low birthweight, or miscarriage (2). Among the general population, 16%–31% of pregnancies end in miscarriages; this rate is dependent on the gestational age of the pregnancy and other maternal risk factors (7,8). No evidence suggests that infants without fetal vaccinia born to exposed mothers have serious or chronic sequelae. Adverse maternal events have not been documented to occur more frequently after exposure to smallpox vaccine during pregnancy. Inadvertent exposure of pregnant women to smallpox vaccine should not be a reason to consider pregnancy termination because the risk for fetal vaccinia is low (2).

Because of the risk for fetal vaccinia and potential unknown risks to the fetus, smallpox vaccine is contraindicated during pregnancy unless a woman is exposed to smallpox. In the absence of exposure to smallpox, vaccine also should be deferred in women who might conceive within 4 weeks of vaccination and in persons who might have close contact with pregnant women within 4 weeks of their vaccination. CDC and ACIP recommend that all pre-event smallpox vaccination programs include pregnancy screening and education components with these elements: questioning about the possibility of pregnancy before vaccination and excluding those at risk, asking about the date of the last menstrual period, providing education about fetal vaccinia, counseling women to avoid becoming pregnant during the month after vaccination, recommending abstinence or highly effective contraception, and advising women who believe they might be pregnant to perform a first morning urine pregnancy test on the vaccination day (1).

Smallpox vaccination screening and education practices in the vaccination programs appear to be effective in deterring women who are pregnant and might not know it from receiving smallpox vaccine and in preventing pregnancy during the 4 weeks after smallpox vaccination. On the basis of the estimated number of pregnancies among the U.S. population of reproductive-aged women (9,10), CDC estimated the expected rate of unknown pregnancy (i.e., pregnancies of  $\leq 4$  weeks' gestation or  $\leq 6$  weeks based on obstetrical dating) and the estimated rate of conception during a 4-week period. In the

general population, both the estimated rate of unknown pregnancy and the rate of conception during a 4-week period is six per 1,000 reproductive-aged women. Therefore, in the absence of screening and counseling, an estimated 12 per 1,000 reproductive-aged women vaccinees could be expected to be exposed to smallpox vaccine during pregnancy. Assuming that health-care providers have the same age-specific fertility rates as the general population, when this rate is adjusted to the older age distribution of the civilian health-care workers currently vaccinated, an estimated four per 1,000 women would be pregnant and not know it and an additional four per 1,000 would be expected to conceive during the 4 weeks after vaccination. The rate of inadvertent exposure during pregnancy among women of reproductive age vaccinated during the first stage of the civilian and DoD programs is approximately one per 1,000. This rate is substantially lower than the approximately eight per 1,000 women and 12 per 1,000 women who would be inadvertently exposed to smallpox vaccine in the civilian health-care worker population and in the general population, respectively, in the absence of screening and education.

Because some women have been inadvertently exposed to smallpox vaccine during pregnancy, the U.S. military revised education materials for potential vaccinees and expanded the questions about pregnancy and intention to become pregnant on screening forms. FDA also has enhanced pregnancy screening materials and protocols. CDC is reviewing and evaluating existing recommendations for pregnancy screening and education in the civilian smallpox vaccination program. CDC continues to recommend that any woman who has pregnancy concerns take a pregnancy test on vaccination day, using her first morning urine. However, pregnancy tests might miss very early pregnancies and will not detect pregnancies conceived after vaccination. None of six reported exposures in the civilian program would have been prevented by urine pregnancy testing on the day of vaccination.

CDC, in collaboration with state health departments and FDA, is conducting a public health investigation to identify why civilian pregnant women have been inadvertently exposed to smallpox vaccines. DoD is undertaking a similar inquiry for military personnel. Information from these investigations is expected to guide efforts to improve the pregnancy screening and education components of the smallpox vaccination programs.

Health-care providers, state health departments, and other public health staff are encouraged to report all exposed pregnant women to the National Smallpox Vaccine in Pregnancy Registry. Civilian women should contact their health-care provider or state health department for help enrolling in the registry. Clinicians or public health staff should report civilian cases through their state health department or to CDC,

telephone 404-639-8253 or 877-554-4625. Military cases should be reported to DoD, telephone 619-553-9255, DSN 553-9255, fax 619-553-7601 or e-mail code25@nhrc.navy.mil. To better understand potential adverse events of smallpox vaccination during early pregnancy, health-care providers are encouraged to save and forward products of conception from pregnancy losses for vaccinia testing to CDC or DoD. Laboratories should freeze specimens at  $-94^{\circ}\text{F}$  ( $-70^{\circ}\text{C}$ ), preferably in viral transport media. Clinicians can contact the registry for additional information about forwarding laboratory specimens.

#### Acknowledgments

This report is based on data contributed by state health departments, health-care providers, and women enrolled in the registry.

#### References

1. CDC. Recommendations for using smallpox vaccine in a pre-event vaccination program: supplemental recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Healthcare Infection Control Practices Advisory Committee (HICPAC). *MMWR Dispatch* 2003;52:1–16.
2. CDC. Smallpox vaccination and adverse reactions: guidance for clinicians. *MMWR* 2003;52(No. RR-4).
3. CDC. National smallpox vaccine in pregnancy registry. *MMWR* 2003;52:256.
4. Lynch FW. Dermatologic conditions of the fetus with particular reference to variola and vaccinia. *Arch Dermat & Syph* 1932;26:997–1019.
5. Levine MM, Edsall G, Bruce-Chwatt LJ. Live-virus vaccine in pregnancy: risks and recommendations. *Lancet* 1974;2:34–8.
6. Hood CK, McKinnon GE. Prenatal vaccinia. *Am J Obstet & Gynec* 1963;85:238–40.
7. Mills JL, Simpson JL, Driscoll SG, et al. Incidence of spontaneous abortion among normal women and insulin-dependent diabetic women whose pregnancies were identified within 21 days of conception. *New Engl J Med* 1988;319:1617–23.
8. Wilcox AJ, Weinberg CR, O'Connor JF, et al. Incidence of early loss of pregnancy. *New Engl J Med* 1988;319:189–94.
9. CDC. National vital statistics reports. *MMWR* 2003;51(No. RR-4).
10. Ventura SJ, Mosher WD, Curtin SC et al. Highlights of trends in pregnancy rates by outcome: estimates for the United States, 1976–96;47(No. 29):1–12.

## Update: Severe Acute Respiratory Syndrome — United States, 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). During November 1, 2002–April 30, 2003, a total of 5,663 SARS cases were reported to WHO from 26 countries, including the United States; 372 deaths (case-fatality proportion: 6.6%) have been reported (1). This report updates information on reported SARS cases among

U.S. residents and provides an overview regarding CDC's issuance of travel alerts and advisories.

As of April 30, a total of 289 SARS cases were reported to CDC from 38 states, of which 233 (81%) were classified as suspect SARS, and 56 (19%) were classified as probable SARS (more severe illnesses characterized by the presence of pneumonia or acute respiratory distress syndrome) (Figure 1, Table) (2). Laboratory testing to evaluate infection with the SARS-associated coronavirus (SARS-CoV) has been completed for 60 cases. Laboratory-confirmed infection, based on detection of antibody to SARS-CoV in serum or evidence of virus in clinical specimens by reverse transcriptase polymerase chain reaction analysis, has been identified in six patients; all were probable cases, as described previously (3,4). Negative findings (i.e., the absence of antibody to SARS-CoV in convalescent serum obtained >21 days after symptom onset) have been documented for 54 cases (41 suspect and 13 probable).

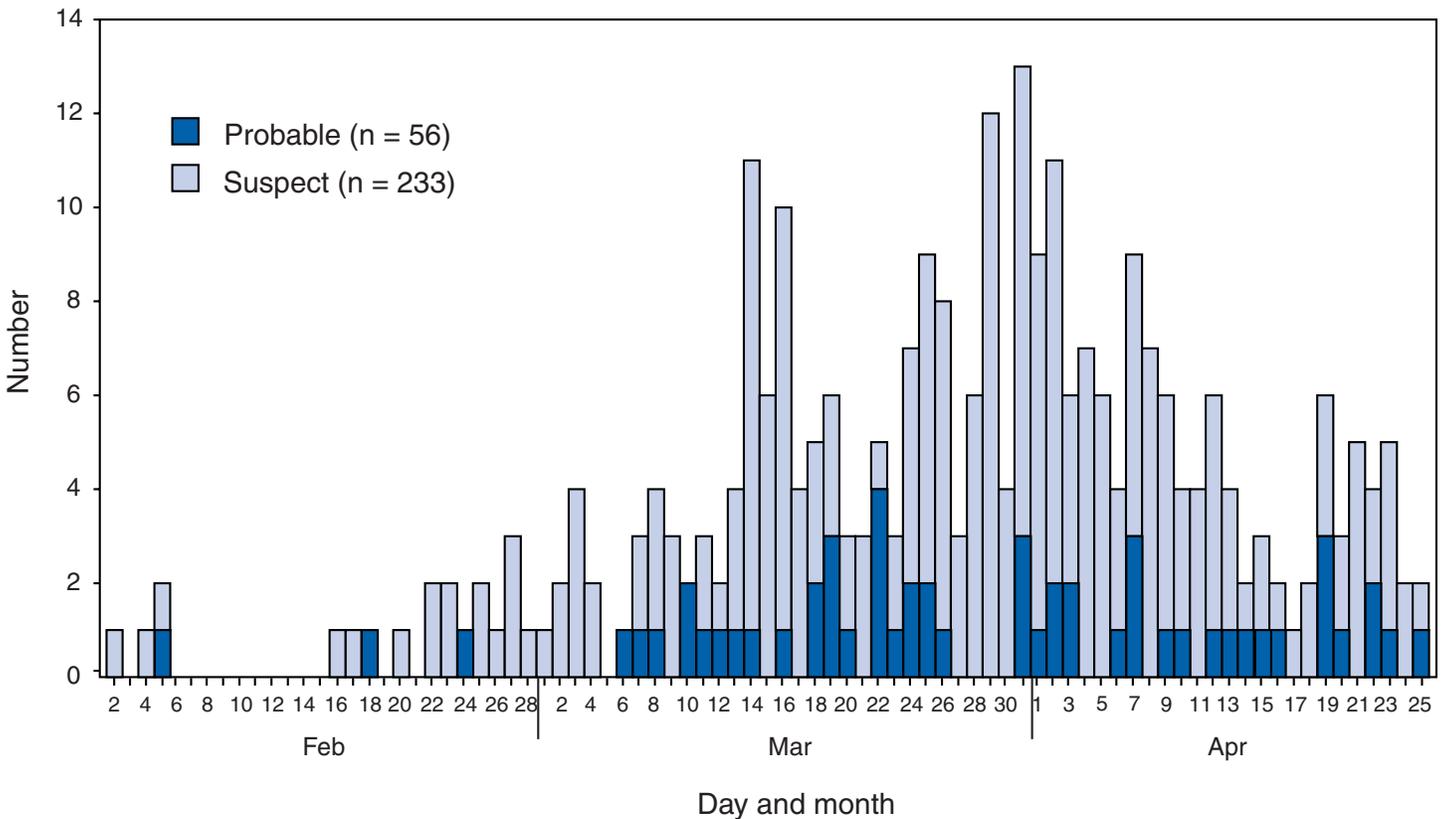
Of the 56 probable SARS patients, 37 (66%) were hospitalized, and two (4%) required mechanical ventilation. One patient (2%) was a health-care worker who provided care to a SARS patient, and one (2%) was a household contact of a SARS patient. The remaining 54 (96%) probable SARS patients (including the six patients with positive SARS-CoV laboratory results) had traveled to mainland China; Hong Kong Special Administrative Region, China; Singapore; Hanoi, Vietnam; or Toronto, Canada.

As of April 30, the SARS outbreak control strategy for the United States has included issuance of travel alerts and advisories and distribution of health alert notices to travelers arriving from areas with SARS to facilitate early identification of imported cases. Current travel alerts (Hanoi and Toronto) and advisories (Hong Kong, Taiwan, mainland China, and Singapore) can be found at <http://www.cdc.gov/ncidod/sars/travel.htm>.

Health alert notices, which have been translated into seven languages (Chinese [Simplified and Traditional], French, Japanese, Korean, Spanish, and Vietnamese), inform the returning traveler of potential exposure to cases of SARS. They alert travelers to the symptoms of SARS and to promptly seek medical attention if symptoms develop. Travelers should call their health-care provider in advance to report recent travel to areas with SARS. The notices also provide information and additional instructions for physicians.

During March 16–April 29, CDC distributed 735,370 health alert notices to travelers arriving from the areas with SARS in Southeast Asia at 22 airports at points of entry into the United States. As of April 26, health alert notices have been distributed at the Lester B. Pearson International Airport in Toronto to embarking U.S. passengers destined for 58

FIGURE 1. Number of reported cases\* of severe acute respiratory syndrome, by classification and date of illness onset — United States, 2003



\* N = 289.

airports in the United States (Figure 2) and overland crossings of the U.S.-Canadian border (Figure 3). In addition, copies of health alert notices have been provided to cargo and cruise ship lines for distribution to crew and passengers.

**Editorial Note:** As of April 30, 96% of probable U.S. SARS cases have occurred among international travelers, with only two instances of secondary transmission associated with these cases (5). Since the previous SARS update (4), no additional laboratory-confirmed cases have been identified. The collection and testing of convalescent serum is critical for laboratory confirmation of cases that have undetermined laboratory status.

CDC issues travel alerts and advisories based on evidence of transmission in areas with SARS, translocation of the disease, and the effectiveness of local prevention efforts. The quality of local disease surveillance and the accessibility of medical care in areas with SARS are additional considerations. The definitions of travel alerts and advisories are available at [http://www.cdc.gov/ncidod/sars/travel\\_alertadvisory.htm](http://www.cdc.gov/ncidod/sars/travel_alertadvisory.htm).

Travel alerts and advisories are notifications that an outbreak of a disease is occurring in a geographic area outside of

the United States. A travel alert, the lower-level notice, provides information about the disease outbreak and informs travelers and resident expatriates of ways to reduce their risk for infection. An alert does not include a recommendation against nonessential travel to the area. When the health risk for travelers is thought to be high, a travel advisory is issued that recommends against nonessential travel to the area. Travel advisories are intended to reduce the number of travelers to areas with SARS and the risk for translocating disease to other areas.

In response to the SARS outbreak, CDC provided health alert notices to travelers returning from areas with SARS to promptly detect potential cases of SARS. These health alert notices also helped raise awareness of SARS among health-care providers and the general public.

Travel alerts and advisories are disseminated through media advisories, press briefings, e-mail notifications, and State Department advisories. They are posted routinely on the CDC Travelers' Health website at <http://www.cdc.gov/travel>. Health alert notices can be found at [http://www.cdc.gov/ncidod/sars/travel\\_alert.htm](http://www.cdc.gov/ncidod/sars/travel_alert.htm).

*"The wisest mind has something yet to learn."*

George Santayana

MMWR Continuing Education makes it possible for you to stay current on relevant public health and clinical topics—online and at no charge.

Review course descriptions, take exams, track your results, and receive course certificates—all from your own computer, when and where your schedule allows.

MMWR CE  
A wise choice.

[cdc.gov/mmwr](http://cdc.gov/mmwr)



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

Characteristic	Probable cases† (n = 56)		Suspect cases† (n = 233)	
	No.	(%)§	No.	(%)§
<b>Age (yrs)</b>				
0–4	7	(13)	36	(15)
5–9	0	(0)	10	(4)
10–17	3	(5)	4	(2)
18–64	33	(59)	159	(68)
≥65	12	(21)	21	(9)
Unknown	1	(2)	3	(1)
<b>Sex</b>				
Female	24	(43)	115	(49)
Male	30	(54)	117	(50)
Unknown	2	(4)	1	(0)
<b>Race</b>				
White	26	(46)	131	(56)
Black	0	(0)	5	(2)
Asian	25	(45)	83	(36)
Other	1	(2)	0	(0)
Unknown	4	(7)	14	(6)
<b>Exposure</b>				
Travel¶	54	(96)	213	(91)
Close contact	1	(2)	16	(7)
Health-care worker	1	(2)	4	(2)
<b>Hospitalized &gt;24 hrs**</b>				
Yes	37	(66)	51	(22)
No	18	(32)	178	(76)
Unknown	1	(2)	4	(2)
<b>Required mechanical ventilation</b>				
Yes	2	(4)	1	(0)
No	53	(95)	228	(98)
Unknown	1	(2)	4	(2)
<b>SARS-associated coronavirus laboratory findings</b>				
Confirmed	6	(11)	0	(0)
Negative	13	(23)	41	(18)
Undetermined††	37	(66)	192	(82)

\* N = 289.

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

§ Percentages may not total 100% because of rounding.

¶ To mainland China, Hong Kong, Hanoi, Singapore, or Toronto.

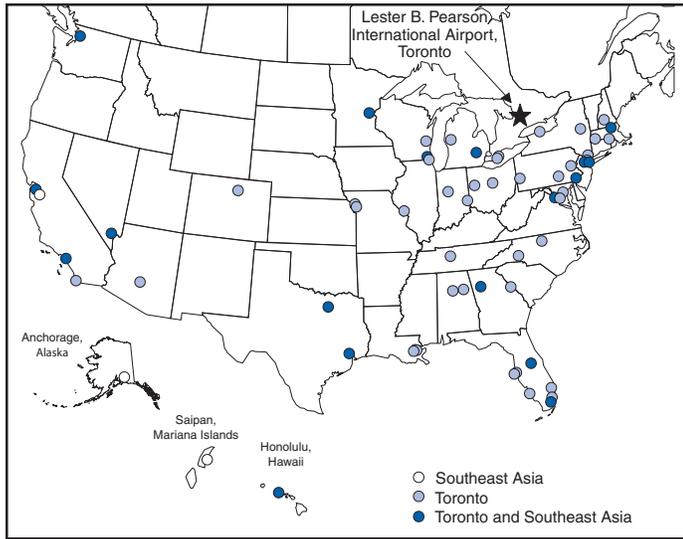
\*\* As of April 30, no deaths of SARS patients have been reported in the United States.

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

#### References

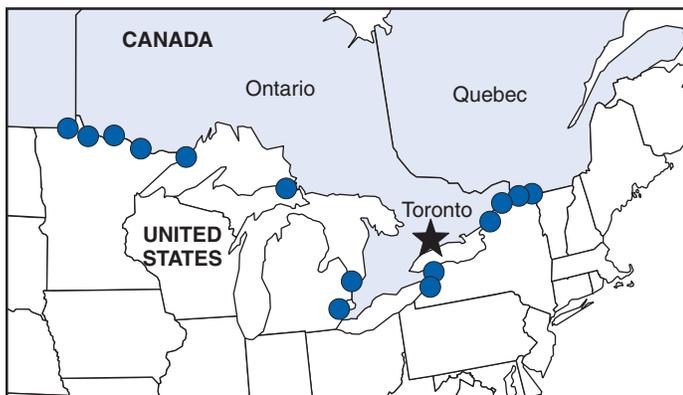
1. World Health Organization. Cumulative number of reported cases of severe acute respiratory syndrome (SARS). Available at [http://www.who.int/csr/sarscountry/2003\\_04\\_30/en](http://www.who.int/csr/sarscountry/2003_04_30/en).
2. CDC. Updated interim U.S. case definition of severe acute respiratory syndrome (SARS). Available at <http://www.cdc.gov/ncidod/sars/casedefinition.htm>.
3. CDC. Severe acute respiratory syndrome (SARS) and coronavirus testing—United States, 2003. *MMWR* 2003;52:297–302.
4. CDC. Update: severe acute respiratory syndrome—United States, 2003. *MMWR* 2003;52:357–60.
5. CDC. Update: severe acute respiratory syndrome—United States, 2003. *MMWR* 2003;52:332–6.

**FIGURE 2. Location of airports with international flights arriving from Southeast Asia and Toronto, Canada — United States, 2003\***



\* As of April 29.

**FIGURE 3. Distribution points for health alert notices about severe acute respiratory syndrome — U.S.-Canadian border, 2003\***



\* As of April 29.

### Updated Interim Surveillance Case Definition for Severe Acute Respiratory Syndrome (SARS) — United States, April 29, 2003

On April 29, 2003, this report was posted on the MMWR website (<http://www.cdc.gov/mmwr>). Before publication in this issue an error was corrected. In the last sentence of the second paragraph and in the <sup>1</sup> footnote of the box, the correct number of days should have been “ $\leq 21$  days”.

CDC’s interim surveillance case definition for severe acute respiratory syndrome (SARS) has been updated to include laboratory criteria for evidence of infection with the SARS-associated coronavirus (SARS-CoV) (Figure, Box). In addition, clinical criteria have been revised to reflect the possible spectrum of respiratory illness associated with SARS-CoV. Epidemiologic criteria have been retained. The majority of U.S. cases of SARS continue to be associated with travel\*, with only limited secondary spread to household members or health-care providers (1).

SARS has been associated etiologically with a novel coronavirus, SARS-CoV (2,3). Evidence of SARS-CoV infection has been identified in patients with SARS in several countries, including the United States. Several new laboratory tests can be used to detect SARS-CoV. Serologic testing for coronavirus antibody can be performed by using indirect fluorescent antibody or enzyme-linked immunosorbent assays that are specific for antibody produced after infection. Although some patients have detectable coronavirus antibody during the acute phase (i.e., within 14 days of illness onset),

\* In this updated case definition, Taiwan has been added to the areas with documented or suspected community transmission of SARS; Hanoi, Vietnam is now an area with recently documented or suspected community transmission of SARS.

**FIGURE. Clinical and laboratory criteria for probable and suspect severe acute respiratory syndrome (SARS) cases and SARS-associated coronavirus (SARS-CoV) infection — United States, April 29, 2003**

Clinical criteria	Mild respiratory* illness/Asymptomatic			
	Moderate respiratory illness			
	Severe respiratory illness	Reported to World Health Organization		
		Laboratory-confirmed	Undetermined	Negative

Laboratory criteria for SARS-CoV

□ Suspect case\*  
 ■ Probable case\*

\* Meets epidemiologic criteria.

**BOX. Updated interim U.S. surveillance case definition for severe acute respiratory syndrome (SARS) – United States, April 29, 2003****Clinical criteria**

- Asymptomatic or mild respiratory illness
- Moderate respiratory illness
  - Temperature of >100.4° F (>38° C)\*, and
  - One or more clinical findings of respiratory illness (e.g., cough, shortness of breath, difficulty breathing, or hypoxia).
- Severe respiratory illness
  - Temperature of >100.4° F (>38° C)\*, and
  - One or more clinical findings of respiratory illness (e.g., cough, shortness of breath, difficulty breathing, or hypoxia), and
    - radiographic evidence of pneumonia, or
    - respiratory distress syndrome, or
    - autopsy findings consistent with pneumonia or respiratory distress syndrome without an identifiable cause

**Epidemiologic criteria**

- Travel (including transit in an airport) within 10 days of onset of symptoms to an area with current or recently documented or suspected community transmission of SARS<sup>†</sup>, or
- Close contact<sup>§</sup> within 10 days of onset of symptoms with a person known or suspected to have SARS infection

**Laboratory criteria<sup>¶</sup>**

- Confirmed
  - Detection of antibody to SARS-CoV in specimens obtained during acute illness or >21 days after illness onset, or
  - Detection of SARS-CoV RNA by RT-PCR confirmed by a second PCR assay, by using a second aliquot of the specimen and a different set of PCR primers, or
  - Isolation of SARS-CoV
- Negative
  - Absence of antibody to SARS-CoV in convalescent serum obtained >21 days after symptom onset
- Undetermined: laboratory testing either not performed or incomplete

**Case classification\*\***

- Probable case: meets the clinical criteria for severe respiratory illness of unknown etiology with onset since February 1, 2003, and epidemiologic criteria; laboratory criteria confirmed, negative, or undetermined
- Suspect case: meets the clinical criteria for moderate respiratory illness of unknown etiology with onset since February 1, 2003, and epidemiologic criteria; laboratory criteria confirmed, negative, or undetermined

\* A measured documented temperature of >100.4° F (>38° C) is preferred. However, clinical judgment should be used when evaluating patients for whom a measured temperature of >100.4° F (>38° C) has not been documented. Factors that might be considered include patient self-report of fever, use of antipyretics, presence of immunocompromising conditions or therapies, lack of access to health care, or inability to obtain a measured temperature. Reporting authorities might consider these factors when classifying patients who do not strictly meet the clinical criteria for this case definition.

† Areas with current documented or suspected community transmission of SARS include mainland China and Hong Kong Special Administrative Region, People's Republic of China; Singapore; Taiwan; and Toronto, Canada. Hanoi, Vietnam is an area with recently documented or suspected community transmission of SARS.

§ Close contact is defined as having cared for or lived with a person known to have SARS or having a high likelihood of direct contact with respiratory secretions and/or body fluids of a patient known to have SARS. Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation (<3 feet), physical examination, and any other direct physical contact between persons. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief period of time.

¶ Assays for the laboratory diagnosis of SARS-CoV infection include enzyme-linked immunosorbent assay, indirect fluorescent-antibody assay, and reverse transcription polymerase chain reaction (RT-PCR) assays of appropriately collected clinical specimens (Source: CDC. Guidelines for collection of specimens from potential cases of SARS. Available at [http://www.cdc.gov/ncidod/sars/specimen\\_collection\\_sars2.htm](http://www.cdc.gov/ncidod/sars/specimen_collection_sars2.htm)). Absence of SARS-CoV antibody from serum obtained ≤21 days after illness onset, a negative PCR test, or a negative viral culture does not exclude coronavirus infection and is not considered a definitive laboratory result. In these instances, a convalescent serum specimen obtained >21 days after illness is needed to determine infection with SARS-CoV. All SARS diagnostic assays are under evaluation.

\*\*Asymptomatic SARS-CoV infection or clinical manifestations other than respiratory illness might be identified as more is learned about SARS-CoV infection.

definitive interpretation of negative coronavirus antibody tests is possible only for specimens obtained >21 days after onset of symptoms. A reverse transcriptase polymerase chain reaction (RT-PCR) test specific for viral RNA has been positive within the first 10 days after onset of fever in specimens from some SARS patients, but the duration of detectable viremia or viral shedding is unknown. RT-PCR testing can detect SARS-CoV in clinical specimens, including serum, stool, and nasal secretions. Finally, viral culture and isolation have both been used to detect SARS-CoV. Absence of SARS-CoV antibody in serum obtained  $\leq$ 21 days after illness onset, a negative PCR test, or a negative viral culture does not exclude coronavirus infection.

Reported U.S. cases of SARS still will be classified as suspect or probable; however, these cases can be further classified as laboratory-confirmed or -negative if laboratory data are available and complete, or as laboratory-indeterminate if specimens are not available or testing is incomplete. Obtaining convalescent serum samples to make a final determination about infection with SARS-CoV is critical.

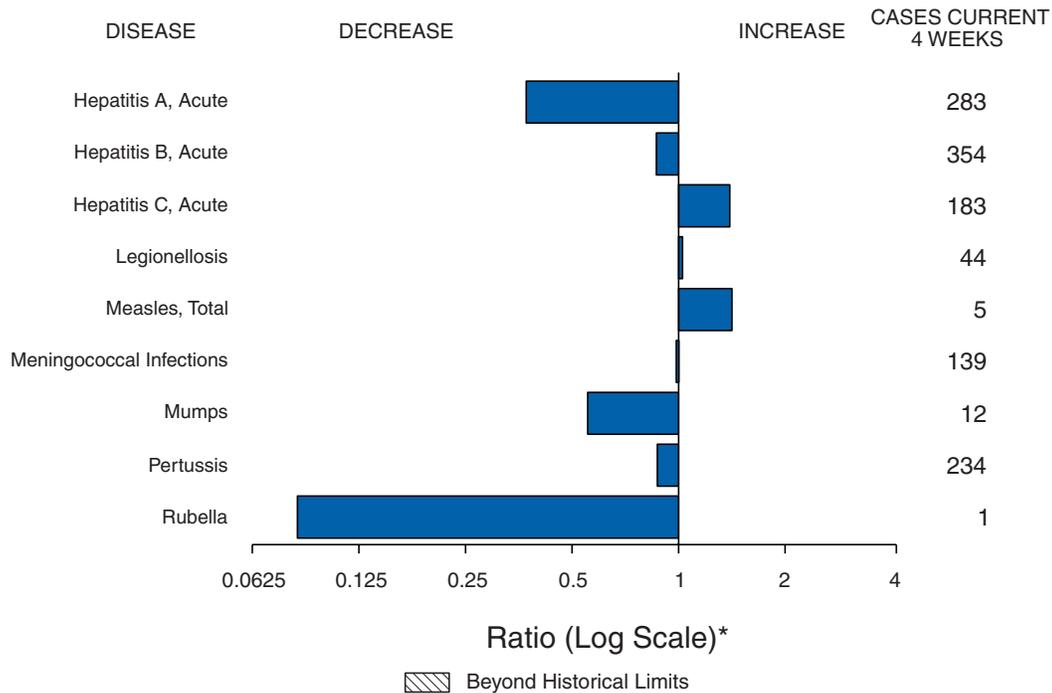
No instances of SARS-CoV infection have been detected in persons who are asymptomatic. However, data are insufficient to exclude the possibility of asymptomatic infection with SARS-CoV and the possibility that such persons can transmit the virus. Investigations of close contacts and health-care workers exposed to SARS patients might provide information about the occurrence of asymptomatic infected persons.

Similarly, the clinical manifestations of SARS might extend beyond respiratory illness. As more is learned about SARS-CoV infection, clinical and laboratory criteria will provide a framework for classifying the full spectrum of infection (Figure).

This surveillance case definition should be used for reporting and classification purposes only. It should not be used for clinical management or as the only criterion for identifying or testing patients who might have SARS or for instituting infection-control precautions (4,5). This definition will be updated as new data become available or if changes in the epidemiology of SARS occur in the United States.

#### References

1. CDC. Update: Severe acute respiratory syndrome — United States, 2003. *MMWR* 2003;52:357–60.
2. Ksiazek TG, Erdman D, Goldsmith C, et al. A novel coronavirus associated with severe acute respiratory syndrome. *N Engl J Med*. Available at <http://content.nejm.org/cgi/reprint/NEJMoa030781v3.pdf>.
3. Drosten C, Gunther S, Preiser W, et al. Identification of a novel coronavirus in patients with severe acute respiratory syndrome. *N Engl J Med*. Available at <http://content.nejm.org/cgi/reprint/NEJMoa030747v2.pdf>.
4. CDC. Updated interim domestic guidelines for triage and disposition of patients who may have severe acute respiratory distress syndrome (SARS). Available at [http://www.cdc.gov/ncidod/sars/triage\\_interim\\_guidance.htm](http://www.cdc.gov/ncidod/sars/triage_interim_guidance.htm).
5. CDC. Interim guidance on infection control precautions for patients with suspected severe acute respiratory syndrome (SARS) and close contacts in households. Available at <http://www.cdc.gov/ncidod/sars/ic-closecontacts.htm>.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending April 26, 2003, 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 April 26, 2003 (17th Week)\***

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	1	Hansen disease (leprosy) <sup>†</sup>	20	25
Botulism:	-	-	Hantavirus pulmonary syndrome <sup>†</sup>	5	2
foodborne	4	5	Hemolytic uremic syndrome, postdiarrheal <sup>†</sup>	37	33
infant	16	21	HIV infection, pediatric <sup>§</sup>	75	55
other (wound & unspecified)	7	6	Measles, total	10 <sup>¶</sup>	11 <sup>**</sup>
Brucellosis <sup>†</sup>	17	27	Mumps	73	91
Chancroid	14	22	Plague	-	-
Cholera	-	3	Poliomyelitis, paralytic	-	-
Cyclosporiasis <sup>†</sup>	12	31	Psittacosis <sup>†</sup>	2	11
Diphtheria	-	-	Q fever <sup>†</sup>	22	13
Ehrlichiosis:	-	-	Rabies, human	-	1
human granulocytic (HGE) <sup>†</sup>	10	18	Rubella	2	2
human monocytic (HME) <sup>†</sup>	12	4	Rubella, congenital	1	2
other and unspecified	-	1	Streptococcal toxic-shock syndrome <sup>†</sup>	52	51
Encephalitis/Meningitis:	-	-	Tetanus	1	6
California serogroup viral <sup>†</sup>	-	-	Toxic-shock syndrome	34	43
eastern equine <sup>†</sup>	-	-	Trichinosis	2	8
Powassan <sup>†</sup>	-	-	Tularemia <sup>†</sup>	5	5
St. Louis <sup>†</sup>	-	-	Yellow fever	-	1
western equine <sup>†</sup>	-	-			

-: No reported cases.

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

<sup>†</sup> Not notifiable in all states.

<sup>§</sup> 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 March 30, 2003.

<sup>¶</sup> Of 10 cases reported, eight were indigenous and two were imported from another country.

\*\* Of 11 cases reported, four were indigenous and seven were imported from another country.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 26, 2003, and April 27, 2002 (17th 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	8,129	11,616	248,638	261,623	1,187	1,232	527	671	-	-
NEW ENGLAND	277	387	8,783	8,675	-	-	32	34	-	-
Maine	-	1	621	465	N	N	2	1	-	-
N.H.	5	12	467	531	-	-	2	9	-	-
Vt.	5	5	327	248	-	-	6	7	-	-
Mass.	49	236	3,437	3,407	-	-	15	9	-	-
R.I.	30	40	1,059	855	-	-	5	5	-	-
Conn.	188	93	2,872	3,169	N	N	2	3	-	-
MID. ATLANTIC	1,909	2,243	25,762	28,417	1	-	67	103	-	-
Upstate N.Y.	93	152	5,808	4,772	N	N	25	20	-	-
N.Y. City	1,108	1,362	8,341	9,719	-	-	19	44	-	-
N.J.	230	464	3,222	4,188	-	-	3	6	-	-
Pa.	478	265	8,391	9,738	N	N	20	33	-	-
E.N. CENTRAL	708	1,140	42,504	48,527	2	7	99	201	-	-
Ohio	111	192	10,741	12,461	-	-	20	46	-	-
Ind.	121	133	5,122	5,381	N	N	7	17	-	-
Ill.	271	477	12,209	15,384	-	1	10	37	-	-
Mich.	168	280	9,917	9,892	2	6	24	40	-	-
Wis.	37	58	4,515	5,409	-	-	38	61	-	-
W.N. CENTRAL	148	180	14,314	14,436	-	-	53	61	-	-
Minn.	23	44	2,971	3,411	N	N	29	21	-	-
Iowa	20	32	1,243	1,519	N	N	7	5	-	-
Mo.	77	63	5,249	4,628	-	-	5	10	-	-
N. Dak.	-	-	397	411	N	N	2	5	-	-
S. Dak.	3	2	751	706	-	-	8	4	-	-
Nebr.	8	16	1,389	1,374	-	-	2	12	-	-
Kans.	17	23	2,314	2,387	N	N	-	4	-	-
S. ATLANTIC	2,216	3,963	48,107	48,466	1	1	96	101	-	-
Del.	30	57	1,022	875	N	N	1	1	-	-
Md.	47	637	5,320	4,971	1	1	8	4	-	-
D.C.	163	152	741	1,108	-	-	-	3	-	-
Va.	216	275	5,836	5,301	-	-	9	1	-	-
W. Va.	5	23	821	780	N	N	-	1	-	-
N.C.	211	262	7,536	7,349	N	N	10	16	-	-
S.C.	160	291	4,608	4,484	-	-	2	2	-	-
Ga.	220	654	9,409	10,224	-	-	42	36	-	-
Fla.	1,164	1,612	12,814	13,374	N	N	24	37	-	-
E.S. CENTRAL	339	511	16,755	17,527	N	N	35	40	-	-
Ky.	10	49	2,734	2,902	N	N	8	1	-	-
Tenn.	170	224	5,872	5,503	N	N	8	23	-	-
Ala.	73	117	4,332	5,486	-	-	16	13	-	-
Miss.	86	121	3,817	3,636	N	N	3	3	-	-
W.S. CENTRAL	1,005	1,453	32,655	35,241	-	-	18	11	-	-
Ark.	34	97	2,106	2,299	-	-	1	3	-	-
La.	133	363	4,864	5,894	N	N	-	2	-	-
Okla.	49	77	3,415	3,400	N	N	3	2	-	-
Tex.	789	916	22,270	23,648	-	-	14	4	-	-
MOUNTAIN	351	391	14,328	16,549	871	818	28	37	-	-
Mont.	6	6	410	669	N	N	3	3	-	-
Idaho	-	8	864	711	N	N	6	10	-	-
Wyo.	1	3	319	281	-	-	1	5	-	-
Colo.	76	95	2,670	4,611	N	N	6	7	-	-
N. Mex.	27	28	2,043	2,602	-	4	-	4	-	-
Ariz.	168	133	4,977	5,040	858	798	3	4	-	-
Utah	42	22	1,347	639	2	4	7	1	-	-
Nev.	31	96	1,698	1,996	11	12	2	3	-	-
PACIFIC	1,176	1,348	45,430	43,785	312	406	99	83	-	-
Wash.	89	142	5,026	4,653	N	N	-	-	-	-
Oreg.	50	128	2,543	2,233	-	-	10	11	-	-
Calif.	1,026	1,053	35,203	34,343	312	406	89	71	-	-
Alaska	8	2	1,147	1,189	-	-	-	-	-	-
Hawaii	3	23	1,511	1,367	-	-	-	1	-	-
Guam	1	-	-	-	-	-	-	-	-	-
P.R.	58	274	421	13	N	N	N	N	-	-
V.I.	2	51	-	63	-	-	-	-	-	-
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 March 30, 2003.

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 26, 2003, and April 27, 2002 (17th 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	294	420	41	16	21	5	4,353	5,616	94,039	111,872
NEW ENGLAND	20	33	4	1	1	1	331	527	2,215	2,603
Maine	3	2	-	-	-	-	37	58	57	25
N.H.	5	2	-	-	-	-	14	17	36	40
Vt.	-	1	-	-	-	-	23	35	28	34
Mass.	6	18	-	1	1	1	156	270	875	1,125
R.I.	1	3	-	-	-	-	33	36	314	302
Conn.	5	7	4	-	-	-	68	111	905	1,077
MID. ATLANTIC	17	33	1	-	6	2	790	1,251	10,169	13,315
Upstate N.Y.	10	24	1	-	5	-	250	324	2,241	2,593
N.Y. City	3	1	-	-	-	-	347	504	3,295	3,971
N.J.	4	8	-	-	-	-	56	140	1,721	2,582
Pa.	N	N	-	-	1	2	137	283	2,912	4,169
E.N. CENTRAL	70	124	8	2	3	-	685	969	19,650	23,455
Ohio	18	20	8	2	3	-	256	266	6,206	6,710
Ind.	8	8	-	-	-	-	-	-	2,036	2,383
Ill.	15	39	-	-	-	-	136	288	5,786	7,891
Mich.	16	25	-	-	-	-	196	274	4,084	4,631
Wis.	13	32	-	-	-	-	97	141	1,538	1,840
W.N. CENTRAL	41	58	4	4	5	-	414	517	4,852	5,748
Minn.	14	18	3	3	-	-	133	186	757	1,014
Iowa	3	13	-	-	-	-	61	77	246	376
Mo.	15	14	N	N	N	N	119	141	2,518	2,742
N. Dak.	1	-	-	-	1	-	9	6	13	20
S. Dak.	2	1	-	-	-	-	15	20	46	80
Nebr.	5	7	1	1	-	-	44	42	447	518
Kans.	1	5	-	-	4	-	33	45	825	998
S. ATLANTIC	37	33	11	5	-	-	811	818	23,771	27,905
Del.	-	2	N	N	N	N	14	16	406	558
Md.	1	1	-	-	-	-	36	33	2,541	2,837
D.C.	1	-	-	-	-	-	13	14	551	933
Va.	3	6	-	-	-	-	79	53	2,755	3,409
W. Va.	1	1	-	-	-	-	8	9	273	326
N.C.	7	8	1	-	-	-	N	N	4,133	4,748
S.C.	-	-	-	-	-	-	28	12	2,569	2,587
Ga.	11	10	2	4	-	-	345	243	4,827	5,414
Fla.	13	5	8	1	-	-	288	438	5,716	7,093
E. S. CENTRAL	13	17	-	-	-	-	95	100	8,173	9,893
Ky.	2	3	-	-	-	-	N	N	1,145	1,126
Tenn.	7	10	-	-	-	-	39	44	2,499	3,041
Ala.	3	1	-	-	-	-	56	56	2,570	3,514
Miss.	1	3	-	-	-	-	-	-	1,959	2,212
W.S. CENTRAL	19	12	7	-	4	1	66	35	13,224	15,795
Ark.	2	1	-	-	-	-	38	35	1,154	1,445
La.	-	-	-	-	-	-	3	-	3,140	3,699
Okla.	2	2	-	-	-	-	25	-	1,287	1,510
Tex.	15	9	7	-	4	1	-	-	7,643	9,141
MOUNTAIN	29	36	5	2	2	1	360	381	3,095	3,685
Mont.	-	8	-	-	-	-	13	25	29	38
Idaho	9	1	3	-	-	-	46	19	30	28
Wyo.	-	1	-	1	-	-	5	6	17	20
Colo.	8	6	1	-	2	1	99	129	726	1,221
N. Mex.	-	3	1	1	-	-	14	47	342	488
Ariz.	8	5	N	N	N	N	71	48	1,308	1,225
Utah	4	6	-	-	-	-	83	66	122	59
Nev.	-	6	-	-	-	-	29	41	521	606
PACIFIC	48	74	1	2	-	-	801	1,018	8,890	9,473
Wash.	15	7	-	-	-	-	57	117	933	960
Oreg.	8	24	1	2	-	-	91	126	307	287
Calif.	25	33	-	-	-	-	602	715	7,172	7,841
Alaska	-	3	-	-	-	-	27	23	174	204
Hawaii	-	7	-	-	-	-	24	37	304	181
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	10	1	35	4
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 April 26, 2003, and April 27, 2002 (17th 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	499	662	3	7	76	117	12	7	1,702	3,331
NEW ENGLAND	41	50	-	-	2	4	2	2	52	130
Maine	3	1	-	-	-	-	1	-	2	4
N.H.	6	4	-	-	-	-	-	-	3	6
Vt.	5	3	-	-	-	-	-	-	1	-
Mass.	17	24	-	-	2	2	1	2	32	62
R.I.	1	8	-	-	-	-	-	-	4	17
Conn.	9	10	-	-	-	2	-	-	10	41
MID. ATLANTIC	82	132	-	1	12	21	3	-	229	497
Upstate N.Y.	33	50	-	1	6	7	-	-	34	61
N.Y. City	14	34	-	-	4	8	-	-	108	224
N.J.	16	31	-	-	2	4	-	-	36	69
Pa.	19	17	-	-	-	2	3	-	51	143
E.N. CENTRAL	58	131	1	1	10	24	-	-	181	414
Ohio	24	40	-	-	5	5	-	-	34	104
Ind.	13	16	-	-	1	5	-	-	12	19
Ill.	14	49	-	-	3	10	-	-	57	144
Mich.	7	6	1	1	1	-	-	-	65	86
Wis.	-	20	-	-	-	4	-	-	13	61
W.N. CENTRAL	38	19	-	-	4	2	4	2	63	126
Minn.	16	14	-	-	4	2	-	1	14	19
Iowa	-	1	-	-	-	-	-	-	15	26
Mo.	15	3	-	-	-	-	4	1	15	25
N. Dak.	-	-	-	-	-	-	-	-	-	1
S. Dak.	1	-	-	-	-	-	-	-	-	3
Nebr.	-	-	-	-	-	-	-	-	4	6
Kans.	6	1	-	-	-	-	-	-	15	46
S. ATLANTIC	118	128	-	-	12	18	-	-	461	905
Del.	-	-	-	-	-	-	-	-	3	8
Md.	26	39	-	-	3	1	-	-	52	103
D.C.	-	-	-	-	-	-	-	-	14	32
Va.	9	9	-	-	3	2	-	-	21	29
W. Va.	3	2	-	-	-	-	-	-	5	9
N.C.	10	13	-	-	-	1	-	-	26	105
S.C.	3	3	-	-	-	1	-	-	18	18
Ga.	25	33	-	-	3	7	-	-	181	189
Fla.	42	29	-	-	3	6	-	-	141	412
E.S. CENTRAL	41	25	1	1	6	6	-	-	46	107
Ky.	2	3	-	-	-	-	-	-	10	26
Tenn.	22	12	-	-	4	3	-	-	23	42
Ala.	15	5	1	1	1	2	-	-	9	13
Miss.	2	5	-	-	1	1	-	-	4	26
W.S. CENTRAL	27	26	-	2	4	5	-	-	116	222
Ark.	4	1	-	-	1	-	-	-	2	13
La.	6	2	-	-	1	-	-	-	13	18
Okla.	17	21	-	-	2	5	-	-	5	12
Tex.	-	2	-	2	-	-	-	-	96	179
MOUNTAIN	68	81	1	2	19	17	2	2	124	198
Mont.	-	-	-	-	-	-	-	-	1	5
Idaho	-	1	-	-	-	-	-	-	-	18
Wyo.	-	1	-	-	-	-	-	-	1	2
Colo.	14	16	-	-	4	2	-	-	12	31
N. Mex.	8	15	-	-	3	4	-	-	7	6
Ariz.	36	35	1	1	9	8	-	1	77	99
Utah	6	10	-	1	3	2	-	-	11	12
Nev.	4	3	-	-	-	1	2	1	15	25
PACIFIC	26	70	-	-	7	20	1	1	430	732
Wash.	3	1	-	-	2	1	1	-	21	51
Oreg.	16	30	-	-	3	4	-	-	27	37
Calif.	2	22	-	-	2	12	-	1	375	626
Alaska	-	1	-	-	-	1	-	-	4	7
Hawaii	5	16	-	-	-	2	-	-	3	11
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	9	49
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 April 26, 2003, and April 27, 2002 (17th 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	1,963	2,136	754	657	269	224	124	128	1,442	1,949
NEW ENGLAND	69	77	-	14	9	8	6	13	112	179
Maine	-	1	-	-	-	1	-	2	-	-
N.H.	4	5	-	-	-	1	1	2	4	17
Vt.	1	2	-	6	1	-	-	-	3	1
Mass.	59	47	-	8	3	4	3	6	11	153
R.I.	3	9	-	-	1	-	-	1	48	3
Conn.	2	13	-	-	4	2	2	2	46	5
MID. ATLANTIC	343	652	39	40	36	63	17	27	1,062	1,471
Upstate N.Y.	32	42	18	19	19	14	6	9	608	723
N.Y. City	132	377	-	-	6	15	6	8	-	65
N.J.	151	125	-	5	2	12	3	3	147	242
Pa.	28	108	21	16	9	22	2	7	307	441
E.N. CENTRAL	141	180	174	39	58	71	12	21	36	60
Ohio	48	26	4	-	30	30	2	9	10	7
Ind.	4	9	1	-	3	5	1	1	4	2
Ill.	1	23	6	10	3	9	3	2	-	5
Mich.	74	110	163	29	22	18	6	6	-	-
Wis.	14	12	-	-	-	9	-	3	22	46
W.N. CENTRAL	93	77	87	288	10	15	4	4	23	19
Minn.	8	2	1	-	2	1	2	-	16	13
Iowa	4	11	-	1	3	3	-	1	2	3
Mo.	56	42	86	284	2	6	-	1	3	3
N. Dak.	-	1	-	-	1	-	-	1	-	-
S. Dak.	1	-	-	-	-	1	-	-	-	-
Nebr.	15	12	-	3	1	4	2	-	-	-
Kans.	9	9	-	-	1	-	-	1	2	-
S. ATLANTIC	605	518	70	67	88	23	33	16	152	157
Del.	2	5	-	3	-	3	N	N	26	24
Md.	34	52	5	6	17	6	4	3	85	95
D.C.	1	6	-	-	1	-	-	-	2	6
Va.	28	67	-	-	4	2	2	1	9	6
W. Va.	7	11	-	1	N	N	1	-	-	-
N.C.	51	72	3	8	9	3	7	2	17	18
S.C.	47	32	22	3	2	3	1	2	1	1
Ga.	224	130	3	29	7	5	10	3	2	1
Fla.	211	143	37	17	48	1	8	5	10	6
E.S. CENTRAL	103	104	26	77	9	6	4	6	10	8
Ky.	23	15	7	2	-	4	-	1	2	3
Tenn.	41	43	1	12	7	-	-	2	5	-
Ala.	22	21	4	2	1	2	3	3	-	3
Miss.	17	25	14	61	1	-	1	-	3	2
W.S. CENTRAL	95	124	315	88	20	8	11	8	8	22
Ark.	2	42	-	6	-	-	-	-	-	-
La.	26	21	18	15	-	3	-	-	2	1
Okla.	14	1	-	-	2	1	1	3	-	-
Tex.	53	60	297	67	18	4	10	5	6	21
MOUNTAIN	196	128	18	10	16	9	11	9	5	4
Mont.	8	3	1	-	-	1	1	-	-	-
Idaho	-	2	-	-	2	-	-	-	1	1
Wyo.	2	7	-	2	1	-	-	-	-	-
Colo.	26	26	13	2	2	2	5	2	1	-
N. Mex.	8	24	-	-	1	1	1	-	-	1
Ariz.	116	40	3	-	5	2	4	5	-	1
Utah	15	10	-	-	3	3	-	2	2	-
Nev.	21	16	1	6	2	-	-	-	1	1
PACIFIC	318	276	25	34	23	21	26	24	34	29
Wash.	20	17	2	4	2	1	1	1	-	-
Oreg.	42	51	4	8	N	N	1	2	9	1
Calif.	245	200	18	22	21	20	24	21	24	28
Alaska	7	5	-	-	-	-	-	-	1	-
Hawaii	4	3	1	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	13	35	-	-	-	-	-	-	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 April 26, 2003, and April 27, 2002 (17th 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	262	327	647	743	1,374	2,003	1,227	2,097	82	99
NEW ENGLAND	6	19	33	48	151	230	128	255	-	-
Maine	1	1	5	3	1	3	11	14	-	-
N.H.	1	4	3	5	12	3	3	7	-	-
Vt.	-	1	-	3	20	38	9	48	-	-
Mass.	4	9	21	26	117	179	53	83	-	-
R.I.	-	-	1	3	1	-	12	18	-	-
Conn.	-	4	3	8	-	7	40	85	-	-
MID. ATLANTIC	52	101	46	101	132	105	106	286	6	13
Upstate N.Y.	15	12	13	22	74	73	77	171	-	1
N.Y. City	27	65	12	18	-	6	1	9	3	3
N.J.	3	13	8	13	7	-	28	36	3	1
Pa.	7	11	13	48	51	26	-	70	-	8
E.N. CENTRAL	28	47	82	109	112	241	10	15	1	2
Ohio	6	7	28	38	74	133	4	2	1	2
Ind.	-	2	14	15	12	15	2	3	-	-
Ill.	11	16	13	18	-	38	1	3	-	-
Mich.	10	17	20	19	14	26	3	3	-	-
Wis.	1	5	7	19	12	29	-	4	-	-
W.N. CENTRAL	9	25	55	61	70	191	179	140	2	12
Minn.	6	8	13	15	33	67	8	7	-	-
Iowa	2	2	7	8	9	51	21	13	1	-
Mo.	-	6	26	25	17	41	4	7	1	12
N. Dak.	-	1	-	-	-	5	16	13	-	-
S. Dak.	-	-	1	2	2	5	20	31	-	-
Nebr.	-	3	4	7	1	3	39	-	-	-
Kans.	1	5	4	4	8	19	71	69	-	-
S. ATLANTIC	72	57	120	103	144	133	623	706	68	61
Del.	-	1	7	4	1	1	-	9	-	-
Md.	22	22	11	3	17	17	2	121	8	8
D.C.	5	2	-	-	-	1	-	-	-	-
Va.	6	7	6	15	33	62	168	171	1	1
W. Va.	2	1	1	-	1	3	23	56	-	-
N.C.	6	7	16	14	54	13	228	183	47	41
S.C.	1	2	6	11	5	23	42	22	9	6
Ga.	6	9	13	13	15	7	116	113	-	5
Fla.	24	6	60	43	18	6	44	31	3	-
E.S. CENTRAL	6	5	25	32	33	59	16	122	4	8
Ky.	1	1	-	4	8	15	10	8	-	-
Tenn.	3	1	7	11	14	29	-	108	3	6
Ala.	2	1	8	9	8	8	6	6	-	1
Miss.	-	2	10	8	3	7	-	-	1	1
W.S. CENTRAL	22	2	125	85	74	439	96	424	-	1
Ark.	2	-	7	13	-	270	25	-	-	-
La.	1	2	19	10	4	3	-	-	-	-
Okla.	1	-	6	8	2	12	71	29	-	-
Tex.	18	-	93	54	68	154	-	395	-	1
MOUNTAIN	10	12	21	50	292	266	23	66	1	1
Mont.	-	-	2	2	-	2	3	4	-	-
Idaho	1	-	2	2	9	26	1	-	-	-
Wyo.	-	-	1	-	50	5	-	3	-	-
Colo.	7	7	4	15	105	116	-	-	-	-
N. Mex.	-	-	3	1	17	28	-	2	-	-
Ariz.	1	2	6	16	78	70	19	56	1	-
Utah	1	2	-	1	25	12	-	-	-	-
Nev.	-	1	3	13	8	7	-	1	-	1
PACIFIC	57	59	140	154	366	339	46	83	-	1
Wash.	8	3	11	26	94	110	-	-	-	-
Oreg.	5	2	27	21	92	20	-	-	-	-
Calif.	44	50	95	102	180	201	43	59	-	1
Alaska	-	1	1	1	-	2	3	24	-	-
Hawaii	-	3	6	4	-	6	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	2	2	-	-	20	21	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 April 26, 2003, and April 27, 2002 (17th 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	7,665	9,034	6,064	4,226	1,979	1,777	905	872	133	98
NEW ENGLAND	373	464	94	81	123	97	3	3	1	1
Maine	25	51	4	2	13	15	-	-	-	-
N.H.	25	23	2	3	11	20	-	-	N	N
Vt.	9	18	2	-	11	4	3	3	1	1
Mass.	209	260	59	56	87	52	N	N	N	N
R.I.	19	18	3	4	1	6	-	-	-	-
Conn.	86	94	24	16	-	-	-	-	-	-
MID. ATLANTIC	701	1,379	342	321	256	327	39	46	32	32
Upstate N.Y.	190	303	86	44	155	135	24	43	26	27
N.Y. City	271	469	117	149	33	84	U	U	U	U
N.J.	65	282	72	69	15	66	N	N	N	N
Pa.	175	325	67	59	53	42	15	3	6	5
E.N. CENTRAL	1,038	1,549	380	549	449	426	183	74	63	41
Ohio	353	373	85	269	140	90	132	-	50	-
Ind.	79	95	32	21	30	16	51	72	8	15
Ill.	320	586	162	170	93	139	-	2	-	-
Mich.	164	265	72	51	169	125	N	N	N	N
Wis.	122	230	29	38	17	56	N	N	5	26
W.N. CENTRAL	458	610	230	392	148	113	95	248	14	19
Minn.	132	137	30	43	68	59	-	162	14	17
Iowa	85	92	10	35	N	N	N	N	N	N
Mo.	129	226	76	41	30	24	6	4	-	1
N. Dak.	11	9	-	7	5	-	3	-	-	1
S. Dak.	19	26	8	126	13	5	-	1	-	-
Nebr.	35	36	79	92	17	9	-	20	N	N
Kans.	47	84	27	48	15	16	86	61	N	N
S. ATLANTIC	2,131	1,964	2,324	1,433	369	274	486	387	4	2
Del.	16	15	86	5	4	1	-	3	N	N
Md.	201	168	182	206	133	44	-	-	-	-
D.C.	11	25	19	18	8	4	2	27	-	1
Va.	178	199	87	320	22	33	N	N	N	N
W. Va.	18	20	-	2	16	7	24	24	4	1
N.C.	313	273	226	101	36	60	N	N	U	U
S.C.	93	107	79	18	12	23	46	83	N	N
Ga.	503	297	841	356	44	71	155	147	N	N
Fla.	798	860	804	407	94	31	259	103	N	N
E.S. CENTRAL	434	465	283	332	74	47	55	68	-	-
Ky.	81	76	41	52	16	6	4	8	N	N
Tenn.	145	137	89	19	58	41	51	60	N	N
Ala.	146	138	111	134	-	-	-	-	N	N
Miss.	62	114	42	127	-	-	-	-	-	-
W.S. CENTRAL	576	756	1,380	365	119	79	29	25	18	1
Ark.	83	89	19	55	2	1	7	4	-	-
La.	62	141	72	65	1	1	22	21	7	1
Okla.	64	76	204	88	31	14	N	N	11	-
Tex.	367	450	1,085	157	85	63	N	N	-	-
MOUNTAIN	523	526	284	161	221	218	13	21	1	2
Mont.	30	20	1	1	-	-	-	-	-	-
Idaho	61	37	6	2	10	4	N	N	N	N
Wyo.	8	18	1	2	-	6	3	8	-	-
Colo.	133	146	46	36	72	49	-	-	-	-
N. Mex.	41	78	47	41	54	44	10	13	-	-
Ariz.	166	131	154	57	78	105	-	-	N	N
Utah	54	35	15	12	7	10	-	-	1	2
Nev.	30	61	14	10	-	-	-	-	-	-
PACIFIC	1,431	1,321	747	592	220	196	2	-	-	-
Wash.	125	85	56	20	-	-	-	-	N	N
Oreg.	128	99	25	31	N	N	N	N	N	N
Calif.	1,092	1,051	650	522	182	178	N	N	N	N
Alaska	34	18	4	2	-	-	-	-	N	N
Hawaii	52	68	12	17	38	18	2	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	47	70	1	1	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	U	U	-	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 April 26, 2003, and April 27, 2002 (17th 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	2,082	2,026	117	133	2,571	3,540	74	92	4,201
NEW ENGLAND	57	25	1	-	75	121	6	7	825
Maine	3	-	1	-	-	5	-	-	470
N.H.	5	-	-	-	3	4	-	-	-
Vt.	-	1	-	-	-	1	-	-	273
Mass.	40	16	-	-	46	57	1	6	80
R.I.	6	1	-	-	5	18	2	-	2
Conn.	3	7	-	-	21	36	3	1	-
MID. ATLANTIC	238	207	24	20	567	591	11	29	3
Upstate N.Y.	7	8	8	1	56	82	3	3	N
N.Y. City	133	116	9	8	352	298	5	14	-
N.J.	48	45	7	10	97	145	3	9	-
Pa.	50	38	-	1	62	66	-	3	3
E.N. CENTRAL	288	412	30	18	290	317	4	14	2,186
Ohio	70	49	2	-	43	49	-	4	444
Ind.	12	20	3	-	38	33	1	1	-
Ill.	99	144	12	16	142	150	-	4	-
Mich.	103	192	13	2	62	62	3	3	1,409
Wis.	4	7	-	-	5	23	-	2	333
W.N. CENTRAL	53	35	2	-	117	143	-	4	12
Minn.	13	18	-	-	51	68	-	2	N
Iowa	3	2	-	-	6	-	-	-	N
Mo.	22	9	2	-	16	41	-	1	-
N. Dak.	-	-	-	-	-	2	-	-	12
S. Dak.	-	-	-	-	9	7	-	-	-
Nebr.	-	3	-	-	6	1	-	1	-
Kans.	15	3	-	-	29	24	-	-	-
S. ATLANTIC	562	482	18	30	536	723	20	8	854
Del.	2	6	-	-	-	7	-	-	3
Md.	103	51	2	3	61	70	3	2	-
D.C.	6	19	1	-	-	-	-	-	7
Va.	29	11	1	-	64	61	8	-	174
W. Va.	-	-	-	-	6	8	-	-	607
N.C.	59	108	5	9	66	98	4	-	N
S.C.	40	38	3	3	46	40	-	-	63
Ga.	109	84	2	7	84	127	3	2	-
Fla.	214	165	4	8	209	312	2	4	N
E. S. CENTRAL	112	201	10	12	201	225	3	2	-
Ky.	17	31	1	2	31	33	-	2	N
Tenn.	46	82	4	4	64	92	1	-	N
Ala.	43	66	4	4	77	65	2	-	-
Miss.	6	22	1	2	29	35	-	-	-
W. S. CENTRAL	275	264	16	33	230	617	-	5	216
Ark.	14	14	-	1	32	35	-	-	-
La.	32	44	-	-	-	-	-	-	3
Okla.	19	23	-	1	31	48	-	-	N
Tex.	210	183	16	31	167	534	-	5	213
MOUNTAIN	95	100	12	5	71	92	3	5	105
Mont.	-	-	-	-	-	-	-	-	N
Idaho	6	1	-	-	2	2	-	-	N
Wyo.	-	-	-	-	1	1	-	-	17
Colo.	6	12	2	1	25	22	3	2	-
N. Mex.	14	13	-	-	-	11	-	-	-
Ariz.	62	67	10	4	34	43	-	-	-
Utah	3	2	-	-	9	8	-	2	88
Nev.	4	5	-	-	-	5	-	1	-
PACIFIC	402	300	4	15	484	711	27	18	-
Wash.	20	18	-	1	68	73	-	-	-
Oreg.	15	5	-	-	24	28	2	2	-
Calif.	361	273	4	14	342	544	25	16	-
Alaska	-	-	-	-	19	21	-	-	-
Hawaii	6	4	-	-	31	45	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	58	8	1	-	-	24	-	-	111
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 April 26, 2003 (17th Week)

Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total	Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
NEW ENGLAND	551	378	112	36	13	12	59	S. ATLANTIC	1,431	902	331	133	38	26	89		
Boston, Mass.	141	86	31	13	2	9	15	Atlanta, Ga.	159	88	51	16	4	-	6		
Bridgeport, Conn.	33	22	10	1	-	-	3	Baltimore, Md.	242	146	53	31	9	3	26		
Cambridge, Mass.	14	11	2	1	-	-	2	Charlotte, N.C.	111	72	23	11	3	2	7		
Fall River, Mass.	32	23	7	1	1	-	5	Jacksonville, Fla.	130	82	32	10	3	3	5		
Hartford, Conn.	53	31	9	7	4	2	8	Miami, Fla.	121	76	27	16	1	1	8		
Lowell, Mass.	20	15	5	-	-	-	2	Norfolk, Va.	74	49	11	6	2	6	-		
Lynn, Mass.	21	16	4	-	-	1	1	Richmond, Va.	70	44	16	6	-	3	8		
New Bedford, Mass.	25	15	5	5	-	-	1	Savannah, Ga.	51	36	11	2	1	1	6		
New Haven, Conn.	38	29	7	1	1	-	3	St. Petersburg, Fla.	72	53	12	4	2	1	4		
Providence, R.I.	44	35	6	2	1	-	-	Tampa, Fla.	183	129	36	12	4	2	11		
Somerville, Mass.	6	6	-	-	-	-	-	Washington, D.C.	198	111	56	18	9	4	4		
Springfield, Mass.	45	34	8	2	1	-	4	Wilmington, Del.	20	16	3	1	-	-	4		
Waterbury, Conn.	19	12	6	-	1	-	7	E.S. CENTRAL	842	560	185	58	20	17	63		
Worcester, Mass.	60	43	12	3	2	-	8	Birmingham, Ala.	180	128	41	4	4	1	13		
MID. ATLANTIC	2,141	1,456	456	133	53	42	120	Chattanooga, Tenn.	88	58	23	4	1	2	7		
Albany, N.Y.	45	33	8	2	1	1	1	Knoxville, Tenn.	95	66	21	6	1	1	5		
Allentown, Pa.	17	17	-	-	-	-	2	Lexington, Ky.	81	53	13	6	3	6	4		
Buffalo, N.Y.	82	58	14	6	2	2	8	Memphis, Tenn.	161	103	34	18	3	3	12		
Camden, N.J.	45	22	13	6	2	2	8	Mobile, Ala.	73	47	14	7	2	3	4		
Elizabeth, N.J.	18	9	3	2	1	2	2	Montgomery, Ala.	46	26	14	4	2	-	4		
Erie, Pa.	30	25	3	1	1	-	1	Nashville, Tenn.	118	79	25	9	4	1	14		
Jersey City, N.J.	48	27	16	5	-	-	-	W.S. CENTRAL	1,398	849	334	112	58	45	98		
New York City, N.Y.	1,041	717	234	51	20	19	45	Austin, Tex.	102	58	29	11	2	2	6		
Newark, N.J.	62	28	20	8	2	4	3	Baton Rouge, La.	30	21	6	1	2	-	-		
Paterson, N.J.	15	10	3	2	-	-	3	Corpus Christi, Tex.	39	30	7	1	-	1	2		
Philadelphia, Pa.	358	220	78	37	15	8	14	Dallas, Tex.	195	117	47	17	6	8	12		
Pittsburgh, Pa. <sup>§</sup>	43	23	12	3	2	3	2	El Paso, Tex.	64	48	12	1	3	-	7		
Reading, Pa.	29	24	3	2	-	-	3	Ft. Worth, Tex.	118	65	31	10	5	7	8		
Rochester, N.Y.	147	124	16	5	2	-	9	Houston, Tex.	370	187	99	51	21	12	22		
Schenectady, N.Y.	17	15	2	-	-	-	4	Little Rock, Ark.	83	53	23	1	1	5	7		
Scranton, Pa.	17	14	2	-	1	-	1	New Orleans, La.	U	U	U	U	U	U	U		
Syracuse, N.Y.	83	56	21	3	3	-	10	San Antonio, Tex.	177	120	40	7	7	3	16		
Trenton, N.J.	23	19	3	-	-	1	1	Shreveport, La.	86	56	16	8	3	3	13		
Utica, N.Y.	21	15	5	-	1	-	3	Tulsa, Okla.	134	94	24	4	8	4	5		
Yonkers, N.Y.	U	U	U	U	U	U	U	MOUNTAIN	1,010	684	199	67	36	24	81		
E.N. CENTRAL	1,921	1,231	458	143	51	38	155	Albuquerque, N.M.	153	111	28	8	6	-	16		
Akron, Ohio	U	U	U	U	U	U	U	Boise, Idaho	41	27	8	3	3	-	-		
Canton, Ohio	47	34	12	-	-	1	4	Colo. Springs, Colo.	72	48	14	7	1	2	4		
Chicago, Ill.	339	211	77	40	8	3	24	Denver, Colo.	112	67	24	9	4	8	8		
Cincinnati, Ohio	65	41	16	7	-	1	9	Las Vegas, Nev.	254	159	66	12	13	4	21		
Cleveland, Ohio	156	96	47	8	4	1	5	Ogden, Utah	24	17	7	-	-	-	-		
Columbus, Ohio	213	136	49	12	11	5	17	Phoenix, Ariz.	U	U	U	U	U	U	U		
Dayton, Ohio	130	88	28	9	3	2	17	Pueblo, Colo.	24	19	5	-	-	-	2		
Detroit, Mich.	188	89	56	22	12	9	12	Salt Lake City, Utah	132	88	20	14	4	6	13		
Evansville, Ind.	70	55	14	1	-	-	6	Tucson, Ariz.	198	148	27	14	5	4	17		
Fort Wayne, Ind.	62	51	6	3	1	1	5	PACIFIC	1,482	1,060	271	96	28	27	124		
Gary, Ind.	U	U	U	U	U	U	U	Berkeley, Calif.	9	7	2	-	-	-	2		
Grand Rapids, Mich.	40	25	9	5	-	1	5	Fresno, Calif.	128	97	18	9	3	1	10		
Indianapolis, Ind.	186	117	46	16	2	5	17	Glendale, Calif.	19	17	2	-	-	-	-		
Lansing, Mich.	48	35	11	-	1	1	4	Honolulu, Hawaii	67	52	11	4	-	-	11		
Milwaukee, Wis.	124	70	38	10	4	2	11	Long Beach, Calif.	61	38	16	3	1	3	7		
Peoria, Ill.	43	28	11	-	2	2	1	Los Angeles, Calif.	365	251	62	37	12	3	18		
Rockford, Ill.	56	40	9	6	-	1	8	Pasadena, Calif.	21	19	2	-	-	-	3		
South Bend, Ind.	52	41	8	-	-	3	6	Portland, Oreg.	154	100	34	12	5	3	11		
Toledo, Ohio	73	51	15	4	3	-	3	Sacramento, Calif.	U	U	U	U	U	U	U		
Youngstown, Ohio	29	23	6	-	-	-	1	San Diego, Calif.	176	122	40	7	2	5	16		
W.N. CENTRAL	504	368	87	28	14	7	64	San Francisco, Calif.	U	U	U	U	U	U	U		
Des Moines, Iowa	66	49	12	1	2	2	7	San Jose, Calif.	171	133	26	8	3	1	22		
Duluth, Minn.	33	25	4	3	-	1	2	Santa Cruz, Calif.	26	23	3	-	-	-	1		
Kansas City, Kans.	21	16	4	1	-	-	2	Seattle, Wash.	131	82	32	10	-	7	14		
Kansas City, Mo.	70	48	15	4	1	2	8	Spokane, Wash.	69	55	8	2	-	4	6		
Lincoln, Nebr.	50	39	8	3	-	-	7	Tacoma, Wash.	85	64	15	4	2	-	3		
Minneapolis, Minn.	49	31	11	1	4	2	5	TOTAL	11,280 <sup>¶</sup>	7,488	2,433	806	311	238	853		
Omaha, Nebr.	100	73	17	6	4	-	16										
St. Louis, Mo.	U	U	U	U	U	U	U										
St. Paul, Minn.	49	37	6	5	1	-	7										
Wichita, Kans.	66	50	10	4	2	-	10										

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](mailto: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: 2003-533-155/69111 Region IV