

Weekly

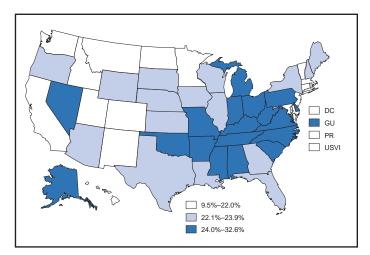
January 9, 2004 / Vol. 52 / No. 53

State-Specific Prevalence of Current Cigarette Smoking Among Adults — United States, 2002

Cigarette smoking in the United States causes serious illnesses among an estimated 8.6 million persons (1) and approximately 440,000 deaths annually (2), resulting in \$157 billion in health-related economic costs (2). To reduce smoking prevalence, morbidity, mortality, and economic impact, state tobacco-control programs should include interventions to help persons stop smoking (3). To assess the prevalence of current cigarette smoking among adults, attempts to quit, and receipt of physician advice to quit during the preceding year, CDC analyzed data from the 2002 Behavioral Risk Factor Surveillance System (BRFSS) survey. This report summarizes the results of that analysis, which indicated a threefold difference in smoking prevalence across the 50 states, the District of Columbia (DC), Guam, Puerto Rico, and the U.S. Virgin Islands (range: 9.5%-32.6%) (Figure). To support smokers' attempts to quit, states/areas should implement comprehensive tobacco-control programs that include interventions to help persons stop smoking (e.g., quitlines).

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized, civilian U.S. population aged ≥18 years. Because BRFSS data are state-specific, median prevalences were reported rather than national averages. Estimates were weighted by age, race/ethnicity, and sex distribution of each state's population, and 95% confidence intervals were calculated by using SUDAAN. The median response rate across states/areas was 58.3% (range: 42.2%–82.6%).

Current cigarette smoking status was determined by asking respondents, "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Current smokers were defined as those who reported having smoked \geq 100 cigarettes during their lifetimes and who currently smoke every day or some days. Attempted smoking cessation was assessed by asking every day smokers, "During the past 12 months, have you stopped FIGURE. Prevalence* of current cigarette smoking among adults aged ≥18 years, by state/area — Behavioral Risk Factor Surveillance System, 50 states, District of Columbia (DC), Guam (GU), Puerto Rico (PR), and U.S. Virgin Islands (USVI), 2002



*The percentage of all adults in each state/area who reported having smoked ≥100 cigarettes during their lifetimes and who currently smoke every day or some days.

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smoking for 1 day or longer because you were trying to quit?" Respondents in 23 states and the U.S. Virgin Islands also were asked about receipt of physician advice to quit. Current smokers who had visited a health-care professional were asked, "In the past 12 months, has a doctor, nurse, or other health professional advised you to quit smoking?"

Cigarette Smoking Prevalence

During 2002, the median prevalence of current smoking in the 50 states and DC was 23.1% (range: 12.7% [Utah]–32.6% [Kentucky]) (Table 1). Current smoking prevalence also was highest in Alaska (29.4%), West Virginia (28.4%), Tennessee (27.8%), and Indiana (27.7%). Smoking prevalence was lowest in Utah (12.7%), California (16.4%), Massachusetts (19.0%), New Jersey (19.1%), and Connecticut (19.5%). In other areas, current smoking prevalence was 32.1% in Guam, 13.2% in Puerto Rico, and 9.5% in the U.S. Virgin Islands. The median smoking prevalence in the 50 states and DC was higher for men (25.9% [range: 14.2%–34.8%]) than for women (20.9% [range: 11.3%–30.5%]). Kentucky had the highest prevalence for both men (34.8%) and women (30.5%), and Utah had the lowest prevalence for both men (14.2%) and women (11.3%).

Attempts to Quit Smoking

Among the 50 states and DC, the median proportion of everyday smokers who tried to quit smoking during the preceding year was 52.0% (range: 42.4% [Hawaii]–66.2% [Utah]) (Table 2). Among respondents in the 23 states who were asked about receipt of physician advice to quit, the median proportion of current smokers who had received advice to quit during the preceding year was 72.0% (range: 64.0% [Wisconsin]–83.7% [Maine]) (Table 2). Overall, the median proportion of current smokers who had received advice to quit during the preceding year did not vary substantially by age, race/ethnicity, or sex.

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Editorial Note: One of the national health objectives for 2010 is to reduce the prevalence of current smoking among adults to $\leq 12\%$ (objective 27-1) (4). The findings in this report indicate that this objective has been achieved only in the U.S. Virgin Islands.

The median proportion of everyday smokers who stopped smoking for ≥ 1 day was 52.0%, compared with 45.0% in 1996 (CDC, unpublished data, 1996). This increase in quit attempts might reflect decreased acceptability of smoking, an increase in clean-indoor–air laws and policies, and higher taxes

TABLE 1. Prevalence of current cigarette smoking among adults*, by state/area and sex - Behavioral Risk Factor Surveillance System, 50 states, District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands, 2002

	P	/len	Wo	omen	Total
State/Area	%	(95% Cl†)	%	(95% CI)	% (95% CI)
Alabama	27.5	(±3.3)	21.6	(±2.1)	24.4 (±1.9)
Alaska	31.9	(±4.1)	26.7	(±3.7)	29.4 (±2.8)
Arizona§	27.0	(±4.4)	20.1	(±2.7)	23.5 (±2.6)
Arkansas [§]	28.7	(±2.8)	24.1	(±2.0)	26.3 (±1.7)
California [§]	19.7	(±2.4)	13.3	(±1.7)	16.4 (±1.5)
Colorado	21.4	(±2.3)	19.4	(±1.8)	20.4 (±1.5)
Connecticut§	20.6	(±2.2)	18.4	(±1.7)	19.5 (±1.3)
Delaware§	25.4	(±3.2)	24.1	(±3.0)	24.7 (±2.2)
District of Columbia§	23.8	(±3.7)	17.5	(±2.4)	20.4 (±2.1)
Florida [§]	23.6	(±2.1)	20.7	(±1.6)	22.1 (±1.3)
Georgia [§]	26.8	(±2.7)	20.0	(±1.8)	23.3 (±1.6)
Hawaii	26.2	(±2.3)	16.0	(±1.6)	21.1 (±1.4)
Idaho	21.6	(±2.2)	19.7	(±1.9)	20.6 (±1.4)
Illinois [§]	26.1	(±2.2)	19.8	(±1.6)	22.9 (±1.4)
Indiana§	29.8	(±2.2)	25.8	(±1.7)	27.7 (±1.4)
lowa	26.3	(±2.6)	20.2	(±2.1)	23.1 (±1.7)
Kansas	23.2	(±2.2)	20.9	(±1.8)	22.1 (±1.4)
Kentucky	34.8	(±3.0)	30.5	(±2.3)	32.6 (±1.8)
Louisiana§	26.6	(±2.4)	21.5	(±1.7)	23.9 (±1.5)
Maine [§]	26.4	(±3.1)	21.1	(±2.4)	23.6 (±2.0)
Maryland [§]	25.7	(±2.8)	18.6	(±2.0)	22.0 (±1.7)
Massachusetts§	20.2	(±1.8)	18.0	(±1.4)	19.0 (±1.2)
Michigan [§]	25.1	(±2.2)	23.5	(±1.9)	24.2 (±1.5)
Minnesota	24.3	(±2.3)	19.4	(±1.8)	21.7 (±1.4)
Mississippi [§] Missouri	33.2	(±3.2)	22.2	(±1.9)	27.4 (±1.8)
	29.6 21.3	(±2.8)	23.9	(±2.2)	26.6 (±1.8)
Montana Nebraska	21.3	(±2.6) (±2.8)	21.4 19.4	(±2.3) (±1.8)	21.3 (±1.7) 22.8 (±1.7)
Nevada	20.5	(±2.8) (±3.8)	23.5	(±1.0) (±3.1)	22.8 (±1.7) 26.0 (±2.4)
New Hampshire [§]	23.9	(±3.8) (±2.1)	23.5	(±3.1) (±1.8)	23.2 (±1.4)
New Jersey§	20.4	(± 2.1) (± 3.4)	17.9	(±1.6) (±2.6)	19.1 (±2.1)
New Mexico	23.3	(±3.4) (±2.4)	19.3	(±2.0) (±1.8)	21.2 (±1.5)
New York [§]	25.9	(± 2.5)	19.3	(±1.7)	22.4 (±1.5)
North Carolina	30.7	(±2.8)	22.3	(±1.7) (±2.0)	26.4 (±1.7)
North Dakota	23.1	(±2.6)	20.0	(±2.0) (±2.1)	21.5 (±1.7)
Ohio§	28.4	(±2.6)	25.0	(±2.1)	26.6 (±1.7)
Oklahoma	29.7	(±2.2)	23.8	(±1.6)	26.7 (±1.3)
Oregon§	24.6	(±2.9)	20.2	(±2.2)	22.4 (±1.8)
Pennsylvania§	26.1	(±1.7)	23.2	(±1.3)	24.6 (±1.0)
Rhode Island§	24.3	(±2.6)	20.9	(±1.9)	22.5 (±1.6)
South Carolina§	29.1	(±2.9)	24.4	(±2.2)	26.6 (±1.8)
South Dakota	25.6	(±2.4)	19.7	(±1.9)	22.6 (±1.5)
Tennessee	31.0	(±3.1)	24.9	(±2.3)	27.8 (±1.9)
Texas [§]	26.8	(±2.2)	19.1	(±1.5)	22.9 (±1.3)
Utah	14.2	(±2.1)	11.3	(±1.8)	12.7 (±1.4)
Vermont§	21.5	(±2.2)	20.9	(±1.9)	21.2 (±1.5)
Virginia [§]	28.5	(±3.4)	20.9	(±2.2)	24.6 (±2.0)
Washington§	23.6	(±2.4)	19.4	(±1.8)	21.5 (±1.5)
West Virginia	29.8	(±2.8)	27.2	(±2.2)	28.4 (±1.8)
Wisconsin	25.4	(±2.5)	21.4	(±1.9)	23.4 (±1.6)
Wyoming	25.3	(±2.8)	22.0	(±2.1)	23.7 (±1.7)
Median	25.9		20.9		23.1
Guam§	40.9	(±6.2)	22.4	(±4.2)	32.1 (±3.9)
Puerto Rico	18.7	(±0.2) (±2.4)	8.4	(± 1.4)	13.2 (±1.4)
U.S. Virgin Islands [§]	12.4	(±2.4) (±2.6)	7.1	(±1.6)	9.5 (±1.5)
Median	18.7		8.4	(=)	13.2
weulan	10.7		0.4		13.2

* Persons aged ≥18 years who reported having smoked ≥100 cigarettes during their lifetimes and who currently smoke every day or some days.

[†] Confidence interval.

§ Response rate: <60%.

TABLE 2. Percentage of everyday adult smokers who tried to quit and percentage of current adult smokers who received advice to quit, by state/area - Behavioral Risk Factor Surveillance System, 50 states, District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands, 2002

Everyday smokers who quit for ≥ 1 day Current smokers who quit for ≥ 1 day State/Area % (95% C1) % (95% C1) Alabama 50.9 (±5.1) 71.1 (±5.3) Alaska 49.5 (±6.8) - - Arizona† 50.5 (±8.0) 70.9 (±7.5) Arkansas† 51.9 (±4.3) 70.5 (±4.2) Colorado 51.2 (±4.6) 71.6 (±4.8) Connecticut [†] 59.3 (±7.0) - - Delaware† 50.4 (±6.1) 80.3 (±4.6) District of Columbia† 59.9 (±7.0) - - Hawaii 42.4 (±4.2) - - Idaho 53.2 (±4.4) - - Illinois† 50.1 (±3.8) - - Illinois† 52.2 (±4.3) - - Illinois 56.7 (±5.2) 83.7 (±3.8)		misianus,	2002		
Alabama 50.9 (± 5.1) 71.1 (± 5.3) Alaska 49.5 (± 6.8) Arizona [†] 50.5 (± 8.0) 70.9 (± 7.5) Arkansas [†] 51.9 (± 4.3) 70.5 (± 4.2) California [†] 62.3 (± 5.3) - - Colorado 51.2 (± 4.6) 71.6 (± 4.8) Connecticut [†] 59.3 (± 4.2) - - Delaware [†] 50.4 (± 6.1) 80.3 (± 4.6) District of Columbia [†] 58.9 (± 7.0) - - Florida [†] 48.0 (± 3.7) 73.6 (± 3.6) Georgia [†] 55.4 (± 4.3) - - - Idaho 53.2 (± 4.4) - - - - Indiana [†] 52.4 (± 3.3) 72.6 (± 3.4) lowa 46.6 (± 4.5) - - - Kansas 42.2 (± 4.3) 72.0 (± 4.3) - - -<				who r	received
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Arizona [†] 50.5 (± 8.0) 70.9 (± 7.5) Arkansas [†] 51.9 (± 4.3) 70.5 (± 4.2) California [†] 62.3 (± 5.3) - - Colorado 51.2 (± 4.6) 71.6 (± 4.8) Connecticut [†] 59.3 (± 4.2) - - Delaware [†] 50.4 (± 6.1) 80.3 (± 4.6) District of Columbia [†] 58.9 (± 7.0) - - Hawaii 42.4 (± 4.2) - - - Idaho 53.2 (± 4.3) - - - Idaho 53.2 (± 4.4) - - - Indiana [†] 52.4 (± 3.3) 72.6 (± 3.4) Iowa 46.6 (± 4.5) - - - Kansas 44.2 (± 4.0) - - - Kansas 44.2 (± 4.0) - - - Kansas 44.2 (± 4.0) - - -	Alabama	50.9	(±5.1)	71.1	(±5.3)
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California [†] 62.3 (± 5.3) Colorado 51.2 (± 4.6) 71.6 (± 4.8) Connecticut [†] 59.3 (± 4.2) Delaware [†] 50.4 (± 6.1) 80.3 (± 4.6) District of Columbia [†] 58.9 (± 7.0) Florida [†] 48.0 (± 3.7) 73.6 (± 3.6) Georgia [†] 55.4 (± 4.3) Ildaho 53.2 (± 4.4) Ildininis [†] 50.1 (± 3.8) Ildininis [†] 50.1 (± 3.8) Ildininis [†] 50.1 (± 3.7) 7.2 (± 3.4) Kantacky 45.6 (± 3.7) 7.2 (± 3.8) Maryland [†] 52.3 (± 5.1) Mississippin [†] 53.9 (± 4.6) Missouri 44.5 (± 4.6) New Jersey [†] 55.2 (± 7.0)	Arizona [†]	50.5	(±8.0)	70.9	(±7.5)
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$\begin{array}{l linois^{\dagger} & 50.1 & (\pm 3.8) & - & - \\ Indiana^{\dagger} & 52.4 & (\pm 3.3) & 72.6 & (\pm 3.4) \\ lowa & 46.6 & (\pm 4.5) & 71.4 & (\pm 5.4) \\ Kansas & 44.2 & (\pm 4.0) & - & - \\ Kentucky & 45.6 & (\pm 3.7) & - & - \\ Louisiana^{\dagger} & 53.4 & (\pm 3.9) & 73.2 & (\pm 3.8) \\ Maine^{\dagger} & 56.7 & (\pm 5.2) & 83.7 & (\pm 4.3) \\ Maryland^{\dagger} & 52.3 & (\pm 5.1) & - & - \\ Massachusetts^{\dagger} & 56.0 & (\pm 3.9) & - & - \\ Michigan^{\dagger} & 53.1 & (\pm 4.3) & - & - \\ Mississippi^{\dagger} & 53.9 & (\pm 4.6) & - & - \\ Mississippi^{\dagger} & 53.9 & (\pm 4.6) & - & - \\ Mississippi^{\dagger} & 53.9 & (\pm 4.6) & - & - \\ Mississupi^{\dagger} & 53.9 & (\pm 4.6) & - & - \\ Motana & 45.0 & (\pm 5.2) & - & - \\ Nebraska & 52.2 & (\pm 4.9) & 72.0 & (\pm 4.4) \\ Nevada & 49.5 & (\pm 6.4) & - & - \\ New Hampshire^{\dagger} & 56.7 & (\pm 3.8) & - & - \\ New Jarsey^{\dagger} & 55.2 & (\pm 7.0) & 69.5 & (\pm 6.9) \\ New Mexico & 50.0 & (\pm 4.2) & - & - \\ New Vard^{\dagger} & 58.0 & (\pm 4.2) & - & - \\ North Carolina & 53.2 & (\pm 4.2) & 76.9 & (\pm 4.0) \\ North Dakota & 47.1 & (\pm 5.1) & 72.1 & (\pm 5.6) \\ Ohio^{\dagger} & 46.7 & (\pm 4.1) & 68.7 & (\pm 4.6) \\ Ohio^{\dagger} & 61.7 & (\pm 4.3) & 70.1 & (\pm 3.8) \\ Oregon^{\dagger} & 52.5 & (\pm 5.4) & - & - \\ Pennsylvania^{\dagger} & 49.8 & (\pm 2.8) & - & - \\ Pennsylvania^{\dagger} & 49.8 & (\pm 2.8) & - & - \\ Pennsylvania^{\dagger} & 61.7 & (\pm 4.3) & 76.8 & (\pm 4.3) \\ Oregon^{\dagger} & 52.5 & (\pm 5.4) & - & - \\ Pennsylvania^{\dagger} & 53.6 & (\pm 4.4) & 69.8 & (\pm 4.7) \\ South Carolina^{\dagger} & 53.6 & (\pm 4.4) & 69.8 & (\pm 4.7) \\ South Dakota & 52.0 & (\pm 4.4) & - & - \\ Tennessee & 48.1 & (\pm 4.5) & - & - \\ Tennessee & 48.1 & (\pm 4.5) & - & - \\ West Virginia & 43.5 & (\pm 4.4) & - & - \\ Werst Virginia & 43.5 & (\pm 4.4) & - & - \\ Werst Virginia & 43.5 & (\pm 4.4) & - & - \\ Werst Virginia & 43.5 & (\pm 4.4) & - & - \\ Werst Virginia & 43.5 & (\pm 4.2) & 76.2 & (\pm 3.8) \\ Wisconsin & 51.7 & (\pm 4.3) & 64.0 & (\pm 5.0) \\ Wyoning & 53.9 & (\pm 5.0) & 72.6 & (\pm 4.7) \\ Median & 52.0 & 72.0 \\ Ush & dian & 52.0 & 72.0 \\ Wyoning & 53.9 & (\pm 5.0) & - & - \\ Wert Nirgin Islands^{\dagger} & 50.5 & (\pm 9.4) & 62.9 & (\pm 10.5) $	Hawaii	42.4	(±4.2)	—	
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	Median	64.4		62.9	

* Confidence interval. † Response rate: <60%.

implemented by certain states. In addition, the proportion of current smokers who had been advised to guit was 72.0%, which was higher than estimates from other surveys (5), although comparisons are limited by the number of states that asked the question. This increase might reflect efforts within health-care systems to increase treatment for tobacco users through proven interventions and system-level changes (e.g., physician reminders to provide counseling). The increases also might be attributed to expanded tobacco-control programs at the state level, including the expansion of evidence-based, telephone quitline services (6). During 1992-2002, states offering some form of quitline services increased from one to 32. Physicians often lack the time and often are not comfortable providing cessation counseling. Establishing readily accessible, free counseling services (e.g., quitlines) increases the availability of more intensive cessation assistance and might also encourage health-care providers to assess tobacco use and provide both advice to quit and medication (7).

The findings in this report are subject to at least three limitations. First, BRFSS does not sample persons in households without telephones. Second, response rates might have affected estimates; however, BRFSS estimates are comparable with current smoking estimates obtained from other surveys with higher response rates (8). Finally, data were based on selfreports, and smoking status in BRFSS is not validated by biochemical markers. However, BRFSS data on cigarette smoking measures have moderate-to-high validity and high reliability (9), and self-reports of smoking have been found to be valid in other population-based surveys (10).

To help states plan and implement comprehensive tobaccocessation programs, CDC recommends several strategies, including implementing telephone quitlines, integrating tobacco cessation into routine health-care delivery, and making tobacco-treatment services a standard health benefit (3). Approximately 70% of smokers visit physicians each year (5), giving health-care providers the opportunity to reach smokers. Through these interactions, providers can advise smokers to quit, discuss appropriate treatments (e.g., medications and counseling), and provide referrals to quitlines or other community programs.

To implement tobacco-control programs fully and reduce smoking prevalence further, CDC recommends spending \$7–\$20 per capita in smaller states (i.e., population of <3 million), \$6–\$17 per capita in medium-sized states (i.e., population of 3–7 million), and \$5–\$16 per capita in larger states (i.e., population of >7 million) (3). In 2002, per capita funding varied across states (range: \$0.33–\$19.16); few met CDC's minimum funding recommendations (4). In recent years, states have received less funding for tobacco-control programs, which inhibits expansion of cessation activities such as quitlines and implementation of recommended changes within the health-care system. Unless states expand cessation and other tobacco-control efforts, the 2010 national health objective of reducing smoking prevalence to $\leq 12\%$ will not be achieved.

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Bovine Spongiform Encephalopathy in a Dairy Cow — Washington State, 2003

On December 23, 2003, the U.S. Department of Agriculture (USDA) made a preliminary diagnosis of bovine spongiform encephalopathy (BSE) in a single "downer" (i.e., nonambulatory disabled) dairy cow in Washington state. On December 25, this diagnosis was confirmed by the BSE international reference laboratory in Weybridge, England. This report summarizes the findings of the initial investigation of this case and describes the public health prevention measures adopted by USDA to protect the human food supply. The occurrence of BSE in the United States reinforces the need for physicians to be aware of the clinical features of variant Creutzfeldt-Jakob disease (vCJD) and to arrange for brain autopsies in all decedents with suspected or probable CJD to assess the neuropathology of these patients.

The BSE-positive cow was aged 6.5 years when it was slaughtered on December 9. Before slaughter, the cow was nonambulatory; its condition was attributed to complications from calving. The animal was examined by a USDA Food Safety and Inspection Service (FSIS) veterinary medical officer both before and after slaughter. After examination, the carcass was released for use as food for human consumption. Tissues (e.g., brain, spinal cord, and small intestine) considered to be at high risk for the transmission of the BSE agent were removed from the cow during slaughter and sent for inedible rendering (often used for nonruminant animal feed). Because the cow was nonambulatory at slaughter, brain tissue samples were taken by USDA's Animal and Plant Health Inspection Service (APHIS) as part of its targeted surveillance for BSE. On December 23, a presumptive diagnosis of BSE was made, and the herd to which this cow belonged was placed under a state hold order. USDA, in collaboration with state and other federal animal and public health agencies, industry representatives, and the Canadian Food Inspection Agency (CFIA), initiated investigations of potentially exposed cattle and regulated products.

On December 24, FSIS recalled beef from cattle slaughtered in the same plant on the same day as the BSE-positive cow. Some of the beef subject to the recall had been shipped to several establishments, which processed it further. Meat products manufactured from the recalled meat were distributed primarily to locations in Oregon and Washington, with smaller quantities distributed to locations in California, Idaho, Montana, and Nevada. FSIS continues to verify the distribution and control of all recalled products.

The U.S. Food and Drug Administration (FDA) and inspectors from Oregon and Washington have located all known potentially infectious rendered products from the BSEpositive cow. The rendering plants that processed this material have placed a voluntary hold on all known potentially infectious products, none of which had left the control of the companies or entered commercial distribution as of January 7, 2004. FDA continues its investigation of all regulated products related to the BSE-positive cow.

APHIS, in collaboration with CFIA, traced the birth of the BSE-positive cow to a farm in Alberta, Canada. On January 6, USDA and CFIA announced that DNA evidence had confirmed this traceback to Canada with a high degree of certainty. This line of investigation indicates that the BSE-positive cow was one of 82 animals from a Canadian herd cleared for shipment to the United States; 81 of the cattle listed on the Canadian animal health certificate entered the United States on September 4, 2001, through Oroville, Washington. These cattle are being traced to determine their disposition or current location. The BSE-positive cow gave birth to two live calves while in the United States. The first is a yearling heifer on the same farm as the BSE-positive cow. The second, a bull calf, was in a group of calves at another location, a calffeeding operation that also was under a state hold order. Because the bull calf could not be identified definitively, APHIS completed the elimination of all calves at this site on January 6. Since the epidemiologic investigation began, APHIS has developed criteria for determining additional cattle at risk for BSE that should be eliminated.

On December 30, USDA announced additional safeguards to further minimize the risk for human exposure to BSE in the United States (Box). Beginning immediately, FSIS has prohibited the use of downer cattle for food for human consumption. Through its emergency rule-making powers, FSIS will take additional actions that will become effective on their publication. Planned actions include the required removal of "specified risk materials" (i.e., high-risk materials) from

BOX. Safeguards proposed by the U.S. Department of Agriculture (USDA) to minimize the risk for exposure to the bovine spongiform encephalopathy (BSE) agent — United States, December 30, 2003

- USDA's Food Safety and Inspection Service (FSIS) has announced an immediate ban on the use of nonambulatory disabled ("downer") cattle for human food consumption.
- FSIS inspectors will not mark cattle carcasses tested for BSE as "inspected and passed" until negative test results are received.
- FSIS will prohibit the use in the human food supply (including advanced meat recovery [AMR]*) of "specified risk materials" (i.e., high-risk materials), including the skull, brain, trigeminal ganglia, eyes, vertebral column, spinal cord, and dorsal root ganglia of cattle aged ≥30 months and the tonsils and small intestine of cattle of all ages.
- FSIS also will prohibit the presence of brain, spinal cord, trigeminal ganglia, and dorsal root ganglia from cattle aged <30 months in meat produced by AMR.
- To reduce the risk that portions of the brain are not dislocated into the tissues of the carcass as a consequence of stunning cattle before slaughter, FSIS will ban air-injection stunning.
- FSIS will prohibit the use of mechanically separated beef[†] in the human food supply.

^{*}An industrial process that removes muscle tissue from the bone of beef carcasses under high pressure without incorporating bone material when operated properly; product may be labeled as "meat."

[†]A meat food product that is finely ground to a paste- or batter-like consistency and that results from the mechanical separation and removal of most of the bones from the attached skeletal muscle of cattle carcasses and parts of carcasses; may not be labeled as "meat" but rather as "meat food product."

animals aged \geq 30 months at the time of slaughter and withholding the USDA "inspected and passed" mark until negative BSE test results are received for any animal tested. To enhance the speed and accuracy of the response to animal health threats such as BSE, APHIS is working to implement a national identification system to track animals of various species through the livestock marketing chain. USDA also will appoint an international panel of scientists with BSE expertise to provide an objective review of the response to the identification of the BSE-positive cow described in this report and to identify areas for potential improvement of current BSE safeguards.

Reported by: Animal and Plant Health Inspection Svc; Food Safety and Inspection Svc, U.S. Dept of Agriculture. U.S. Food and Drug Administration. Div of Vital Statistics, National Center for Health Statistics; Div of Viral and Rickettsial Diseases, National Center for Infections Diseases, CDC.

Editorial Note: BSE is a progressive, fatal neurologic disorder of cattle and is classified as one of the transmissible spongiform encephalopathies, a group of diseases of animals and humans believed to be caused by abnormally folded proteins called prions. BSE was first identified in 1986 in the United Kingdom (UK), where it caused a large outbreak among cattle (1). Although the source of the BSE epizootic agent is uncertain, feeding cattle BSE-contaminated meat-andbone meal is the major contributory factor to the amplification of BSE among cattle (2). Since 1986, BSE cases have been identified in 20 European countries, Japan, Israel, and Canada. Since BSE surveillance was initiated in the United States in 1990, USDA has tested brain tissue from approximately 57,000 cattle, targeting those at high risk for BSE (e.g., downer cattle and cattle with neurologic signs); the case described in this report represents the first identification of BSE in the United States. Whether an epidemiologic link exists between this BSE case traced to Canada and the previous case reported in Canada is not known.

Epidemiologic and laboratory evidence suggests that the BSE agent has been transmitted to humans via consumption of BSE-contaminated cattle products, causing vCJD (1). However, the risk for acquiring vCJD from consumption of BSEcontaminated product is low, presumably because of a "species barrier" that provides substantial but incomplete protection against development of vCJD. In the UK, where an estimated one million or more cattle probably were infected with BSE, cases of vCJD continue to be reported; however, the number of cases of vCJD remains small, with 148 probable and confirmed vCJD cases identified as of January 7, including those of three persons residing in Ireland, Canada, and the United States who are believed to have been exposed to BSE in the UK (1,3). Seven additional cases not directly linked to the BSE outbreak in the UK also have been reported (six in France and one in Italy).

In the United States, the feeding of rendered cattle products to other cattle has been prohibited since 1997, and the importation of cattle and cattle products from countries with BSE or considered to be at high risk for BSE has been prohibited since 1989; these measures have minimized the potential exposure of animals and humans to the BSE agent (4). The additional safeguards described in this report should further reduce the risk for acquiring vCJD.

Substantial clinical and epidemiologic differences exist between vCJD and the more commonly occurring classic form of CJD recognized in the United States for decades before the emergence of BSE (Table). Although strong epidemiologic and laboratory evidence indicates that vCJD is linked causally with BSE, no exogenous source of infection has been identified for approximately 85% of classic CJD cases (5). The median age at death of classic CJD patients in the United States is 68 years, compared with 28 years for vCJD patients. The age

Characteristic	UK vCJD	U.S. classic CJD
Median age at death (yrs)	28 (range: 14–74)	68 (range: 23–97)*
Median Illness duration (mos)	13–14	4–5
Clinical presentation	Prominent psychiatric/behavioral symptoms; painful sensory symptoms; delayed neurologic signs	Dementia; early neurologic signs
Periodic sharp waves on EEG	Absent	Often present
"Pulvinar sign" on MRI [†]	Present in >75% of cases	Not reported
Presence of "florid plaques" on neuropathology	Present in great numbers	Rare or absent
Immunohistochemical analysis of brain tissue	Marked accumulation of PrPres§	Variable accumulation
Presence of agent in lymphoid tissue	Readily detected	Not readily detected
Increased glycoform ratio on immunoblot analysis of PrPres	Present	Not present
Genotype at codon 129 of prion protein	Methionine/Methionine	Polymorphic

TABLE. Clinical and pathologic characteristics distinguishing variant Creutzfeldt-Jakob disease (vCJD) from classic CJD — United Kingdom (UK) and United States, 1979–2001

* Surveillance data 1979–2001.

 $\frac{1}{8}$ High signal in the posterior thalamus.

⁹Protease-resistant prion protein.

trust-wor-thy: adj

('trəst-"wər-thē) 1 : worthy of belief
2 : capable of being depended upon;
see also *MMWR*.



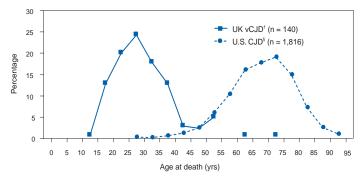
know what matters.



distribution of these deaths illustrates that most vCJD occurs in age groups in which classic CJD is rare (Figure) (RG Will, M.D., National CJD Surveillance Unit, Edinburgh, Scotland, personal communication, 2004). In addition, the median duration of illness before death for classic CJD patients in the United States is 4-5 months, compared with 13-14 months for vCID patients (6). Patients with vCID often have prominent early behavioral or psychiatric manifestations and painful sensory symptoms, with neurologic signs such as myoclonus and extrapyramidal dysfunction being delayed for several months after illness onset (6). The characteristic electroencephalographic pattern of periodic sharp waves observed in classic CJD patients is absent in patients with vCJD. A characteristic high signal in the posterior thalamus on T2- and diffusion-weighted magnetic resonance imaging (the "pulvinar sign") is demonstrated in >75% of vCJD patients, and in the appropriate clinical context, is highly indicative of a vCJD diagnosis (7).

Confirmatory diagnosis of vCJD and classic CJD requires pathologic examination of brain tissue obtained at autopsy or biopsy. The neuropathology in vCJD is distinguished by the presence of numerous deposits of kuru-type plaques surrounded by vacuoles (i.e., "florid plaques") in the cerebellum and cerebrum and the marked accumulation of the pathologic protease-resistant prion protein on immunohistochemical (IHC) analysis (8). Prions are detected readily by IHC analysis in lymphoid tissues (e.g., appendix, lymph nodes, spleen, and tonsils) of vCJD patients, but not in classic CJD patients (9). All persons with vCJD tested as of January 2004 have had methionine homozygosity at the polymorphic codon 129 of the prion protein gene, indicating that persons who do

FIGURE. Percentage distribution of deaths caused by variant Creutzfeldt-Jakob disease (vCJD) in the United Kingdom (UK) and deaths caused by CJD in the United States, by age at death, 1995–2003*



* Excludes blood transfusion-associated vCJD and pituitary hormone- or _dural graft-associated CJD.

- ⁺ Noniatrogenic UK vCJD deaths, including UK-related nonresident cases, s1995–2003.
- [§]Noniatrogenic U.S. deaths, 1995–2001.

not carry this genotype (comprising the majority of the general population) appear to have increased resistance to vCJD.

Since 1996, CDC has used several mechanisms to conduct surveillance for classic CJD and vCJD in the United States (10). CDC reviews national multiple cause-of-death data to monitor the epidemiology of CJD in the United States. CDC, in collaboration with state and local health departments, investigates CID cases in persons aged <55 years to identify cases of possible vCJD. In addition, CDC assists routinely in the investigation of suspected cases of vCJD spontaneously reported by health-care providers. During 1996–1997, in collaboration with the American Association of Neuropathologists, CDC established the National Prion Disease Pathology Surveillance Center (NPDPSC) at Case Western Reserve University, Cleveland, Ohio. NPDPSC provides advanced neuropathologic and biochemical diagnostic services free of charge to U.S. physicians and state and local health departments. These surveillance efforts have not detected any cases of indigenous vCJD in the United States.

The emergence of BSE in the United States reinforces the need for physicians to be aware of the clinical features of vCJD in all patients, regardless of age, who report with distinguishing characteristics (Table 2). Because testing brain tissue permits the most definitive diagnosis of all forms of CJD and identification of emerging forms of the disease, including vCJD, CDC encourages physicians to arrange for brain autopsies in all decedents with suspected or diagnosed CJD and to use the free services of NPDPSC to assess the neuropathology of these patients. Information about these services is available from NPDPSC at http://www.cjdsurveillance.com or from CDC, telephone 404-639-3091.

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Fatal Respiratory Diphtheria in a U.S. Traveler to Haiti — Pennsylvania, 2003

Respiratory diphtheria can be severe or fatal in unvaccinated persons; even with appropriate treatment, 5%-10% of patients with diphtheria die (1). For >50 years, vaccination against diphtheria has been recommended for children and adults in the United States. Persons who are unvaccinated or vaccinated inadequately can contract diphtheria during travel to areas where the disease is endemic^{*}, putting them and their close contacts at risk for severe illness. This report describes fatal respiratory diphtheria in an unvaccinated Pennsylvania resident who had visited Haiti, a country where the disease is endemic. The case highlights the need for all international travelers to be up-to-date with all recommended vaccinations, including a primary series of diphtheria toxoid–containing vaccine.

In October 2003, the Pennsylvania Department of Health and CDC were notified of a suspected case of respiratory diphtheria in a previously healthy Pennsylvania man aged 63 years who reported that he had never been vaccinated against diphtheria. He and seven other men from New York, Pennsylvania, and West Virginia had returned from a week-long trip to rural Haiti, where they helped build a church. One day before leaving Haiti, the patient had a sore throat. Two days after his return to Pennsylvania, he visited a local emergency department (ED) complaining of a persistent sore throat and difficulty swallowing. A rapid test for group A streptococcal antigens and a test for heterophile agglutinins were negative; he received oral amoxicillin and clavulanate potassium.

On the fourth day of illness, the patient returned to the ED with chills, sweating, restlessness, difficulty swallowing and breathing, nausea, and vomiting. On examination, he was afebrile and had stridor and a swollen neck. Expiratory wheezing and diminished breath sounds in the left lung base were noted. Arterial pO2 was 88% on room air. Radiographs of the neck and chest showed prevertebral soft-tissue swelling, enlargement of the epiglottis, and opacity of the left lung base. Initial diagnosis was acute epiglottitis with airway obstruction and impending respiratory failure. The patient was admitted to the intensive care unit; during intubation, a laryngoscopy was performed that revealed a yellow exudate on the tonsils, posterior pharynx, and soft palate, and sloughing of the anterior pharyngeal folds. During the next 4 days, the patient was treated with azithromycin, ceftriaxone, nafcillin, and steroids, but he became hypotensive and febrile (100.9° F [38.3° C]). Methicillin-susceptible *Staphylococcus aureus* was isolated from sputum. Culture of a throat swab specimen was negative for *Corynebacterium diphtheriae*.

On the eighth day of illness, the patient was transferred to a tertiary care facility. A chest radiograph showed infiltrates in the right and left lung bases. During tracheostomy, a white exudate consistent with C. diphtheriae infection was observed. The pseudomembrane covered the supraglottic structures, including the epiglottis, vallecula and piriform sinus, the postcricoid region, and glottic inlet. Gram stain of laryngeal exudates showed gram-positive rods, gram-positive cocci, and yeast. The patient continued to receive multiple antibiotics, including penicillin, vancomycin, and gentamicin; diphtheria antitoxin (DAT) was administered on the ninth day of illness. Two days later, a sample of the pseudomembrane was negative by culture but positive for C. diphtheriae tox genes by polymerase chain reaction (PCR) performed at CDC. After 17 days of illness, the patient had cardiac complications and died. Based on the patient's travel to a country where diphtheria is endemic, the pattern of illness, and positive PCR results, his illness was consistent with a confirmed case of respiratory diphtheria.

Investigations of close contacts were conducted in New York, Pennsylvania, and West Virginia. Close contacts were defined as persons who had been exposed to the patient's respiratory secretions or who lived in the same household as the patient. These persons included his wife, health-care providers, Haiti traveling companions, and two other persons with whom he shared accommodations on the second day of his illness. Specimens were obtained for isolation of *C. diphtheriae* and PCR testing; all culture and PCR results were negative. Close contacts were administered antibiotic prophylaxis and offered a diphtheria toxoid–containing vaccine if they had not received a booster within the preceding 5 years.

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^{*} Diphtheria-endemic countries are listed at http://www.cdc.gov/travel/diseases/ dtp.htm.

Editorial Note: Diphtheria is caused by toxigenic strains of the bacterium *C. diphtheriae* and less frequently by *C. ulcerans.* Since universal vaccination began in the 1940s, diphtheria has been uncommon in the United States. In 2001, the vaccination coverage rate among children aged 19–35 months who had received ≥ 3 doses of diphtheria toxoid–containing vaccine was approximately 95% (2). However, among adults, coverage rates with decennial booster doses were lower. Testing of serum samples from participants in the Third National Health and Nutrition Examination Survey (1988–1994) indicated that the percentage of U.S. residents with protective levels (≥ 0.1 IU/ml) of diphtheria antibodies decreased progressively with age, from 91% at ages 6–11 years to approximately 30% at ages 60–69 years (3).

During 1980–2001, a total of 53 cases of probable or confirmed respiratory diphtheria were reported to CDC (4); the most recent previous report from Pennsylvania was in 1992. In recent years, sporadic cases of respiratory diphtheria have continued to occur in the United States, primarily among adults. In 1996, toxigenic *C. diphtheriae* was isolated from residents of an American Indian community (5), and toxigenic *C. ulcerans* was isolated from an Indiana resident aged 54 years who had respiratory diphtheria (6). In 1999, a Washington state resident aged 75 years died from an illness clinically consistent with respiratory diphtheria; toxigenic *C. ulcerans* was isolated from a throat swab (7).

Respiratory diphtheria should be suspected in patients with membranous nasopharyngitis or obstructive laryngotracheitis who returned recently from areas where the disease is endemic or who were in close contact with persons who returned recently from such areas. DAT, which is available from CDC[†], should be administered as soon as diphtheria is suspected, without waiting for laboratory confirmation. Antibiotics are administered to patients suspected with diphtheria to eradicate carriage of *C. diphtheriae* (8). Because diphtheria disease might not confer immunity, patients should be administered a diphtheria toxoid–containing vaccine during convalescence.

Diphtheria-infected travelers returning to the United States with incubating or untreated disease can transmit *C. diphtheriae* to their close contacts. Antibiotic prophylaxis is recommended for close contacts after nasal and pharyngeal specimens for culture are obtained (8). Adolescent and adult contacts who have not received a dose of a diphtheria toxoid– containing vaccine during the preceding 5 years should be vaccinated (8). Children should receive diphtheria and tetanus toxoids and acellular pertussis vaccine at ages 2 months, 4 months, 6 months, 12–18 months, and 4–6 years; a booster dose of tetanus and diphtheria toxoids (Td) vaccine should be administered preferably at ages 11–12 years (or ages 13– 18 years for catch-up); and protection should be maintained by a regular booster of Td every 10 years (*9*).

In addition to taking destination-specific, diseaseprevention precautions, all international travelers, regardless of age or destination, should ensure that they are up-to-date with all recommended vaccinations, including a primary series (i.e., ≥ 3 doses) of diphtheria toxoid–containing vaccine that includes a dose within the preceding 10 years. Additional information on vaccines recommended for travelers can be obtained from state health departments or CDC (10).

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Update: Influenza-Associated Deaths Reported Among Children Aged <18 Years — United States, 2003–04 Influenza Season

During the 2003–04 influenza season, CDC has received reports from state health departments regarding deaths among children with evidence of influenza virus infection. To help investigate these deaths, CDC has requested that all influenza-associated deaths among children aged <18 years be reported to CDC through state and local health departments during the 2003–04 season. This summary is based on

[†] Contact the duty officer for diphtheria antitoxin, telephone, 404-639-8257, 8 a.m. to 4:30 p.m.; 770-488-7100, after hours.

preliminary data reported from 31 states as of January 6, 2004, and updates a previous report published in *MMWR* (1).

Since October 2003, a total of 93 influenza-associated deaths among children aged <18 years have been reported to CDC. All patients had evidence of influenza virus infection detected by rapid antigen testing or other laboratory tests.

The date of death was reported for 92 of the 93 cases (Figure). The median age of the 93 children was 4 years (range: 4 weeks-17 years), with 55 (59%) children aged <5 years and 24 (26%) aged 6-23 months (Table 1). Among the 92 children whose sex was reported, 41 (45%) were male. A total of 35 (38%) of the 93 children were reported to have had underlying chronic medical conditions (Table 2), and 41 (44%) were reported to have had no underlying conditions; the medical history was unknown for 17 (18%) children. Of the 55 children for whom the location of death was reported, 15 (27%) died at home, 12 (22%) died in emergency departments, 25 (45%) died as

inpatients, and three (5%) died in transport to hospitals.

Pneumonia was a reported complication in 25 of the 93 children. Invasive bacterial co-infections were reported in 15 children, including methicillin-resistant *Staphylococcus aureus*, *Streptococcus pneumoniae*, *Streptococcus pyogenes*, *Enterococcus* sp., *Haemophilus influenzae* (type b and non-typable), *Neisseria meningitidis*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, and *Serratia marcescens*.

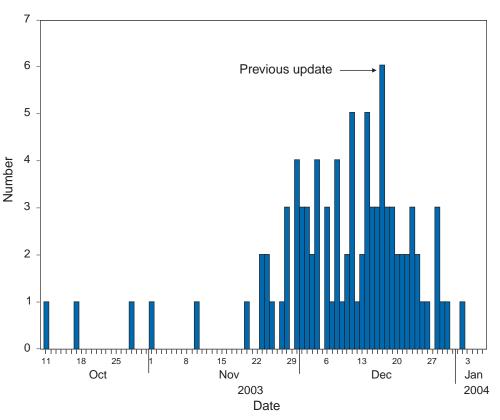
Of the 45 children whose influenza vaccination status was reported, one child had evidence of adequate vaccination, whereas 33 (73%) were not vaccinated, and six children were partially vaccinated (i.e., they had received 1 of 2 doses); five

TABLE 1. Age distribution of influenza-associated deaths reported among children aged <18 years — United States, 2003–04 influenza season*

Age	No.	(%)	
<6 mos	8	(9)	
6–23 mos	24	(26)	
2–4 yrs	23	(25)	
5–11 yrs	19	(20)	
12–17 yrs	19	(20)	

* N = 93 as of January 6, 2004.

FIGURE. Number* of influenza-associated deaths among children aged <18 years, by date of death — United States, 2003–04 influenza season



* N = 92 as of January 6, 2004; date of death was not available for one child.

TABLE 2. Underlying chronic medical conditions reported in influenza-associated deaths among children aged <18 years — United States, 2003–04 influenza season*

Underlying chronic condition	No. children affected [†]
Asthma§	4
Other chronic pulmonary disease§	4
Cardiac disease (e.g., pulmonary stenosis	
and cardiac transplant) [§]	5
Immunocompromised or immunosuppressed [§]	4
Endocrine disorder (e.g., diabetes mellitus)§	4
Renal disease [§]	1
Prematurity	1
Hematologic disorder (e.g., immune thrombocytopenic purpura) 1
Mental retardation/developmental delay	12
Cerebral palsy	3
Other neurologic disease (e.g., epilepsy)	6
Genetic disorder	4
Gastrointestinal disorder (e.g., gastroesophageal reflux disease	e) 5
*NL 05 as af lawyamy 0,0004	

 $_{+}^{*}N = 35$ as of January 6, 2004.

Certain children had more than one condition.

[§]Condition places patient at high risk for complications secondary to influenza.

children were reported as vaccinated, but the interval between vaccination and onset of illness was not documented.

Influenza A viruses were isolated from respiratory specimens collected from 28 patients. A total of 55 children had influenza virus infection confirmed by rapid antigen testing and direct fluorescent antibody staining of respiratory specimens. Four additional children had influenza virus infection confirmed solely by reverse transcriptase polymerase chain reaction (RT-PCR) of respiratory specimens.

A total of 16 children with evidence of influenza virus infection by culture, rapid antigen detection test, or RT-PCR also had autopsy specimens tested at CDC by immunohis-tochemical (IHC) staining. Of these, 11 had influenza A viral antigen detected by IHC staining in respiratory epithelium of airway tissue specimens (2). In addition, autopsy tissue specimens from four of 11 pediatric deaths without previous laboratory confirmation of influenza virus infection were positive by IHC staining for influenza A viral antigen.

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Editorial Note: During October 11, 2003–January 6, 2004, a total of 93 influenza-associated deaths among children aged <18 years were reported to CDC. Of the 51 deaths that were not reported previously, 26 occurred before publication of the previous report (*1*).

Because laboratory-confirmed influenza illnesses and deaths among children are not nationally reportable conditions, the numbers of deaths reported this season cannot be compared directly with previous influenza seasons, and the proportion of illnesses associated with death cannot be estimated. Heightened awareness of severe complications and deaths associated with influenza among children this season and increased testing might be contributing to identification of more pediatric fatalities related to influenza than in previous seasons.

These reports underscore the need to further characterize the impact of influenza among children. In addition to initiating voluntary reporting of influenza-associated deaths, CDC is developing studies in collaboration with health departments and other partners to estimate the rates of influenzaassociated hospitalization and serious complications and to identify risk factors for severe illness and complications during the current season. Additional studies are planned to assess the relative severity of this season by comparing influenza-associated hospitalizations and mortality among children with those in previous seasons. Such information might be helpful in evaluating current pediatric influenza vaccination recommendations. Clinicians should consider influenza testing in children who have severe febrile illness, when influenza viruses are circulating in their local community. Clinicians should recognize that secondary conditions such as bacterial infection can complicate some cases of influenza. Susceptibility testing of bacterial isolates is important to guide appropriate antibiotic therapy. Guidelines for antiviral treatment of influenza have been published (3).

CDC Request for Reports of Influenza-Associated Deaths Among Children

During the 2003–04 influenza season, CDC is requesting that all influenza-associated deaths among children aged <18 years be reported to CDC through state and local health departments. In addition, CDC is requesting submission of postmortem tissue specimens and autopsy reports when available. Influenza viral isolates in fatal cases also should be sent to CDC for antigenic characterization.

To report the influenza-associated death of a child aged <18 years, state and local health departments should contact CDC's Influenza Branch, telephone, 800-232-4636; e-mail, eocinfluenza@cdc.gov. Case reporting forms are available to state and local health departments and medical examiners via the *Epidemic Information Exchange* (Epi-X), accessible at http://www.cdc.gov/mmwr/epix/epix.html. Completed forms should be sent to CDC with a cover sheet with the heading, "ATTN: Fatal Case Reporting" via fax, 888-232-1322.

References

- 1. CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;51:1254–5.
- Guarner J, Shieh WJ, Dawson J, et al. Immunohistochemical and in situ hybridization studies of influenza A virus infection in human lungs. Am J Clin Path 2000;114:227–33.
- CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2003;52(No. RR-8).

Update: Influenza Activity — United States, December 21, 2003– January 3, 2004

The number of states reporting widespread influenza activity* decreased during December 21, 2003–January 3,

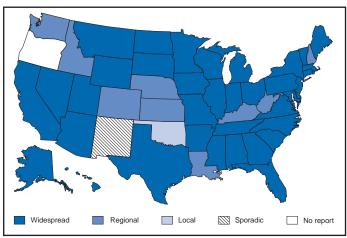
^{*}Levels of activity are 1) *no activity*, 2) *sporadic*—small numbers of laboratoryconfirmed influenza cases or a single influenza outbreak reported but no increase in cases of influenza-like illness (ILI), 3) *local*—outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed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

2004[†]. During the latest reporting week, ending January 3, health departments in 38 states, the District of Columbia, and New York City reported widespread influenza activity. Nine states reported regional activity, one state reported local activity, and one state and Guam reported sporadic activity (Figure 1). The percentage of outpatient visits for influenza-like illness (ILI)[§] decreased in all surveillance regions during the week ending January 3, with an overall national percentage of 2.5%. The percentage of specimens testing positive for influenza also decreased; however, the percentage of deaths attributed to pneumonia and influenza (P&I) increased.

Laboratory Surveillance

During the reporting week of December 28, 2003–January 3, 2004, World Health Organization (WHO) laboratories reported testing 3,092 specimens for influenza viruses, of which 641 (20.7%) were positive. Of these, 111 were

FIGURE 1. States in which estimated influenza activity levels have been reported by state epidemiologists, by level of activity* — United States, December 28, 2003–January 3, 2004



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

influenza A (H3N2) viruses, 524 were influenza A viruses that were not subtyped, and six were influenza B viruses.

Since September 28, 2003, WHO and National Respiratory and Enteric Virus Surveillance System laboratories have tested 57,831 specimens for influenza viruses, of which 16,174 (28.0%) were positive. Of these, 16,065 (99.3%) were influenza A viruses, and 109 (0.7%) were influenza B viruses. Of the 16,065 influenza A viruses, 3,927 (24.4%) have been subtyped; 3,926 (99.9%) were influenza A (H3N2) viruses, and one (0.1%) was an influenza A (H1) virus.

Antigenic Characterization

Of the 461 influenza viruses collected by U.S. laboratories since October 1, 2003, and characterized antigenically by CDC, 454 were influenza A (H3N2) viruses, two were influenza A (H1) viruses, and five were influenza B viruses. The hemagglutinin proteins of the influenza A (H1) viruses were similar antigenically to the hemagglutinin of the vaccine strain A/New Caledonia/20/99. Of the 454 influenza A (H3N2) isolates that have been characterized, 98 (21.6%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 356 (78.4%) were similar to a drift variant, A/Fujian/411/2002 (H3N2)**. Four influenza B viruses characterized were similar antigenically to B/Sichuan/379/99 and one was similar antigenically to B/Hong Kong/330/2001.

P&I Mortality Surveillance

During the reporting week of December 21–December 27, 2003, P&I accounted for 9.0% of all deaths reported through the 122 Cities Mortality Reporting System and increased to 9.4% during the reporting week of December 28, 2003–January 3, 2004. The epidemic threshold^{††} was 7.9% and 8.0% for each reporting week, respectively (Figure 2).

ILI Surveillance

The percentage of patient visits^{§§} to approximately 1,000 U.S. sentinel providers nationwide for ILI decreased from 8.8% during the week ending December 27 to 6.2% for the week ending January 3, but remained above the national baseline

[†] Provisional data reported as of January 7, 2004.

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

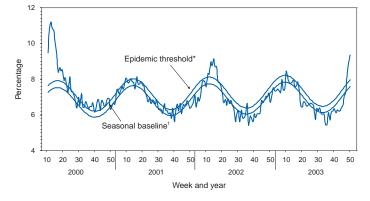
⁹ Calculated as the mean percentage of visits for ILI during noninfluenza weeks, plus two standard deviations. Wide variability in regional data precludes calculating region-specific baselines and makes it inappropriate to apply the national baseline to regional data.

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

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

^{\$\$} National and regional percentage of patient visits for ILI are weighted on the basis of state population.

FIGURE 2. Percentage of deaths attributed to pneumonia and influenza (P&I) reported by 122 Cities Mortality Reporting System, by week and year — United States, 2000–2003

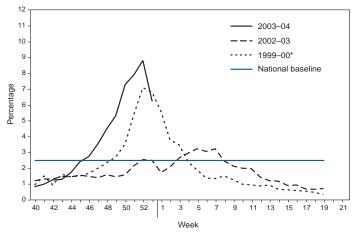


* The epidemic threshold is 1.645 standard deviations above the seasonal , baseline percentage.

of 2.5% (Figure 3). The percentage of patient visits for ILI decreased in all nine surveillance regions[¶] during the week ending January 3. On a regional level, the percentage of visits for ILI was highest in the West South Central region (8.3%), followed by Pacific region (7.1%), East North Central region (6.8%), South Atlantic region (6.4%), Mid-Atlantic region (6.2%), East South Central region (4.8%), New England region (4.6%), West North Central region (4.5%), and the Mountain region (3.4%).

Activity Reported by State and Territorial Epidemiologists

During the week ending January 3, influenza activity was reported as widespread in 38 states (Alabama, Alaska, Arizona, FIGURE 3. Percentage of visits for influenza-like illness reported by Sentinel Provider Surveillance Network, by week — United States, 1999–00, 2002–03, and 2003–04 influenza seasons



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

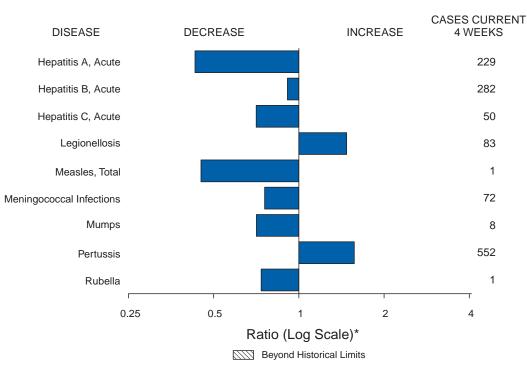
Arkansas, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Wisconsin, and Wyoming), the District of Columbia, and New York City. Regional activity was reported in nine states (Colorado, Idaho, Kansas, Kentucky, Louisiana, Nebraska, New Hampshire, Washington, and West Virginia). Oklahoma reported local activity, and New Mexico and Guam reported sporadic activity. Oregon did not report. During the week ending December 27, health departments in 42 states, the District of Columbia, and New York City reported widespread influenza activity, and eight states reported regional activity.

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

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

⁵⁵ New England=Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Mid-Atlantic*=New Jersey, New York City, Pennsylvania, and Upstate New York; *East North Central*=Illinois, Indiana, Michigan, Ohio, and Wisconsin; *West North Central*=Ilowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota; *South Atlantic*=Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, District of Columbia, and West Virginia; *East South Central*=Alabama, Kentucky, Mississippi, and Tennessee; *West South Central*=Arkansas, Louisiana, Oklahoma, and Texas; *Mountain*=Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; and *Pacific*=Alaska, California, Hawaii, Oregon, and Washington.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals January 3, 2004, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending January 3, 2004 (53rd Week)*

		Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax		-	2	Hansen disease (leprosy)†	72	96
Botulism:		-	-	Hantavirus pulmonary syndrome [†]	18	19
foodbo	rne	18	28	Hemolytic uremic syndrome, postdiarrheal [†]	157	218
infant		70	69	HIV infection, pediatric ^{1§}	204	159
other (v	wound & unspecified)	31	21	Measles, total	42¶	44**
Brucellosis [†]		90	125	Mumps	197	270
Chancroid		44	67	Plague	1	2
Cholera		1	2	Poliomyelitis, paralytic	-	-
Cyclosporiasis [†]		73	160	Psittacosis [†]	15	19
Diphtheria		1	1	Q fever [†]	75	61
Ehrlichiosis:		-	-	Rabies, human	3	3
human	granulocytic (HGE) [†]	360	511	Rubella	7	18
human	monocytic (HME) [†]	209	216	Rubella, congenital	-	1
other a	nd unspecified	42	23	SARS-associated coronavirus disease ^{††}	8	NA
Encephalitis/Meningitis	3:	-	-	Streptococcal toxic-shock syndrome [†]	136	121
Californ	nia serogroup viral†	88	157	Tetanus	14	25
eastern	n equine [†]	10	9	Toxic-shock syndrome	128	110
Powass	san [†]	-	1	Trichinosis	6	14
St. Lou	is [†]	37	28	Tularemia [†]	83	90
western	n equine†	5	-	Yellow fever	-	1

-: 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. _ Last update November 30, 2003.

 ¶ Of 42 cases reported, 31 were indigenous, and 11 were imported from another country.

** Of 44 cases reported, 26 were indigenous, and 18 were imported from another country.

⁺⁺ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).

(53rd Week)*	AI	08	Chia	mudiat	Coosidio	domuoosio	Cruptoon	oridionio		is/Meningitis
Reporting area	Cum. 2003 [§]	Cum. 2002	Cum. 2003	mydia [†] Cum. 2002	Cum. 2003	domycosis Cum. 2002	Cryptosp Cum. 2003	Cum. 2002	Cum. 2003	st Nile Cum. 2002
UNITED STATES	41,832	40,326	834,640	834,423	4,354	4,969	3,274	3,016	1,933	2,838
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	1,436 52 36 16 599 102 631	1,548 28 38 12 807 102 561	27,122 1,652 1,037 1,035 11,673 2,969 8,756	27,870 1,805 1,557 954 10,914 2,832 9,808	N - - - - N	N - - - N	166 20 11 32 69 16 18	193 12 31 33 77 21 19	8 - - - - 8	29 - - 18 1 10
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	9,714 1,007 5,201 1,448 2,058	9,477 1,306 5,345 1,371 1,455	112,201 20,560 34,641 14,669 42,331	97,078 18,060 33,063 14,164 31,791	N - N	N N N	423 140 105 15 163	428 153 147 17 111	192 8 - 32 152	138 51 28 23 36
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	3,863 757 514 1,718 703 171	4,225 757 483 2,097 706 182	147,961 37,779 17,150 44,996 32,546 15,490	152,505 38,032 17,100 48,101 32,272 17,000	7 - N - 7	23 N 3 20	975 173 105 90 149 458	960 119 70 121 135 515	120 106 1 2 11	1,628 439 19 554 565 51
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. [¶] Kans.	768 162 82 365 2 14 52 91	782 162 81 383 3 10 71 72	46,775 9,389 3,344 18,152 1,402 2,650 4,792 7,046	47,517 10,107 6,195 16,181 1,256 2,215 4,779 6,784	2 N N - 2 N	2 N N - 2 N	579 152 121 49 15 47 21 174	447 206 49 41 41 42 52 16	469 49 78 34 9 72 140 87	200 17 - 113 2 14 35 19
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. ¹¹ Ga. Fla.	11,498 202 1,441 863 856 86 1,060 756 1,825 4,409	11,955 194 1,836 769 811 83 1,041 815 1,543 4,863	154,310 3,035 16,974 3,072 16,415 2,584 26,187 16,386 29,319 40,338	158,923 2,649 16,891 3,305 18,518 2,464 24,726 14,314 33,998 42,058	5 N 5 - N N - N	4 N 4 - N N - N	412 4 26 13 45 4 56 10 128 126	343 4 19 5 35 3 40 8 123 106	201 12 51 - 22 1 7 3 51 54	103 21 - 29 3 - 1 21 28
E.S. CENTRAL Ky. Tenn. Ala. Miss.	1,879 200 800 441 438	1,930 301 772 421 436	51,449 7,981 20,055 12,002 11,411	52,209 8,756 16,042 15,611 11,800	N N N N		117 24 39 44 10	128 10 61 47 10	44 11 17 16	279 42 11 34 192
W.S. CENTRAL Ark. La. Okla. Tex.	4,566 172 610 202 3,582	4,138 240 1,163 202 2,533	104,315 7,679 17,945 11,032 67,659	106,079 7,312 18,442 10,804 69,521	4 - N 4	14 - N N 14	97 20 3 22 52	68 8 10 16 34	506 22 49 31 404	455 33 204 14 204
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	1,461 13 24 7 343 102 646 72 254	1,368 11 31 11 307 88 552 63 305	44,387 2,235 2,375 964 10,349 6,690 12,257 3,870 5,647	51,684 2,475 2,503 944 14,028 7,417 14,841 3,540 5,936	2,644 N 1 9 2,580 19 35	3,198 N 1 9 3,133 11 44	133 18 27 5 34 14 6 21 8	160 6 29 9 57 20 19 16 4	389 216 - 99 - 68 3 1 2	6 1 - - 4 -
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	6,647 491 242 5,802 15 97	4,903 441 310 3,995 30 127	146,120 16,800 7,567 112,874 3,707 5,172	140,558 14,934 7,009 110,288 3,806 4,521	1,691 N - 1,691 -	1,727 N 1,727	372 59 38 274 1	289 46 40 200 1 2	4 - - -	
Guam P.R. V.I. Amer. Samoa C.N.M.I.	6 1,025 33 U 2	2 1,136 76 U U	1,895 208 U	613 2,479 125 U U	N U	N U U	N U	N U U	- - U -	- - - U U

N: Not notifiable.

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 November 30, 2003. ¶ Contains data reported through National Electronic Disease Surveillance System (NEDSS).

MMWR

(53rd Week)*									_	
		Escher	<i>ichia coli</i> , Ente	rohemorrhagio						
			-	n positive,	Shiga toxii					
	Cum.	57:H7 Cum.	Serogroup Cum.	o non-O157 Cum.	not sero	grouped Cum.	Gia Cum.	rdiasis Cum.	Gon Cum.	orrhea Cum.
Reporting area	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
UNITED STATES	2,574	3,840	275	195	130	61	18,411	21,206	318,411	351,815
NEW ENGLAND	167	265	56	51	17	7	1,453	1,769	7,201	7,743
Maine N.H.	11 12	39 35	4 2	10	1	-	184 22	213 46	170 76	142 120
Vt.	18	14	-	1	-	1	122	145	91	98
Mass. R.I.	72 4	120 12	8	21 1	16	6	775 114	935 170	3,040 965	3,242 900
Conn.	50	45	42	18	-	-	236	260	2,859	3,241
MID. ATLANTIC Upstate N.Y.	251 106	426 183	21 11	2 1	36 19	9 1	3,729 1,157	4,304 1,347	43,054 8,099	43,029 9,114
N.Y. City	6	19	2	-	-	-	1,168	1,417	13,527	12,727
N.J. Pa.	24 115	63 161	2 8	-	17	1 7	392 1,012	474 1,066	8,098 13,330	7,894 13,294
E.N. CENTRAL	561	855	28	31	23	6	3,028	3,597	66,126	74,540
Ohio Ind.	133 89	154 87	16 -	11 1	22	5	908	972	20,118 6,716	22,008 7,395
III. Mich.	115 91	191 134	- 2	6 3	-	- 1	795 761	1,011 923	20,307 13,965	24,026 14,770
Wis.	133	289	10	10	1	-	564	691	5,020	6,341
W.N. CENTRAL Minn.	438 133	521 163	57 23	34 29	21 1	12	2,048 796	2,321 982	16,631 2,709	18,124 3,049
Iowa	104	121	-	- 29	-	-	274	314	775	1,480
Mo. N. Dak.	89 13	70 20	20 4	-	1 8	- 4	498 38	512 47	8,600 86	8,952 72
S. Dak.	29	41	4	2	-	-	85	83	232	263
Nebr. Kans.	38 32	74 32	5 1	3	- 11	- 8	132 225	191 192	1,647 2,582	1,564 2,744
S. ATLANTIC	155	488	77	39	12	3	2,850	3,076	76,833	89,450
Del. Md.	11 14	10 29	N	N	N	N	55 118	54 118	1,128 8,129	1,576 9,355
D.C. Va.	1 38	3 70	- 11	- 11	-	-	58 358	47 386	2,423 7,535	2,669 10,462
W.Va.	6	9	-	-	-	3	53	78	850	974
N.C. S.C.	4 4	244 7	33	-	-	-	N 143	N 149	15,116 8,826	15,531 9,152
Ga. Fla.	31 46	47 69	6 27	8 20	- 12	-	929 1,136	926 1,318	14,837 17,989	18,383 21,348
E.S. CENTRAL	40 85	113	27	-	7	10	348	396	25,685	30,113
Ky.	29	30	2	-	7	10	N	N	3,578	3,772
Tenn. Ala.	35 15	52 20	-	-	-	-	178 170	191 205	8,405 7,818	9,348 10,118
Miss.	6	11	-	-	-	-	-	-	5,884	6,875
W.S. CENTRAL Ark.	94 12	115 12	4	2	9	9	295 144	269 175	42,940 3,924	47,620 4,584
La. Okla.	3 29	4 25	-	-	-	-	14 137	6 85	10,528 4,556	11,387 4,661
Tex.	50	74	4	2	9	9	-	3	23,932	26,988
MOUNTAIN	334	347	26	29	5	5	1,595	1,750 94	9,641	11,375
Mont. Idaho	17 86	31 45	- 16	18	-	-	115 206	137	112 69	123 94
Wyo. Colo.	5 71	15 98	1 3	2 6	- 5	- 5	23 420	29 571	46 2,412	65 3,511
N. Mex.	12	14	5	3	-	-	52	153	1,061	1,462
Ariz. Utah	40 79	39 77	N -	N -	N -	N -	261 378	269 335	3,393 408	3,758 374
Nev.	24	28	1	-	-	-	140	162	2,140	1,988
PACIFIC Wash.	489 117	710 166	4 1	7	-	-	3,065 367	3,724 510	30,300 2,749	29,821 2,925
Oreg. Calif.	103 255	206 293	3	7	-	-	394 2,126	447 2,561	984 24,829	909 24,606
Alaska	4	8	-	-	-	-	86	115	554	641
Hawaii	10	37	-	-	-	-	92	91	1,184	740
Guam P.R.	N -	N 1	-	-	36	-	- 144	7 86	- 197	45 334
V.I. Amer. Samoa	- U	- U	- U	- U	- U	- U	- U	- U	55 U	31 U
C.N.M.I.	-	Ŭ	-	Ŭ	-	Ŭ	-	Ŭ		Ŭ

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 3, 2004, and December 28, 2002 (53rd Week)*

(53rd Week)*				Haemophilus	influenzae, inv	vasive [†]			Нер	atitis
	All	ages	1		Age <					te), by type
	All se	rotypes	Serot		Non-sei	otype b	Unknown	serotype		Α
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	1,707	1,743	23	34	92	144	190	153	7,254	8,795
NEW ENGLAND	126	135	1	-	5	12	7	2	355	295
Maine N.H.	4 11	2 14	- 1	-	-	-	1	-	22 11	8 12
Vt. Mass.	11 57	7 46	-	-	- 5	- 5	1 4	- 2	6 218	4 144
R.I.	9	16	-	-	-	-	1	-	15	34
Conn. MID. ATLANTIC	34 378	50 326	-	-	- 3	7 17	- 50	- 26	83 1,784	93 1,121
Upstate N.Y.	138	134	-	2	3	4	14	9	152	189
N.Y. City N.J.	62 65	70 58	-	-	-	-	11 9	10 7	453 157	445 188
Pa.	113	64	-	2	-	13	16	-	1,022	299
E.N. CENTRAL Ohio	248 78	319 82	4	4	13 1	15 1	36 14	44 10	707 172	1,030 301
Ind. III.	51 69	44 120	1	2	8	9	- 15	- 21	75 209	51 262
Mich.	24	18	3	2	4	5	1	-	206	220
Wis. W.N. CENTRAL	26 126	55 81	- 2	- 1	- 7	- 3	6 18	13 7	45 199	196 299
Minn.	55	52	2	1	7	3	2	4	45	53
lowa Mo.	- 44	1 13	-	-	-	-	- 14	- 2	41 72	66 84
N. Dak. S. Dak.	3 1	7 1	-	-	-	-	-	1	1	4 3
Nebr.	3	2	-	-	-	-	-	-	13	19
Kans. S. ATLANTIC	20 408	5 385	-	- 5	- 17	- 17	2 23	- 29	27 1,797	70 2,422
Del.	-	-	-	-	-	-	-	-	9	15
Md. D.C.	100	98	1 -	2	7	4	1	1	178 43	300 81
Va. W.Va.	55 17	41 20	-	-	-	- 1	6	5 1	108 16	163 24
N.C.	41	33	-	-	3	3	2	-	124	209
S.C. Ga.	5 65	15 84	-	-	-	-	1 5	2 13	41 858	65 509
Fla.	125	94	3	3	7	9	8	7	420	1,056
E.S. CENTRAL Ky.	83 6	74 10	1 -	1 -	2 2	5 1	11 -	13 2	253 32	273 47
Tenn. Ala.	53 22	38 16	- 1	- 1	-	1 3	7 3	7 1	190 15	124 39
Miss.	2	10	-	-	-	-	1	3	16	63
W.S. CENTRAL Ark.	72 7	76 5	3	4	10 1	12	5	3	384 19	1,070 74
La.	12	11	-	-	-	-	5	3	58	89
Okla. Tex.	49 4	53 7	- 3	- 4	9	12	-	-	25 282	52 855
MOUNTAIN	162	199	5	7	20	42	24	17	485	569
Mont. Idaho	- 7	- 2	-	-	-	-	- 3	- 1	8 18	13 31
Wyo. Colo.	2 37	2 35	-	-	-	-	- 7	- 4	2 68	3 74
N. Mex.	20	27	1	2	5	6	1	1	23	32
Ariz. Utah	72 14	101 20	4	5 1	6 5	30 4	8 5	7 1	267 48	306 56
Nev.	10	12	-	1	4	2	-	3	51	54
PACIFIC Wash.	104 11	148 5	3	8 2	15 7	21 3	16 3	12	1,290 65	1,716 162
Oreg. Calif.	48 20	57 44	- 3	- 6	- 8	- 17	6 4	3 4	60 1,144	65 1,452
Alaska	3	2	-	-	-	-	2	2	9	12
Hawaii Guam	22	40	-	-	-	1	1	3	12	25 1
P.R.	-	2	-	-	-	-	-	1	57	239
V.I. Amer. Samoa	- U	Ū	Ū	Ū	- U	U	- U	- U	Ū	Ū
C.N.M.I.	- Ll:Llnavailable	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). * Non-serotype b: nontypeable and type other than b; Unknown serotype: type unknown or not reported. Previously, cases reported without type information were counted as non-serotype b.

(53rd Week)*					-					
		epatitis (viral B	, acute), by ty		Legior	nellosis	Lister	iosis	Lyme	disease
Denerting	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.
Reporting area	2003 6,799	2002 8,064	2003 1,802	2002 1,835	2,014	2002 1,316	2003 629	2002 665	2003 18,387	2002 23,763
NEW ENGLAND Maine N.H. Vt. Mass. R.I.	245 1 11 4 189 18	319 14 25 7 169 36	13 2 11	22 - 15 6 1	105 2 6 6 46 17	123 6 7 35 45 11	49 7 3 1 15 1	64 5 4 3 34 2	3,499 234 95 43 1,225 593	7,807 219 261 37 1,807 852
Conn. MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	22 885 132 280 187 286	68 1,559 140 733 344 342	U 166 41 - 125	U 119 56 - 5 58	28 577 165 61 74 277	19 377 118 66 35 158	22 121 36 21 18 46	16 194 59 39 37 59	1,309 11,956 4,611 5 2,179 5,161	4,631 11,873 5,476 59 2,349 3,989
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	426 162 38 1 194 31	756 110 85 185 327 49	155 12 9 18 116	118 2 1 24 87 4	397 226 29 3 121 18	296 123 22 28 85 38	74 27 10 9 20 8	91 26 12 23 22 8	841 72 23 33 12 701	1,266 82 21 47 26 1,090
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	359 40 14 253 2 2 28 20	257 52 20 119 8 3 31 24	274 12 1 258 - 3	643 14 1 612 - 1 15	69 5 11 34 2 5 11	71 18 13 19 1 4 16	25 12 1 5 - 4 3	22 4 3 10 1 1 2 1	494 365 53 65 - 1 2 8	966 867 42 41 1 2 6 7
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fia.	2,146 12 136 12 189 38 163 157 785 654	1,811 14 131 22 224 25 233 135 484 543	170 - 18 - 11 9 13 24 10 85	215 - 14 - 15 4 29 5 64 84	528 28 135 19 93 21 42 8 32 150	234 10 56 6 35 - 13 10 19 85	143 N 28 - 12 7 18 5 34 39	90 N 21 - 10 1 8 8 14 28	1,311 198 656 13 159 27 147 15 17 79	1,486 194 738 25 259 26 137 26 2 79
E.S. CENTRAL Ky. Tenn. Ala. Miss.	432 74 207 63 88	405 67 145 101 92	85 20 19 7 39	140 5 31 11 93	96 43 34 14 5	50 22 20 8	32 9 8 13 2	21 4 12 4 1	61 15 17 5 24	76 25 28 11 12
W.S. CENTRAL Ark. La. Okla. Tex.	830 59 113 41 617	1,473 118 135 110 1,110	748 3 117 2 626	405 12 99 21 273	63 2 1 7 53	37 - 4 5 28	42 1 3 3 35	38 - 5 9 24	79 6 - 73	147 3 5 - 139
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	613 16 8 31 79 34 292 66 87	635 10 7 17 79 146 252 53 71	57 4 1 - 18 - 7 - 27	58 1 5 6 3 7 4 31	81 4 7 15 3 11 27 12	57 4 3 2 9 2 15 16 6	30 2 10 2 10 4	34 - 2 - 7 3 18 3 1 2	19 3 2 4 1 3 3 3 3	19 4 2 1 1 4 5 2
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	863 80 114 632 11 26	849 83 128 614 12 12	134 17 16 89 1 11	115 27 13 74 - 1	98 11 N 86 - 1	71 8 60 2 1	113 8 95 - 5	111 11 9 83 - 8	127 3 18 103 3 N	123 11 12 97 3 N
Guam P.R. V.I. Amer. Samoa C.N.M.I.	86 - - - -	1 211 - U U	- - - U -	- - U U	- - - U -	- 1 - U U	- - - U -	2 - U U	N U	- N - U U

(53rd Week)*	•									
	Ма	laria		gococcal ease	Pert	ussis	Rabie	s, animal		Mountain ed fever
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	1,176	1,430	1,588	1,814	8,483	9,771	5,545	7,689	973	1,104
NEW ENGLAND	45	85	74	95	1,440	925	568	917	1	10
Maine N.H.	5 4	6 8	6 3	7 14	68 60	21 78	71 13	64 50	-	-
Vt. Mass.	2 11	4 33	4 45	4 48	71 1,194	172 602	39 212	89 303	- 1	- 3
R.I.	3	12	2	6	20	22	60	80	-	4
Conn.	20	22	14	16	27	30	173	331	-	3
MID. ATLANTIC Upstate N.Y.	293 59	375 52	200 53	222 60	1,289 825	694 442	936 430	1,348 701	46 3	59 -
N.Y. City N.J.	144 44	230 43	39 30	37 29	- 120	24 34	6 62	21 188	14 17	10 16
Pa.	46	50	78	96	344	194	438	438	12	33
E.N. CENTRAL Ohio	92 23	163 24	214 59	265 74	826 328	1,097 441	165 53	163 39	17 11	33 13
Ind.	3	15	43	37	70	183	32	31	1	5
III. Mich.	31 25	62 46	43 48	57 45	- 134	231 62	24 49	31 46	- 5	12 3
Wis.	10	16	21	52	294	180	7	16	-	-
W.N. CENTRAL Minn.	53 25	73 31	132 27	154 36	545 146	822 429	583 43	485 47	70 2	105 1
Iowa	6	4	27	29	152	157	105	79	2	3
Mo. N. Dak.	6 1	16 1	55 1	52 4	173 6	147 9	55 55	50 59	55	96 -
S. Dak. Nebr.	3	2 6	1 7	2 23	7 15	8 9	67 100	96	5 4	1 4
Kans.	12	13	14	8	46	63	158	154	2	-
S. ATLANTIC Del.	331 3	334 5	265 9	297 7	709 9	453 4	2,472 64	2,660 55	609 1	494 1
Md.	82	109	28	9	89	68	257	396	106	43
D.C. Va.	15 40	22 36	- 24	- 46	3 90	2 168	- 477	- 592	1 30	2 43
W. Va. N.C.	4 25	3 22	6 36	5	27 144	35 46	81	172 702	5	2
S.C.	4	9	22	35 34	192	48	759 253	151	322 44	294 75
Ga. Fla.	67 91	52 76	30 110	32 129	32 123	29 53	388 193	411 181	82 18	19 15
E.S. CENTRAL	22	22	88	98	145	273	173	216	111	134
Ky. Tenn.	9 7	8 4	20 30	18 38	46 76	103 124	39 100	28 108	3 66	5 85
Ala.	3	5	16	22	17	37	33	76	13	16
Miss. W.S. CENTRAL	3 77	5 87	22 189	20 229	6 700	9 1,870	1 270	4 1,295	29 105	28 249
Ark.	4	3	17	26	37	488	69	131	45	125
La. Okla.	4	4 11	35 22	48 25	6 96	7 135	- 201	- 126	- 49	- 111
Tex.	65	69	115	130	561	1,240	-	1,038	11	13
MOUNTAIN Mont.	55	57 2	79 6	95 3	915 5	1,717 10	170 21	311 19	10 1	15 1
Idaho	1	-	9	5	82	151	15	38	2	-
Wyo. Colo.	2 22	- 25	2 22	26	130 340	11 465	6 38	18 59	2 2	5 2
N. Mex. Ariz.	3 19	3 17	11 15	4 32	69 126	200 717	5 66	10 143	1	1
Utah	6	6	6	5	128	115	14	13	2	-
Nev. PACIFIC	2 208	4 234	8 347	20 359	35 1,914	48 1,920	5 208	11 294	-	5 5
Wash.	31	26	45	76	719	575	-	-	-	-
Oreg. Calif.	12 158	12 185	62 226	46 224	439 736	188 1,120	7 193	14 253	- 4	3 2
Alaska Hawaii	1	2	3 11	4 9	8	7 30	8	27	-	-
Guam	-	9 -	-	9	1Z -	30 2	-	-	-	-
P.R.	1	1	5	7	1	3	71	87	N	N
V.I. Amer. Samoa	- U	U	Ū	U	U	U	- U	- U	- U	- U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

MMWR

(53rd Week)*							Stre	ptococcus pne	<i>umoniae</i> , inv	asive
	Salmo	onellosis	Shine	ellosis	Streptococc invasive,			sistant,	, 	5 years
Departing area	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.
Reporting area UNITED STATES	40,913	2002 44,264	2003 21,641	23,541	2003 5,155	2002 4,720	2,110	2,655	2003 481	2002 427
NEW ENGLAND	2,062	2,234	333	353	362	334	43	2,055	401 9	427
Maine	140	147	7	10	28	20	-	-	-	-
N.H. Vt.	100 73	142 77	5 8	15 1	21 20	36 10	- 9	- 5	N 5	N 2
Mass. R.I.	1,231 129	1,222 189	225 21	203 20	174 17	112 23	N 10	N 27	N 4	N 5
Conn.	389	457	67	104	102	133	24	104	Ū	Ŭ
MID. ATLANTIC	4,650	5,884	2,296	1,908	902	745	138	139	110	95
Upstate N.Y. N.Y. City	1,200 1,282	1,614 1,396	603 413	405 506	356 128	313 157	78 U	106 U	82 U	80 U
N.J. Pa.	617 1,551	1,044 1,830	295 985	617 380	152 266	146 129	N 60	N 33	N 28	N 15
E.N. CENTRAL	5,254	5,568	1,734	2,294	1,029	998	439	301	185	172
Ohio	1,328	1,425	302	661	291	212	286	107	98	31
Ind. III.	565 1,691	599 1,770	179 893	138 1,105	105 182	68 279	153	192 2	49	79
Mich. Wis.	795 875	875 899	236 124	200 190	353 98	312 127	N N	N N	N 38	N 62
W.N. CENTRAL	2,572	2,659	803	1,111	332	282	178	518	69	75
Minn.	579	591	108	222	165	147	-	373	57	70
Iowa Mo.	404 978	507 830	93 372	122 217	N 72	N 47	N 15	N 5	N 3	N 1
N. Dak. S. Dak.	43 127	55 121	6 17	22 157	16 24	5 14	3 1	2 1	9	4
Nebr.	147	203	86	279	25	28	-	26	N	N
Kans.	294	352	121	92	30	41	159	111	N	N
S. ATLANTIC Del.	11,304 99	11,725 103	7,200 164	8,380 418	923 7	741 3	1,073 1	1,162 3	18 N	39 N
Md. D.C.	868 52	938 82	586 73	1,233 68	278 10	125 10	- 1	-	- 7	26 4
Va.	1,068	1,277	426	1,061	97	82	N	N	N	Ν
W.Va. N.C.	134 1,416	173 1,655	1 985	13 1,074	36 103	22 122	80 N	60 N	11 U	9 U
S.C. Ga.	832 2,186	895 1,952	518 1,598	148 1,826	37 122	42 133	146 238	201 289	N N	N N
Fla.	4,649	4,650	2,849	2,539	233	202	607	609	N	N
E.S. CENTRAL	2,683	3,331	943	1,573	207	119	144	151	-	-
Ky. Tenn.	399 744	415 886	129 392	210 180	45 162	24 95	21 123	19 132	N N	N N
Ala. Miss.	554 986	864 1,166	255 167	836 347	-	-	-	-	N	N
W.S. CENTRAL	4,786	4,718	4,498	3,494	341	322	61	197	84	34
Ark.	790 543	1,074	99 307	199	5	12 1	8 53	15	- 11	- 11
La. Okla.	474	792 527	843	508 718	91	56	N	182 N	49	11
Tex.	2,979	2,325	3,249	2,069	244	253	N	N	24	12
MOUNTAIN Mont.	2,274 112	2,558 91	1,266 2	1,270 4	445 2	603 -	30	51	6	5
Idaho Wyo.	181 76	184 107	36 8	22 8	19 2	11 7	N 10	N 14	N	N
Colo.	443	607	277	213	126	125	-	-	-	-
N. Mex. Ariz.	277 772	338 829	254 570	250 685	119 163	114 314	20	36	N	N
Utah	234	185	53	35	12	32	-	-	6	5
Nev. PACIFIC	179 5,328	217 5,587	66 2,568	53 3,158	2 614	- 576	-	1	-	-
Wash.	596	656	157	230	70	60	-	-	N	N
Oreg. Calif.	423 3,984	342 4,235	213 2,142	109 2,742	N 415	N 406	N N	N N	N N	N N
Alaska	97 228	86 268	10 46	5	-	110	- 4	-	N	N
Hawaii Guam	- 220	208 46	40	72 37	129	-	4 -	-	-	-
P.R.	364	616	8	31	N	N	N	Ň	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U U	U	U U	U	U U	U	U U

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 3, 2004, and December 28, 2002

(53rd Week)*	,			,	,				, 	
		Syp							Varicella	
		secondary	Congenital		Tuberculosis		Typhoid fever		(Chickenpox)	
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	
UNITED STATES	6,816	6,859	363	439	11,619	13,971	313	321	13,474	
NEW ENGLAND	204	152	1	1	344	459	24	13	1,866	
Maine N.H.	7 14	2 8	1	-	5 7	20 18	2	-	780	
Vt. Mass.	1 132	2 99	-	- 1	7 243	8 260	- 13	- 7	930 151	
R.I.	24	13	-	-	32	49	2	-	5	
Conn.	26	28	-	-	50	104	7	6	-	
MID. ATLANTIC Upstate N.Y.	884 49	752 43	64 17	68 4	2,175 285	2,316 350	62 11	80 10	40 N	
N.Y. City	515	435	32	26	1,100	1,084	25	42	-	
N.J. Pa.	165 155	169 105	15	37 1	442 348	529 353	17 9	19 9	40	
E.N. CENTRAL	869	1,216	69	74	1,182	1,457	23	34	6,297	
Ohio Ind.	202 53	159 62	3 11	3 4	217 135	257 128	2 4	7 2	1,267	
III.	353	479	21	41	557	679	7	17	-	
Mich. Wis.	249 12	486 30	34	26	220 53	315 78	10	4 4	4,107 923	
W.N. CENTRAL	145	127	4	2	484	533	4	10	80	
Minn.	43	59	-	1	201	237	-	4	N	
Iowa Mo.	7 56	8 34	- 4	- 1	25 109	34 126	2 1	- 2	N -	
N. Dak. S. Dak.	2 2	-	-	-	4 20	6 13	-	-	80	
Nebr.	12	6	-	-	27	27	1	4	-	
Kans.	23	20	-	-	98	90	-	-	-	
S. ATLANTIC Del.	1,822 7	1,839 11	72	93	2,352 23	2,869 23	54	45	2,098 29	
Md. D.C.	310	228 58	11	16	239	306	10	11	- 31	
Va.	53 75	71	- 1	1 1	255	315	12	8	503	
W.Va. N.C.	2 152	2 279	- 19	- 20	21 363	30 434	- 9	- 2	1,262 N	
S.C.	94	134	7	13	171	148	-	-	273	
Ga. Fla.	492 637	439 617	11 23	13 29	391 889	527 1,086	8 15	5 19	N	
E.S. CENTRAL	318	454	10	31	696	798	7	4	2	
Ky. Tenn.	33 135	88 168	1 2	3 11	132 224	146 308	1 3	4	N N	
Ala.	118	149	5	10	238	210	3	-	-	
Miss.	32	49	2	7	102	134	-	-	2	
W.S. CENTRAL Ark.	940 54	847 34	71 2	90 11	1,508 110	1,875 135	32	30	2,289	
La. Okla.	174	152	- 1	- 2	148	-	- 1	- 2	14	
Tex.	65 647	72 589	68	77	1,250	190 1,550	31	28	N 2,275	
MOUNTAIN	307	330	26	21	359	475	7	11	802	
Mont. Idaho	- 15	- 8	-	-	5 13	12 14	- 1	-	N N	
Wyo.	-	-	-	-	4	3	-	2	110	
Colo. N. Mex.	24 63	64 39	3 4	2	64 6	104 34	3 1	5 2	- 4	
Ariz. Utah	180 14	197 7	19	19	206 39	263 31	2	- 2	4 684	
Nev.	11	15	-	-	22	14	-	2	- 004	
PACIFIC	1,327	1,142	46	59	2,519	3,189	100	94	-	
Wash. Oreg.	82 48	70 28	-	2	249 104	252 111	4 5	7 2	-	
Calif.	1,185	1,033	46	56	1,991	2,629	90	80	-	
Alaska Hawaii	- 12	- 11	-	- 1	55 120	49 148	- 1	5	-	
Guam	-	6	-	-	-	65	-	-	-	
P.R. V.I.	194 1	282 1	1	23	86	129	-	-	434	
Amer. Samoa	U	U	U	U	U	U	U	U	U	
C.N.M.I.	-	U	-	U	-	U	-	U	-	

TABLE III. Deaths in 122 U.S. cities,* week ending January 4, 2003 (53rd Week)

	All causes, by age (years)						All causes, by age (years)								
Reporting Area	All Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	P&I [†] Total	Reporting Area	All Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	P&I [†] Total
NEW ENGLAND	654	476	116	41	9	10	85	S. ATLANTIC	1,168	748	281	88	25	23	78
Boston, Mass.	181	122	36	14	3	6	22	Atlanta, Ga.	166	104	47	12	2	1	8
Bridgeport, Conn.	56	36	12	6	2	-	1	Baltimore, Md.	154	98	33	12	6	3	17
Cambridge, Mass. Fall River, Mass.	26 30	21 20	5 7	- 3	-	-	3 2	Charlotte, N.C. Jacksonville, Fla.	126 113	88 69	27 31	10 9	- 2	1 2	19 4
Hartford, Conn.	50 54	32	13	5	2	-	7	Miami, Fla.	140	93	32	9	2	2	6
Lowell, Mass.	23	15	7	1	-	-	5	Norfolk, Va.	37	27	7	-	-	3	3
Lynn, Mass.	18	17	-	1	-	-	4	Richmond, Va.	58	32	18	4	3	1	4
New Bedford, Mass.	35	24	7	3	-	1	7	Savannah, Ga.	52	34	14	2	2	-	1
New Haven, Conn.	43	39	3	- U	-	1	7	St. Petersburg, Fla.	55	43	4	5	2	1	6
Providence, R.I. Somerville, Mass.	U 5	U 4	U 1	U	U	U	U	Tampa, Fla. Washington, D.C.	142 99	94 49	27 35	15 7	2 3	4 5	7 3
Springfield, Mass.	48	35	8	3	1	1	5	Wilmington, Del.	26	17	6	3	-	-	-
Waterbury, Conn.	55	46	7	2	-	-	9							4.0	00
Worcester, Mass.	80	65	10	3	1	1	13	E.S. CENTRAL Birmingham, Ala.	730 177	509 128	135 33	53 9	17 1	16 6	66 24
MID. ATLANTIC	1,665	1,220	300	104	20	19	127	Chattanooga, Tenn.	33	23	7	2	1	-	1
Albany, N.Y.	41	35	5	1	-	-	4	Knoxville, Tenn.	103	78	20	4	-	1	5
Allentown, Pa.	27	26	1	-	-	-	3	Lexington, Ky.	66	44	14	5	2	1	3
Buffalo, N.Y.	118	90	21	4	1	2	11	Memphis, Tenn.	129	88	17	16	5	3	10
Camden, N.J.	21	10	8	1	1	1	2	Mobile, Ala.	57	38	12	3	2	2	3
Elizabeth, N.J.	U	U	U	U	U	U	U	Montgomery, Ala.	38	24	7	3	1	3	7
Erie, Pa. Jersey City, N.J.	47 U	38 U	8 U	1 U	- U	- U	1 U	Nashville, Tenn.	127	86	25	11	5	-	13
New York City, N.Y.	625	427	136	44	7	10	42	W.S. CENTRAL	679	446	154	47	22	10	66
Newark, N.J.	62	39	12	6	2	3	3	Austin, Tex.	102	73	23	6	-	-	11
Paterson, N.J.	U	U	U	U	U	U	U	Baton Rouge, La. Corpus Christi, Tex.	24	19 27	1	2 2	1 2	1	- 5
Philadelphia, Pa.	313	220	56	26	8	2	18	Dallas, Tex.	43 197	110	12 59	∠ 15	12	-	5 25
Pittsburgh, Pa.§	25	20	5	-	-	-	4	El Paso. Tex.	30	19	9	1	-	1	5
Reading, Pa.	25	21	4	-	-	-	2	Ft. Worth, Tex.	81	51	15	8	3	4	2
Rochester, N.Y. Schenectady, N.Y.	153 26	127 18	16 5	9 3	-	1	13 2	Houston, Tex.	U	U	U	U	U	U	U
Scranton, Pa.	47	41	5	1	-		5	Little Rock, Ark.	71	53	11	3	2	2	10
Syracuse, N.Y.	71	58	10	3	-	-	8	New Orleans, La.	30	18	7	5		-	
Trenton, N.J.	20	13	5	2	-	-	-	San Antonio, Tex.	U 29	U 21	U 7	U	U	U	U 2
Utica, N.Y.	16	14	-	2	-	-	1	Shreveport, La. Tulsa, Okla.	29 72	∠ 1 55	10	1 4	2	- 1	6
Yonkers, N.Y.	28	23	3	1	1	-	8								
E.N. CENTRAL	2,162	1,515	436	123	48	36	211	MOUNTAIN	680 85	489 70	131 12	34 3	13	13	54 17
Akron, Ohio	59	41	10	3	3	2	7	Albuquerque, N.M. Boise, Idaho	39	23	11	2	-	3	1
Canton, Ohio	51	40	9	-	1	1	9	Colo. Springs, Colo.	Ŭ	Ū	U	Ū	U	Ŭ	Ů
Chicago, III.	385 94	246 57	82 24	34 8	10 2	11 3	30 13	Denver, Colo.	U	U	U	U	U	U	U
Cincinnati, Ohio Cleveland, Ohio	212	154	24 50	6	2	-	20	Las Vegas, Nev.	257	169	65	12	6	5	15
Columbus, Ohio	207	138	44	12	8	5	16	Ogden, Utah	28	23	4		1	-	2
Dayton, Ohio	103	73	23	2	3	2	9	Phoenix, Ariz.	U 43	U 33	U	U	U 1	U	U 4
Detroit, Mich.	181	108	51	13	6	3	12	Pueblo, Colo. Salt Lake City, Utah	43	33 79	5 18	4 9	1	4	4 10
Evansville, Ind.	52	43	8	1	-	-	3	Tucson, Ariz.	117	92	16	4	4	1	5
Fort Wayne, Ind.	61	44 5	15 2	1 3	-	1	13	PACIFIC				98			
Gary, Ind. Grand Rapids, Mich.	10 100	5 73	21	3	- 2	-	- 16	Berkeley, Calif.	1,744 16	1,242 13	345 3	96	38	21	200 2
Indianapolis, Ind.	184	135	28	15	3	3	14	Fresno, Calif.	86	62	16	4	4	-	9
Lansing, Mich.	58	46	7	3	-	-	4	Glendale, Calif.	25	22	2	1	-	-	2
Milwaukee, Wis.	84	59	16	5	3	1	8	Honolulu, Hawaii	97	79	13	2	1	2	5
Peoria, III.	43	32	8	2	-	1	6	Long Beach, Calif.	57	40	13	3	1	-	7
Rockford, III.	71	56	10	4	1	-	11	Los Angeles, Calif.	406	267	88	29	13	9	59
South Bend, Ind. Toledo. Ohio	45 101	35 79	6 14	3 4	1 2	- 2	4 14	Pasadena, Calif. Portland, Oreg.	28 98	22 65	4 25	1 5	1 2	-	4 10
Youngstown, Ohio	61	51	8	1	1	-	2	Sacramento, Calif.	284	202	62	13	6	1	29
-						~		San Diego, Calif.	141	101	29	5	3	3	27
W.N. CENTRAL Des Moines, Iowa	343 U	232 U	71 U	23 U	7 U	9 U	33 U	San Francisco, Calif.	U	U	U	Ū	Ū	Ū	U
Des Molnes, Iowa Duluth, Minn.	17	11	3	2	-	1	-	San Jose, Calif.	190	140	31	14	5	-	16
Kansas City, Kans.	14	4	6	3	1	-	-	Santa Cruz, Calif.	33	27	5	-	-	1	4
Kansas City, Mo.	72	44	21	4	2	1	6	Seattle, Wash.	105	71	23	11	-	-	12
Lincoln, Nebr.	31	21	7	2	-	-	2	Spokane, Wash. Tacoma, Wash.	65 113	50 81	10 21	4 6	1 1	- 4	7 7
Minneapolis, Minn.	63	40	9	7	3	4	5								
Omaha, Nebr.	81	67	12	1		1	13	TOTAL	9,825¶	6,877	1,969	611	199	157	920
St. Louis, Mo.	U	U	U	U	U	U	U								
St. Paul, Minn. Wichita, Kans.	31 34	21 24	7 6	3 1	-	- 2	2 5								
	·No reporte		U	1	1	2	5	I							

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

¹ Total includes unknown ages.

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