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### Multistate Outbreak of *Escherichia coli* O157:H7 Infections Associated with Eating Ground Beef — United States, June–July 2002

During July 2002, the Colorado Department of Public Health and Environment (CDPHE) identified an outbreak of *Escherichia coli* O157:H7 infections among Colorado residents. This report summarizes the results of an ongoing epidemiologic and laboratory investigation that has linked 28 illnesses in Colorado and six other states to eating contaminated ground beef products recalled by ConAgra Beef Company on June 30, 2002. To date, seven patients have been hospitalized; five developed hemolytic-uremic syndrome (HUS).

For this investigation, a case was defined as culture-confirmed *E. coli* O157 infection in a Colorado resident with symptom onset on or after June 1, and an isolate matching the outbreak pulsed-field gel electrophoresis (PFGE) pattern by two-enzyme analysis. To date, 18 cases have been identified. The median age of patients was 15 years (range: 1–72 years). Dates of symptom onset ranged from June 13 to July 7. Two cases of HUS have been diagnosed among Colorado residents who have epidemiologic links to the outbreak but do not have laboratory-confirmed *E. coli* O157 infection.

Interviews with 16 of 18 patients with confirmed infection revealed that all ate ground beef during the 7 days before illness. All 16 patients ate ground beef that was purchased at grocery chain A during June 10–24. *E. coli* O157 was cultured from an opened package of ground beef collected from a patient's home. A traceback by CDPHE of ground beef collected from a patient's home indicated that it was reground by grocery chain A with meat produced on May 31 by ConAgra Beef Company. On June 30, independent of the outbreak investigation, ConAgra Beef Company issued a nationwide recall of 354,200 lbs of ground beef products produced on May 31. This recall was based on the detection of *E. coli* O157 during routine microbiologic testing conducted by the U.S. Department of Agriculture (USDA).

PFGE analysis conducted by CDPHE and CDC using two restriction enzymes indicated that the 18 outbreak-related human isolates of *E. coli* O157 from Colorado were indistinguishable from isolates of *E. coli* O157 recovered from the opened ground beef package from a patient's home and from the ConAgra Beef Company recalled ground beef product. To identify potential cases outside Colorado, the outbreak-related PFGE patterns were posted on PulseNet, the National Molecular Subtyping Network for Foodborne Disease Surveillance. On the basis of epidemiologic data and molecular subtyping, eight additional *E. coli* O157 cases related to the Colorado cluster have been identified in six states (California, Iowa, Michigan, South Dakota, Washington, and Wyoming). The dates of onset ranged from June 17 to 27. Of the eight patients outside Colorado, six had PFGE patterns that were indistinguishable from the outbreak pattern by two-enzyme analysis, and two were siblings of a PFGE-matched patient. State and local health departments are investigating additional cases to establish epidemiologic and molecular links to the outbreak.

Subsequent to the detection of this multistate outbreak and the initiation of an in-plant inspection of the ConAgra Beef Company by USDA, the nationwide recall of 354,200 lbs of ground beef was expanded to a nationwide recall of 18.6 million

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lbs of fresh and frozen ground beef and beef trimmings. The expanded recall included fresh and frozen ground beef products produced during April 12–June 29, and beef trimmings produced during April 12–July 11.

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**Editorial Note:** *E. coli* O157:H7 was first described as a cause of human illness and associated with undercooked ground beef in 1982 (1). Symptoms of *E. coli* O157 infection include bloody and nonbloody diarrhea, vomiting, and abdominal cramps. Illness resolves typically within 7–10 days. A subset of patients, particularly the young and the elderly, will develop HUS, characterized by microangiopathic hemolytic anemia, thrombocytopenia, and renal failure. Infection with *E. coli* O157 has been associated with exposure to contaminated food and water, person-to-person transmission, and contact with animal reservoirs (2). Foods of bovine origin, particularly ground beef, are common causes of sporadic infections and outbreaks of *E. coli* O157 (2,3). Surveys conducted on feed lots demonstrate that cattle can be infected symptomatically with *E. coli* O157, and the prevalence of *E. coli* O157 in feed lots can reach 63%–100%, particularly during the summer, under muddy conditions, or with feeding of barley (4,5).

Although the investigation is ongoing, the findings indicate that this outbreak is associated with the ConAgra Beef Company's recalled ground beef products. Supportive evidence includes 1) reported eating by all Colorado patients of ground beef purchased at grocery chain A; 2) recovery of *E. coli* O157 from leftover meat from a patient's home; 3) traceback of the leftover meat indicating that it was produced at grocery chain A using recalled meat; and 4) PFGE results demonstrating a unique strain of *E. coli* O157 in human isolates, leftover meat, and meat recalled from ConAgra Beef Company.

This outbreak demonstrates the continuing importance of routine public health surveillance combined with molecular subtyping in epidemiologic investigations. The PulseNet database includes molecular fingerprinting patterns of at least 9,800 isolates submitted since 1996. The PFGE pattern of the human and meat isolates in this outbreak was novel in the PulseNet database, facilitating the detection and investigation of seemingly sporadic cases of *E. coli* O157 infection in Colorado and six other states and strengthening the association between the recalled beef products and human illness.

The June 30 recall of meat occurred before detection of the multistate cluster of human infections and was based on results of microbiologic testing conducted by USDA. The subsequent identification of human illness associated with the recalled meat reinforces the importance to public health of microbiologic testing in meat processing plants.

The expanded recall announced on July 19 was one of the largest in U.S. history (6). Detailed information on the distribution of recalled meat is not available. The extent to which the recalled meat was repackaged and distributed under other labels is unclear, potentially making it difficult to identify the affected lots by simple inspection of the package. Grocers and butchers from whom ground beef was purchased might be able to advise concerned customers about the producer and production date of purchased meat. However, consumers should be aware that microbiologic testing in meat processing plants cannot eliminate the risk for contamination of ground beef with *E. coli* O157 and other pathogens. To further reduce the risk for illness, consumers can buy ground beef that is precooked or treated with electron beams. Consumers also can protect themselves by using safe food preparation practices. Frozen ground beef should be thawed in the refrigerator rather than at room temperature. Ground beef should be cooked thoroughly to internal temperatures of at least 160° F (71° C). Using meat thermometers will help ensure that internal temperatures are high enough to kill bacteria. To reduce the risk for cross-contamination, consumers should use soap and hot water to wash hands, utensils, and other surfaces that might have come into contact with raw or undercooked ground beef and other meat products. Additional food safety and product recall information is available from USDA at <http://www.usda.gov>; telephone 866-849-7438.

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#### References

1. Riley LW, Remis RS, Helgerson SD, et al. Hemorrhagic colitis associated with a rare *Escherichia coli* serotype. *N Engl J Med* 1983;308:681–5.
2. Griffin P, Mead P, Sivapalasingam S. *Escherichia coli* O157:H7 and other enterohemorrhagic *E. coli*. In: M Blaser, ed. *Infections of the gastrointestinal tract*. New York, New York: Lippincott Williams & Wilkins, 2002.

3. Slutsker L, Ries AA, Maloney K, Wells J, Greene K, Griffin PM. A nationwide case-control study of *Escherichia coli* O157:H7 infection in the United States. *J Infect Dis* 1998;177:962–6.
4. Smith D, Blackford M, Younts S, et al., Ecological relationships between the prevalence of cattle shedding *Escherichia coli* O157:H7 and characteristics of the cattle or conditions of the feedlot pen. *J Food Prot* 2001;64:1899–903.
5. Dargatz D, Wells SJ, Thomas LA, et al. Factors associated with the presence of *Escherichia coli* O157 in feces of feedlot cattle. *J Food Prot* 1997;60:466–70.
6. CDC. *Escherichia coli* O157:H7 infections associated with eating a nationally distributed commercial brand of frozen ground beef patties and burgers—Colorado, 1997. *MMWR* 1997;46:777–8.

## Methemoglobinemia Following Unintentional Ingestion of Sodium Nitrite — New York, 2002

Methemoglobinemia is an unusual and potentially fatal condition in which hemoglobin is oxidized to methemoglobin and loses its ability to bind and transport oxygen. The most common cause of methemoglobinemia is the ingestion or inhalation of oxidizing agents such as nitrates or nitrites (e.g., sodium nitrite, which is used commonly as a preservative in curing meats and fish). This report summarizes the investigation of an incident of methemoglobinemia in five members of a household in New York who became ill after eating a meal seasoned with a white crystalline substance from a plastic bag labeled “Refined Iodized Table Salt” (Figure).

**FIGURE.** Bag containing sodium nitrite (labeled “Refined Iodized Table Salt”)



Photo/Food and Drug Administration

The findings underscore the need for proper storage of hazardous materials to avoid unintentional ingestion and the importance of collaboration by multiple agencies to address a potential public health emergency.

On May 16, 2002, Yonkers, New York, emergency personnel were called to a household in which five adults of Middle Eastern descent (three men aged 40, 43, and 44 years and two women aged 60 and 29 years) reported symptoms of dizziness, lightheadedness, and cyanosis almost immediately after sharing a meal. Two of the men also reported vomiting. A sixth person, a man aged 21 years, who did not eat the meal, was asymptomatic.

### Case Report

On arrival, the first responders found the younger woman unresponsive; all others were awake and alert. En route to the hospital, both women had progressive respiratory distress and loss of consciousness and were intubated; the older woman began having seizures. On arrival at the emergency department (ED), the five persons were markedly cyanotic and had oxygen saturation levels by pulse oximetry of 72%–96% (normal:  $\geq 92\%$ ) (Table). Blood drawn for routine testing was described as “black colored.” Empiric therapy with methylene blue was initiated for suspected methemoglobinemia after consultation with a poison control center. Subsequently, the patients were found to have extremely high methemoglobin levels (range: 21.1%–87.0%) (normal: 1%–3%) (Table).

Within 10–15 minutes after administration of methylene blue, cyanosis resolved and oxygenation improved. After therapy, the three men became asymptomatic, and the two women continued to require ventilatory support; the younger woman did not regain consciousness immediately. After overnight observation, the three men were discharged. The older woman was extubated on May 18, and the younger woman was extubated on May 20; all patients recovered completely.

### Epidemiologic Investigation

Initial reports indicated that first responders and ED personnel had developed a rash following contact with the

patients. Although these reports were found later to be erroneous, emergency hazardous materials procedures were implemented at both the apartment building and the ED until ambient testing of the building confirmed the absence of chemical or biologic agents and clinical laboratory testing confirmed the diagnosis of methemoglobinemia. Because of heightened awareness for potential terrorist events and intelligence information about the disappearance of a shipment of cyanide in Mexico (sodium nitrite is used as an antidote by persons handling sodium cyanide), local and federal law enforcement organizations also investigated the incident for potential criminal activity. Both health department and law enforcement staff interviewed the patients during the investigation.

The implicated meal consisted of meat, rice, and vegetables. The meat was purchased on May 15, 2002, from a national discount food warehouse. It was boiled in water to which was added a white crystalline substance from a plastic bag labeled “Refined Iodized Table Salt” in both English and Arabic. Herbs were added to the water, which was subsequently used to make the rice and vegetables. Samples of all residual food items from the implicated meal were obtained for analysis, including all herbs, the product labeled as salt, and spices found in the kitchen and samples of the remaining uncooked meat, which had been frozen. Samples of meat from the same lot number from the store at which it was purchased also were obtained. Finally, prescription drugs found in the home were collected for testing. All samples were sent to the Food and Drug Administration (FDA) for testing, including specific tests for nitrites, cyanide, arsenic, and select hydrocarbons.

Sale of the meat was suspended voluntarily during the investigation, and the store cooperated with the health department in determining the origin of the meat and identifying other customers who had purchased the same lot number of meat. Those customers were contacted; none reported any symptoms following consumption.

Within 48 hours of onset of illness, FDA laboratory testing confirmed the presence of sodium nitrite in all three foods eaten by the group. The meat contained 3,134 parts per million (ppm), the rice 18,792 ppm, and the vegetables 7,440

**TABLE. Admission laboratory values for five patients with methemoglobinemia — New York, 2002**

Patient	Methemoglobin (% total hemoglobin)	PO <sub>2</sub> (mmHg)	FiO <sub>2</sub>	O <sub>2</sub> Saturation (%)
Male, aged 43 yrs	21.1	NA*	100% (nonbreather mask)	NA
Male, aged 40 yrs	62.0	389	100% (nonbreather mask)	82
Male, aged 44 yrs	49.5	133	100% (nonbreather mask)	96
Female, aged 60 yrs	72.7	136	100% (ventilator)	72
Female, aged 29 yrs	87.0	86	50% (ventilator)	NA

\* Not available

ppm (upper limits of normal: 1,000–2,000 ppm; acceptable levels in smoked fish: 200 ppm). The substance in the plastic bag labeled “Refined Iodized Table Salt” contained 100% sodium nitrite. Remaining uncooked meat from the household and from the same lot number from the store had negligible levels of sodium nitrite.

On determining that a product available commercially and labeled as table salt might have contained sodium nitrite, the local health department, police, and FDA canvassed area stores to find and remove similar bags marked as iodized table salt, and an education campaign was initiated to alert the public and prevent the use of this product. FDA investigators also searched national and international records to determine the origin of the product labeled as salt and whether it had been imported into the United States. Although the original source of this product was traced to a foreign country, no records of importation into the United States were identified by FDA.

Further interviews with the patients found that they had moved recently from another residence to the apartment in which they ate the meal. During the move, two of the patients packed food items from the previous residence to use in the new apartment, including the bag labeled as iodized table salt. None could remember purchasing the bag. However, several recalled that another tenant of the initial residence had been involved in curing meats and returned to his country of origin several months earlier. Law enforcement personnel contacted this person and ascertained that he had used sodium nitrite in preserving meat and transferred a portion to the bag labeled as table salt for storage.

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**Editorial Note:** Methemoglobin is produced when ferrous iron is oxidized to ferric iron within a hemoglobin molecule, an effect that inhibits the binding and delivery of oxygen by a red blood cell (1). Methemoglobinemia occurs when excessive oxidative stress produces methemoglobin at a rate that overwhelms the body's capacity to reduce it through enzyme systems (e.g., nicotinamide adenine dinucleotide [NADH] methemoglobin reductase). Methemoglobinemia is acquired most commonly after ingestion or inhalation of an oxidizing agent, such as nitrates or nitrites.

Sodium nitrate and sodium nitrite are used for their antimicrobial effects to preserve and cure meat, fish, and certain cheeses. They also are used commercially to prevent corrosion of pipes. Epidemics of methemoglobinemia have been associated with drinking water from sodium nitrite-contaminated tanks and pipes (2). Well water contaminated by nitrogenous fertilizer run-off is an important cause of nitrate-induced methemoglobinemia (3–6).

Methemoglobinemia should be suspected in patients presenting with cyanosis that does not improve with supplemental oxygen. Oxygen saturation is not measured accurately by conventional pulse oximetry in the presence of methemoglobinemia and appears relatively normal even when PaO<sub>2</sub> is decreased markedly. The blood of victims is described as “chocolate brown” or otherwise atypical in color and does not redden with exposure to air. Although cyanide and carbon monoxide poisoning are included in the differential diagnosis of agents causing respiratory distress and altered mental status, they do not cause cyanosis. Cyanosis and chocolate-brown blood develop when methemoglobin concentrations reach approximately 15%–20%. Symptoms typical of hypoxia (e.g., dyspnea, weakness, headache, metabolic acidosis, seizures, and coma) occur with progressively rising levels of methemoglobin.

Because of the acute and dramatic nature of illness onset, early reports of potential contamination of first responders, and law enforcement intelligence reports of the disappearance of a shipment of sodium cyanide, local and federal agencies were mobilized to address a possible biologic/chemical incident. Although environmental testing ruled out ambient chemical exposure and medical evaluation and epidemiologic evidence excluded a biologic agent, the cause of the poisoning remained unknown. Further collaboration between local and federal agencies and the store in which the meat was purchased allowed investigators to rule out a widely distributed commercial product and to allay public fears. Within 48 hours of the onset of illness, widespread and rapid testing of food and products indicated that the contamination and exposure were limited to a single household. Further investigation indicated that this incident was associated not with criminal activity but rather with improper storage and inadvertent ingestion of sodium nitrite.

This incident highlights the need to store and label potentially hazardous materials properly to avoid unintentional ingestion and the importance of an ongoing working relation among multiple agencies and organizations in the effective and timely response to a potential public health threat.

## References

1. Wright RO, Lewander WJ, Woolf AD. Methemoglobinemia: etiology, pharmacology, and clinical management. *Ann Emerg Med* 1999;34:646–56.
2. CDC. Methemoglobinemia attributable to nitrite contamination of potable water through boiler fluid additives—New Jersey, 1992 and 1996. *MMWR* 1997;46:202–4.
3. CDC. Methemoglobinemia in an infant—Wisconsin, 1992. *MMWR* 1993;42:217–20.
4. Williams CM. Management and utilization of poultry wastes. *Rev Environ Contam Toxicol* 1999;162:105–57.
5. Downs TJ. Risk screening for exposure to groundwater pollution in a wastewater irrigation district of the Mexico City region. *Environ Health Perspect* 1999;107:553–61.
6. Gelberg KH, Church L, Casey G, et al. Nitrate levels in drinking water in rural New York State. *Environ Res* 1999;80:34–40.

## Cigarette Smoking Among Adults — United States, 2000

One of the national health objectives for 2010 is to reduce the prevalence of cigarette smoking among adults to  $\leq 12\%$  (objective 27.1a) (1). To assess progress toward this objective, CDC analyzed self-reported data from the 2000 National Health Interview Survey (NHIS) sample Adult Core questionnaire and Cancer Control module. This report summarizes the findings of this analysis, which indicate that, in 2000, approximately 23.3% of adults were current smokers compared with 25.0% in 1993, reflecting a modest but statistically significant decrease in prevalence among U.S. adults. In 2000, an estimated 70% of smokers said they wanted to quit, and 41% had tried to quit during the preceding year; however, marked differences in successful quitting were observed among demographic groups. A comprehensive approach to cessation that comprises economic, clinical, regulatory, and educational strategies is required to further reduce the prevalence of smoking in the United States.

The 2000 NHIS Adult Core questionnaire was administered by personal interview to a nationally representative sample ( $n=32,374$ ) of the U.S. noninstitutionalized civilian population aged  $\geq 18$  years; the survey response rate was 72.1%. Respondents were asked, “Have you smoked  $\geq 100$  cigarettes in your entire life?” and “Do you now smoke cigarettes every day, some days, or not at all?” Ever smokers were those who reported having smoked  $\geq 100$  cigarettes during their lifetime. Current smokers were ever smokers who reported smoking every day or some days. Former smokers were ever smokers who currently did not smoke. Interest in quitting smoking completely and attempts to quit were determined by asking current smokers, “Would you like to completely quit smoking cigarettes?” and “During the past 12 months, have you

stopped smoking for 1 day or longer because you were trying to stop smoking?” Data were adjusted for nonresponses and weighted to provide national estimates. Confidence intervals were calculated by using SUDAAN.

In 2000, an estimated 46.5 million adults (23.3%) (95% confidence interval [CI]= $\pm 0.5$ ) were current smokers. Overall, 19.1% (95% CI= $\pm 0.5$ ) of adults were everyday smokers, and 4.1% (95% CI= $\pm 0.3$ ) were some day smokers. The prevalence of smoking was higher among men (25.7% [95% CI= $\pm 0.8$ ]) than women (21.0% [95% CI= $\pm 0.7$ ]) (Table 1). Among racial/ethnic groups, Asians (14.4% [95% CI= $\pm 2.8$ ]) and Hispanics (18.6% [95% CI= $\pm 1.3$ ]) had the lowest prevalence of adult cigarette use; American Indians/Alaska Natives had the highest prevalence (36.0% [95% CI= $\pm 8.0$ ]). By education level, adults who had earned a General Educational Development (GED) diploma had the highest prevalence (47.2% [95% CI= $\pm 4.3$ ]) of smoking; persons with master’s, professional, and doctoral degrees had the lowest prevalence (8.4% [95% CI= $\pm 1.2$ ]) and met the 2010 objective. Current smoking prevalence was highest among persons aged 18–24 years and those aged 25–44 years and lowest among those aged  $\geq 65$  years. The prevalence of current smoking was higher among adults living below the poverty level\* (31.7% [95% CI= $\pm 1.9$ ]) than among those at or above the poverty level (22.9% [95% CI= $\pm 0.7$ ]).

In 2000, an estimated 44.3 million adults (22.2% [95% CI= $\pm 0.5$ ]) were former smokers, representing 24.7 million men and 19.7 million women. Among ever smokers, 48.8% (95% CI= $\pm 0.9$ ) were former smokers (Table 2). Among current smokers, 70.0% (95% CI= $\pm 1.3$ ) reported that they wanted to quit completely, and an estimated 15.7 million (41.0% [95% CI= $\pm 1.4$ ]) had stopped smoking for  $\geq 1$  day during the preceding 12 months because they were trying to quit; 4.7%<sup>†</sup> (95% CI= $\pm 0.5$ ) of smokers who had smoked every day or some days during the preceding year quit and maintained abstinence for 3–12 months in 2000. Among all demographic groups, the majority of smokers were interested in quitting. However, the percentage of ever smokers who had quit varied sharply by demographic group. By level of education, the percentage of ever smokers who had quit ranged from 33.6% (95% CI= $\pm 4.7$ ) to 74.4% (95% CI= $\pm 3.4$ ), with the highest level of success among those with graduate degrees. By race/ethnicity, the percentage of ever smokers who had quit was

\* Poverty thresholds for 1999 from the Bureau of the Census, Economics and Statistics Administration, U.S. Department of Commerce.

<sup>†</sup> This estimate was calculated by using the following equation: Percentage successfully quit during the previous year = [(3 months  $\leq$  FS < 1 year)/(3 months  $\leq$  FS < 1 year) + (CS)] where FS = number of former smokers and CS = number of current smokers.

**TABLE 1. Percentage of persons aged  $\geq 18$  years who were current smokers\*, by selected characteristics — National Health Interview Survey, United States, 2000**

Characteristic	Men (n=13,986)		Women (n=18,388)		Total (n=32,374)	
	%	(95% CI†)	%	(95% CI)	%	(95% CI)
<b>Race/Ethnicity§</b>						
White, non-Hispanic	25.9	( $\pm 1.0$ )	22.4	( $\pm 0.8$ )	24.1	( $\pm 0.7$ )
Black, non-Hispanic	26.1	( $\pm 2.5$ )	20.9	( $\pm 1.7$ )	23.2	( $\pm 1.5$ )
Hispanic	24.0	( $\pm 2.1$ )	13.3	( $\pm 1.6$ )	18.6	( $\pm 1.3$ )
American Indian/Alaska Native¶	29.1	( $\pm 11.0$ )	42.5	( $\pm 11.0$ )	36.0	( $\pm 8.0$ )
Asian**	21.0	( $\pm 4.6$ )	7.6	( $\pm 2.8$ )	14.4	( $\pm 2.8$ )
<b>Education††</b>						
0–12 (no diploma)	33.2	( $\pm 2.2$ )	23.6	( $\pm 1.7$ )	28.2	( $\pm 1.4$ )
$\leq 8$	26.1	( $\pm 3.1$ )	14.2	( $\pm 2.2$ )	20.0	( $\pm 1.9$ )
9–11	37.6	( $\pm 3.5$ )	30.8	( $\pm 2.7$ )	33.9	( $\pm 2.2$ )
12	40.1	( $\pm 6.8$ )	25.3	( $\pm 5.1$ )	32.7	( $\pm 4.4$ )
GED§§ diploma	50.1	( $\pm 6.2$ )	44.3	( $\pm 5.7$ )	47.2	( $\pm 4.3$ )
12 (diploma)	31.7	( $\pm 1.9$ )	23.5	( $\pm 1.4$ )	27.2	( $\pm 1.2$ )
Associate degree	21.9	( $\pm 2.8$ )	20.4	( $\pm 2.4$ )	21.1	( $\pm 1.8$ )
Some college	25.8	( $\pm 2.1$ )	21.6	( $\pm 1.7$ )	23.5	( $\pm 1.3$ )
Undergraduate degree	14.2	( $\pm 1.7$ )	12.4	( $\pm 1.5$ )	13.2	( $\pm 1.1$ )
Graduate degree	9.1	( $\pm 1.8$ )	7.5	( $\pm 1.6$ )	8.4	( $\pm 1.2$ )
<b>Age group (yrs)</b>						
18–24	28.5	( $\pm 2.7$ )	25.1	( $\pm 2.4$ )	26.8	( $\pm 1.8$ )
25–44	29.7	( $\pm 1.4$ )	24.5	( $\pm 1.1$ )	27.0	( $\pm 0.9$ )
45–64	26.4	( $\pm 1.5$ )	21.6	( $\pm 1.3$ )	24.0	( $\pm 1.0$ )
$\geq 65$	10.2	( $\pm 1.3$ )	9.3	( $\pm 1.0$ )	9.7	( $\pm 0.8$ )
<b>Poverty status¶¶</b>						
At or above	25.4	( $\pm 1.0$ )	20.4	( $\pm 0.9$ )	22.9	( $\pm 0.7$ )
Below	35.3	( $\pm 3.2$ )	29.1	( $\pm 2.3$ )	31.7	( $\pm 1.9$ )
Unknown	23.6	( $\pm 1.8$ )	19.5	( $\pm 1.4$ )	21.4	( $\pm 1.1$ )
<b>Total</b>	<b>25.7</b>	<b>(<math>\pm 0.8</math>)</b>	<b>21.0</b>	<b>(<math>\pm 0.7</math>)</b>	<b>23.3</b>	<b>(<math>\pm 0.5</math>)</b>

\* Smoked  $\geq 100$  cigarettes during their lifetime and reported at the time of interview smoking every day or some days. Excludes 301 respondents for whom smoking status was unknown.

† Confidence interval.

§ Excludes 287 respondents of unknown, multiple, and other racial/ethnic categories.

¶ Wide variances among estimates reflect limited sample sizes.

\*\* Does not include Native Hawaiians and Other Pacific Islanders.

†† Persons aged  $\geq 25$  years. Excludes 305 persons with unknown years of education.

§§ General Educational Development.

¶¶ The 1999 poverty thresholds from the Bureau of the Census were used in these calculations.

highest for whites (51.0% [95% CI= $\pm 1.1$ ]) and lowest for non-Hispanic blacks (37.3% [95% CI= $\pm 2.7$ ]). Interest in quitting and attempts to quit decreased with age. In comparison, the percentage of ever smokers who had quit increased with age; however, because this measure is cumulative, older smokers have had more opportunities to quit, and continuing smokers are more likely to have died from the effects of long-term smoking.

During 1999–2000, significant changes in smoking prevalence did not occur (2). To assess temporal changes, CDC compared data from 1993 and 2000 (3). In addition to the modest decrease in the prevalence of current smoking, the prevalence of never smoking increased from 50.5% (95% CI= $\pm 0.9$ ) in 1993 to 54.6% (95% CI= $\pm 0.6$ ) in 2000. Preliminary data for 2001 indicate a continuing decline in current smoking among adults (22.8% [95% CI= $\pm 0.6$ ]) (4).

During 1993–2000, substantial decreases in current smoking prevalence were reported for all age groups, except those aged 18–24 years. Persons aged 18–24 years and those aged 25–44 years continued to have the highest smoking prevalence; these age groups made little progress toward achieving the national health objectives (1). Current smoking prevalence increased among persons aged 20–24 years with  $\geq 13$  years of education, from 17.9% (95% CI= $\pm 2.2$ ) during 1992–1993 to 22.7% (95% CI= $\pm 2.0$ ) during 1999–2000.

**Reported by:** A Trosclair, MS, C Husten, MD, L Pederson, PhD, I Dhillon, MSPH, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

**Editorial Note:** Although current smoking prevalence is declining among adults in the United States, the decline is not occurring at a rate sufficient to meet national health objectives for 2010. However, full implementation of

**TABLE 2. Percentages of current smokers\* aged ≥18 years who wanted to quit smoking cigarettes completely and those who had quit for ≥1 day during the preceding 12 months because they were trying to quit smoking, and percentage of ever smokers† who had quit smoking completely, by selected characteristics — National Health Interview Survey, United States, 2000**

Characteristic	Current smokers who wanted to quit		Current smokers who quit for >1 day		Percentage of ever smokers who had quit	
	%	(95% CI) <sup>§</sup>	%	(95% CI)	%	(95% CI)
<b>Sex</b>						
Male	68.0	(± 1.8)	40.2	(± 2.1)	50.0	(± 1.3)
Female	72.2	(± 1.7)	41.9	(± 2.0)	47.3	(± 1.3)
<b>Race/Ethnicity<sup>¶</sup></b>						
White, non-Hispanic	71.1	(± 1.5)	40.6	(± 1.7)	51.0	(± 1.1)
Black, non-Hispanic	68.4	(± 3.4)	45.0	(± 3.9)	37.3	(± 2.7)
Hispanic	61.9	(± 4.0)	37.8	(± 4.5)	42.9	(± 2.9)
American Indian/Alaska Native**	69.8	(±13.0)	47.1	(±15.9)	40.9	(±10.4)
Asian**††	67.6	(±10.4)	39.0	(±10.9)	44.7	(± 7.7)
<b>Education<sup>§§</sup></b>						
0–12 (no diploma)	63.6	(± 3.0)	36.6	(± 3.2)	47.1	(± 2.1)
≤8	54.2	(± 5.6)	33.4	(± 5.5)	55.8	(± 3.5)
9–11	65.3	(± 3.9)	36.2	(± 4.2)	43.5	(± 2.9)
12	75.0	(± 6.9)	44.0	(± 9.3)	38.4	(± 6.3)
GED <sup>¶¶</sup> diploma	70.7	(± 5.9)	38.1	(± 6.4)	33.6	(± 4.7)
12 (diploma)	69.4	(± 2.4)	36.1	(± 2.6)	46.4	(± 1.8)
Associate degree	73.9	(± 4.2)	47.0	(± 5.3)	53.7	(± 3.3)
Some college	73.7	(± 2.9)	43.0	(± 3.6)	52.1	(± 2.3)
Undergraduate degree	75.9	(± 3.9)	41.6	(± 5.2)	64.0	(± 2.7)
Graduate degree	68.6	(± 7.3)	39.8	(± 8.8)	74.4	(± 3.4)
<b>Age group (yrs)</b>						
18–24	71.9	(± 2.6)	52.5	(± 4.3)	22.4	(± 2.7)
25–44	72.4	(± 2.0)	41.7	(± 2.1)	34.8	(± 1.5)
45–64	68.2	(± 2.2)	36.6	(± 2.5)	55.6	(± 1.6)
≥65	57.1	(± 4.6)	32.4	(± 4.5)	80.1	(± 1.6)
<b>Poverty status<sup>***</sup></b>						
At or above	60.0	(± 6.6)	42.5	(± 1.8)	49.9	(± 1.1)
Below	61.4	(± 6.7)	41.2	(± 3.9)	33.6	(± 2.7)
Unknown	69.0	(± 5.9)	36.0	(± 3.1)	51.2	(± 2.0)
<b>Total</b>	<b>70.0</b>	<b>(± 1.3)</b>	<b>41.0</b>	<b>(± 1.4)</b>	<b>48.8</b>	<b>(± 0.9)</b>

\* Smoked ≥100 cigarettes during their lifetime and reported smoking every day or some days at the time of interview. Excludes 301 respondents for whom smoking status was unknown.

† Smoked ≥100 cigarettes during their lifetime.

§ Confidence interval.

¶ Excludes 287 respondents of unknown, multiple, and other racial/ethnic categories.

\*\* Wide variances among estimates reflect limited sample sizes.

†† Does not include Native Hawaiians and Other Pacific Islanders.

§§ Persons aged ≥25 years. Excludes 305 persons with unknown years of education.

¶¶ General Educational Development.

\*\*\* The 1999 poverty thresholds from the Bureau of the Census were used in these calculations.

comprehensive tobacco-control programs could help meet these objectives (5). Effective interventions include increasing the unit price of tobacco products, conducting sustained mass media campaigns, and increasing access to proven cessation treatments (6).

The findings in this report indicate that current smoking prevalence has remained stable among persons aged 18–24 years. This might reflect the aging of a cohort of persons with high smoking levels as adolescents in the mid-1990s (7) and/or the possible targeting of young adults by the tobacco industry. Increased efforts should be made to prevent tobacco

use among youth and to provide cessation interventions to young adults who smoke.

The findings in this report are subject to at least three limitations. First, questionnaires and data-collection procedures for NHIS have changed since 1993. In 1995, the sample was redesigned. In 1997, questions on tobacco use were moved from supplementary questionnaires to the Adult Core questionnaire; therefore, trend analyses or comparisons with data from years preceding 1997 should be approached with caution. In addition, in 2000, the Office of Management and Budget changed its tabulation guidelines to require that data



on Asians and Native Hawaiians and Other Pacific Islanders (NHOPI) be collected separately; this change made it impossible to perform comparisons with the formerly combined category of Asians/Pacific Islanders. Second, estimates for NHOPI are not included in this report; because of small sample sizes, those data were suppressed in the 2000 public use data files to protect respondents from being identified. Third, because the NHIS sample sizes for some racial/ethnic populations (e.g., American Indians/Alaska Natives) were limited, data for a single year might be unstable, as reflected in the wide CIs. Combining data from several years would produce more reliable estimates for these groups. All the estimates in this report, except those for persons wanting to quit (a question asked in 2000 only), could be produced from combined years of data.

Smoking cessation has major and immediate health benefits for smokers of all ages (8). Despite a high interest in quitting among all demographic groups, the percentage of ever smokers who have quit is low among some populations. Factors that might account for this include lack of access to proven treatments (e.g., brief advice from a health-care provider to quit or more intensive counseling that includes social support and a discussion of practical strategies to help smokers deal with nicotine withdrawal and situations that put them at high risk for relapse) and the cost of medications that are approved by the Food and Drug Administration for cessation (i.e., nicotine replacement therapy and bupropion sustained-release) (5,9). To increase the number of persons who quit smoking, health-care providers should integrate treatment into routine care by assessing patients' smoking behavior during every visit. Access to treatment should be increased by reducing out-of-pocket costs for cessation counseling and treatment and by expanding access to telephone counseling services (e.g., quitlines). Media campaigns and other population-based measures that increase interest in quitting and provide information on effective treatments also are needed (6,9). Preliminary estimates for 2002 indicate that six states were funding comprehensive programs at the minimum levels recommended by CDC (10). Implementation at the state and federal levels of comprehensive tobacco-control programs comprising educational, economic, clinical, and regulatory strategies will be required to meet the 2010 national objectives.

#### References

1. U.S. Department of Health and Human Services. Healthy people 2010, 2nd ed. With understanding and improving health and objectives for improving health (2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
2. CDC. Cigarette smoking among adults—United States, 1999. *MMWR* 2001;50:869–73.
3. CDC. Cigarette smoking among adults—United States, 1993. *MMWR* 1994;43:925–9.
4. CDC. Early release of selected estimates from the National Health Interview Survey (NHIS). Available at <http://www.cdc.gov/nchs/about/major/nhis/released200207/about.htm>.
5. U.S. Department of Health and Human Services. Reducing tobacco use: a report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.
6. Hopkins DP, Briss PA, Ricard CJ, et al. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *Am J Prevent Med* 2001;20:16–52.
7. CDC. Trends in cigarette smoking among high school students—United States, 1999–2001. *MMWR* 2002;51:409–12.
8. U.S. Department of Health and Human Services. The health benefits of smoking cessation. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1990.
9. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence: a clinical practice guideline. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, 2000.
10. CDC. Tobacco control state highlights 2002: impact and opportunity. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2002.

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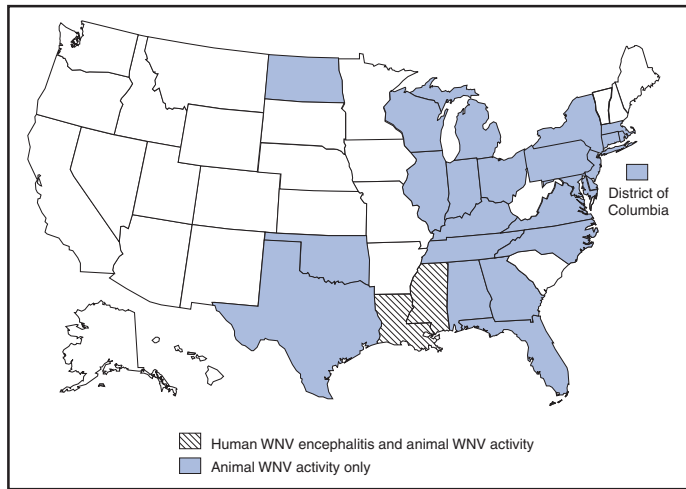
## Weekly Update: West Nile Virus Activity — United States, July 17–23, 2002

This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET and verified by states and other jurisdictions as of July 23, 2002.

During the reporting week of July 17–23, nine human cases of WNV were reported from two states (Louisiana and Mississippi). During the same period, WNV infections were reported in 202 dead crows, 48 other dead birds, 13 horses, and 69 mosquito pools.

During 2002, a total of 12 human cases of WNV encephalitis or meningitis have been reported from Louisiana and Mississippi. Among these cases, eight were men, the median age was 74 years (range: 34–88 years), and the dates of illness onset ranged from June 10 to July 11. In addition, 373 dead crows and 314 other dead birds with WNV infection were reported from 25 states, New York City, and the District of Columbia (Figure); 36 WNV infections in horses have been reported from six states (Florida, Kentucky, Louisiana, Mississippi, North Dakota, and Texas). During 2002, WNV seroconversions have been reported in six sentinel chicken flocks from Florida; WNV seropositivity has been reported from two states (Indiana and Louisiana) in three wild birds that were caught and released; and 95 WNV-positive mosquito pools have been reported from eight states (Alabama,

**FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2002\***



\* As of July 23, 2002.

Illinois, Indiana, Massachusetts, New Jersey, Ohio, Pennsylvania, and Texas) and New York City.

Additional information about WNV activity is available at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm> and [http://cindi.usgs.gov/hazard/event/west\\_nile/west\\_nile.html](http://cindi.usgs.gov/hazard/event/west_nile/west_nile.html).

### *Notice to Readers*

#### **National Laboratory Inventory as Part of Global Poliovirus Containment — United States, June 2002**

Since the initiation of the global poliomyelitis initiative in 1988 through 2001, the number of countries where polio is endemic decreased from 125 to 10, and the number of reported polio cases decreased >99%, from an estimated 350,000 to <1,000 (1). The Global Commission for the Certification of the Eradication of Poliomyelitis, convened by the World Health Organization, will declare the world polio-free when all regions have documented the absence of wild poliovirus transmission for at least 3 consecutive years and when laboratories with wild poliovirus materials have implemented appropriate containment conditions (2).

In anticipation of the interruption of wild poliovirus transmission within the next few years, the United States has joined 122 other polio-free countries in taking steps toward wild poliovirus laboratory containment (3). In October 2002, the U.S. Department of Health and Human Services, through the National Vaccine Program Office, and in partnership with the Departments of Agriculture, Commerce, Defense, Education, Justice, Energy, Interior, Labor, and Veterans

Affairs, the Environmental Protection Agency, and the National Science Foundation, will mail inventory forms to approximately 15,000 biomedical institutions/laboratories to alert them to the approaching eradication of polio, encourage destruction of all unneeded wild poliovirus materials, and develop a national inventory of laboratories retaining such materials.

The nationwide wild poliovirus inventory is a separate process from the Select Agent Registry process required by the Public Health and Security and Bioterrorism Preparedness Response Act of 2002, which will be implemented during the same period. The latter requires all persons with select agents to submit notification and ensure that all such agents are under appropriate laboratory containment. It is anticipated that laboratories will use the opportunity presented by the Select Agent notification to update their inventories of all infectious materials, including wild polioviruses. The wild poliovirus inventory is being conducted to prepare for laboratory containment before wild poliovirus transmission is interrupted. The purpose of containment is to reduce the risk for inadvertent reintroduction of polioviruses from the laboratory into the community. Information about all aspects of the inventory process, polioviruses, and the rationale for containment and responses to frequently asked questions are available at the Poliovirus Laboratory Containment Preparedness website at <http://www.cdc.gov/od/nvpo/polio>.

The poliovirus inventory instruments and procedures were developed in collaboration with CDC, the National Institutes of Health, Emory University, Arizona State Public Health Laboratory, and Wyeth, a biopharmaceutical company. A pilot inventory approved by the Office of Management and Budget is under way in all relevant federal agencies and approximately 500 participating academic, state, private, and hospital laboratories/institutions. The pilot inventory will provide the framework for the nationwide inventory in October.

Laboratories are encouraged to destroy all unneeded infectious materials (e.g., wild poliovirus clinical materials, isolates, stocks, products of research, and materials from infected animals) and potential infectious materials (e.g., respiratory secretions, feces, and environmental samples collected for any purposes at a time and in a geographic area where wild poliovirus was known or suspected to be present). Laboratories electing to retain such materials will be listed on the national inventory and kept informed of progress toward interruption of poliovirus transmission. Beginning 1 year after detection of the last case of polio associated with wild poliovirus, laboratories undertaking activities involving wild poliovirus materials or potential wild poliovirus materials in permissive cells or animals will be notified to initiate high-containment

(Biosafety Level [BSL-3] polio) measures. For all other activities involving potential wild poliovirus materials, current recommendations remain unchanged. For example, bacteriology and parasitology laboratories may continue to work with such materials under BSL-2 polio conditions, which require the use of biologic safety cabinets for manipulation of all such open materials and polio vaccination of personnel handling such materials (4).

The containment measures required for Global Certification will remain in force as long as universal vaccination continues. If vaccination discontinues in some or all countries after certification, global biosafety requirements for wild poliovirus materials, oral polio vaccine–like viruses, and potential oral polio vaccine infectious materials could become

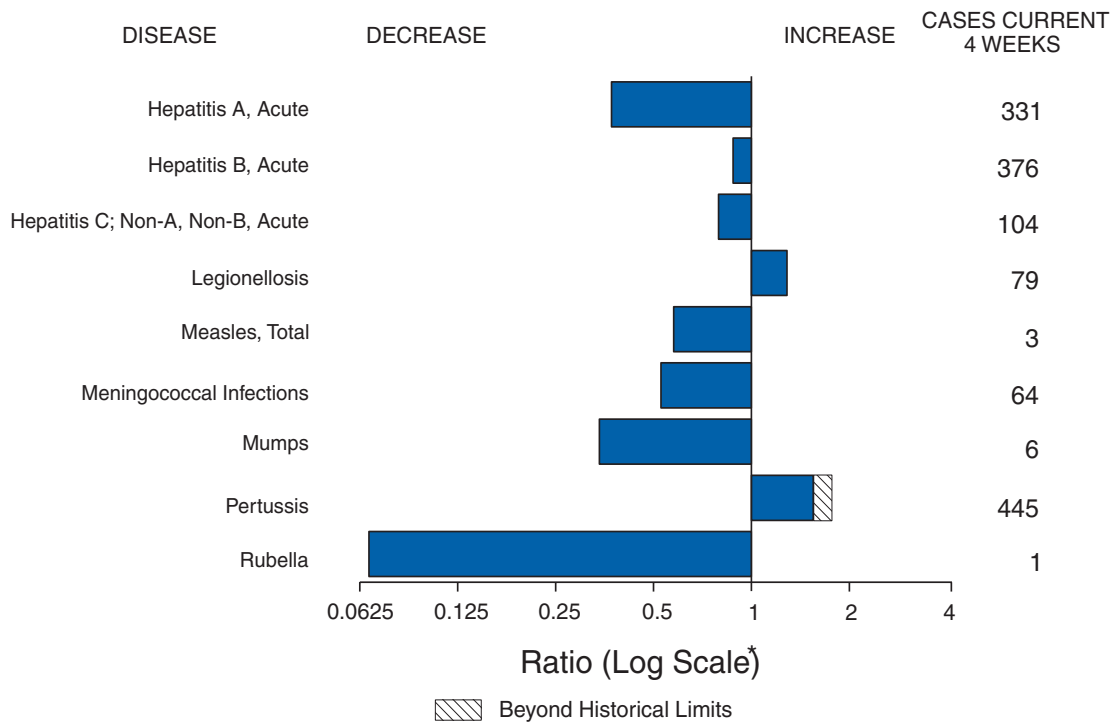
more stringent in keeping with the increased consequences of virus transmission to the community (5).

#### References

1. CDC. Progress toward global eradication of poliomyelitis, 2001. *MMWR* 2002;51:253–6.
2. Department of Vaccines and Biologicals. Report of the third meeting of the Global Commission for the Certification of the Eradication of Polio, July 9, 1998. Geneva, Switzerland: World Health Organization, 1999 (Document no. WHO/EPI/GEN/981.17).
3. CDC. Global progress towards laboratory containment of wild polioviruses, June 2001. *MMWR* 2001;50:620–3.
4. World Health Organization. Global action plan for laboratory containment of wild polioviruses. 2nd ed. Geneva, Switzerland: World Health Organization, 2002 (in press).
5. Technical Consultative Group on Global Eradication of Poliomyelitis. “Endgame” issues for the global polio eradication initiative. *Clin Infect Dis* 2002;34:72–7.



**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending July 20, 2002, 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 July 20, 2002 (29th Week)\***

	Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax	2	1	Encephalitis: West Nile <sup>†</sup>	8	-
Botulism: foodborne	9	11	Hansen disease (leprosy) <sup>†</sup>	44	41
infant	33	54	Hantavirus pulmonary syndrome <sup>†</sup>	8	5
other (wound & unspecified)	10	6	Hemolytic uremic syndrome, postdiarrheal <sup>†</sup>	85	69
Brucellosis <sup>†</sup>	44	66	HIV infection, pediatric <sup>†§</sup>	98	96
Chancroid	37	23	Plague	-	2
Cholera	4	3	Poliomyelitis, paralytic	-	-
Cyclosporiasis <sup>†</sup>	88	65	Psittacosis <sup>†</sup>	12	7
Diphtheria	1	1	Q fever <sup>†</sup>	20	13
Ehrlichiosis: human granulocytic (HGE) <sup>†</sup>	120	74	Rabies, human	1	1
human monocytic (HME) <sup>†</sup>	53	50	Streptococcal toxic-shock syndrome <sup>†</sup>	51	52
other and unspecified	3	3	Tetanus	10	22
Encephalitis: California serogroup viral <sup>†</sup>	10	9	Toxic-shock syndrome	67	73
eastern equine <sup>†</sup>	1	-	Trichinosis	9	10
Powassan <sup>†</sup>	-	-	Tularemia <sup>†</sup>	28	63
St. Louis <sup>†</sup>	-	-	Yellow fever	1	-
western equine <sup>†</sup>	-	-			

-: No reported cases.

\* Incidence data for reporting year 2001 and 2002 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 June 30, 2002.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		Escherichia coli			
	Cum. 2002§	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	O157:H7		Shiga Toxin Positive, Serogroup non-O157	
							Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	20,967	21,772	403,973	417,508	1,091	1,140	1,092	1,129	43	49
NEW ENGLAND	802	811	14,446	11,922	65	52	99	119	12	21
Maine	19	22	815	663	2	4	10	14	-	-
N.H.	19	16	884	733	14	2	8	12	-	3
Vt.	8	10	414	333	15	14	3	6	-	-
Mass.	377	478	5,959	4,616	16	25	45	64	4	6
R.I.	62	51	1,537	1,553	13	3	5	6	-	-
Conn.	317	234	4,837	4,024	5	4	28	17	8	12
MID. ATLANTIC	4,702	5,677	40,525	44,933	127	159	81	91	-	-
Upstate N.Y.	359	784	9,023	7,274	40	47	68	56	-	-
N.Y. City	2,554	2,996	15,057	16,590	58	65	4	8	-	-
N.J.	812	1,000	3,772	7,193	7	8	9	27	-	-
Pa.	977	897	12,673	13,876	22	39	N	N	-	-
E.N. CENTRAL	2,241	1,469	69,100	76,973	280	388	273	256	1	3
Ohio	433	232	18,711	19,804	73	63	60	65	1	2
Ind.	306	163	8,996	8,486	25	33	26	38	-	-
Ill.	1,029	670	17,162	23,180	41	41	79	62	-	-
Mich.	364	320	17,797	16,584	54	77	44	30	-	1
Wis.	109	84	6,434	8,919	87	174	64	61	-	-
W.N. CENTRAL	330	459	22,751	21,518	126	105	180	138	5	2
Minn.	72	81	5,252	4,326	50	32	64	49	3	-
Iowa	47	47	2,724	2,688	13	29	47	26	-	-
Mo.	138	211	7,640	7,603	17	22	25	24	N	N
N. Dak.	1	1	522	565	6	4	3	1	-	-
S. Dak.	2	18	1,196	967	5	5	17	9	1	1
Nebr.	31	47	1,857	1,911	26	13	16	17	1	1
Kans.	39	54	3,560	3,458	9	-	8	12	-	-
S. ATLANTIC	6,499	6,603	78,388	79,656	168	178	105	95	15	13
Del.	114	115	1,465	1,606	1	1	4	1	-	-
Md.	961	899	8,114	8,453	9	27	5	6	-	-
D.C.	321	460	1,694	1,853	3	9	-	-	-	-
Va.	488	541	9,422	9,635	4	10	24	26	1	2
W. Va.	50	47	1,291	1,302	2	1	2	3	-	-
N.C.	456	378	13,349	11,289	23	18	17	26	-	-
S.C.	455	403	7,103	8,827	2	2	1	2	-	-
Ga.	1,087	751	14,653	16,858	80	73	37	17	9	7
Fla.	2,567	3,009	21,297	19,833	44	37	15	14	5	4
E.S. CENTRAL	919	1,030	27,182	27,523	73	25	51	55	-	-
Ky.	150	201	4,755	4,872	3	3	16	23	-	-
Tenn.	404	306	8,722	8,100	38	5	21	20	-	-
Ala.	173	259	8,157	7,755	28	9	9	8	-	-
Miss.	192	264	5,548	6,796	4	8	5	4	-	-
W.S. CENTRAL	2,181	2,314	58,182	59,398	15	36	13	116	-	-
Ark.	149	123	3,462	4,250	5	3	3	4	-	-
La.	508	458	10,261	9,842	4	7	-	3	-	-
Okla.	119	128	5,478	6,002	6	6	10	13	-	-
Tex.	1,405	1,605	38,981	39,304	-	20	-	96	-	-
MOUNTAIN	678	756	25,290	24,713	77	61	110	117	6	6
Mont.	6	12	1,145	1,165	4	5	9	6	-	-
Idaho	15	16	1,383	943	18	7	7	15	2	2
Wyo.	4	1	478	453	6	1	2	5	1	-
Colo.	133	183	7,684	6,967	21	19	39	50	1	3
N. Mex.	51	59	3,234	3,327	9	11	4	7	1	1
Ariz.	284	279	8,113	8,167	10	4	14	15	1	-
Utah	35	62	1,193	972	6	11	24	13	-	-
Nev.	150	144	2,060	2,719	3	3	11	6	-	-
PACIFIC	2,615	2,653	68,109	70,872	160	136	180	142	4	4
Wash.	264	284	7,792	7,338	24	U	20	32	-	-
Oreg.	196	110	3,726	4,002	23	17	50	24	4	4
Calif.	2,090	2,207	52,335	55,862	112	116	83	75	-	-
Alaska	12	14	1,917	1,507	-	-	4	2	-	-
Hawaii	53	38	2,339	2,163	1	3	23	9	-	-
Guam	2	8	-	231	-	-	N	N	-	-
P.R.	601	579	1,590	1,520	-	-	-	-	-	-
V.I.	60	2	30	103	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	117	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 year 2001 and 2002 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 June 30, 2002.

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	<i>Escherichia coli</i>		Giardiasis	Gonorrhea		<i>Haemophilus influenzae</i> , Invasive			
	Shiga Toxin Positive, Not Serogrouped					All Ages, All Serotypes		Age <5 Years	
	Cum. 2002	Cum. 2001						Serotype B	
						Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	17	5	7,504	169,984	189,741	912	903	12	16
NEW ENGLAND	-	1	791	4,109	3,227	66	60	-	1
Maine	-	-	85	66	73	1	1	-	-
N.H.	-	-	26	64	85	5	-	-	-
Vt.	-	1	64	55	41	5	3	-	-
Mass.	-	-	390	1,838	1,377	33	33	-	1
R.I.	-	-	68	484	399	9	2	-	-
Conn.	-	-	158	1,602	1,252	13	21	-	-
MID. ATLANTIC	-	-	1,677	18,522	21,741	158	128	3	3
Upstate N.Y.	-	-	578	4,601	4,386	71	41	2	-
N.Y. City	-	-	665	6,133	6,907	37	34	-	-
N.J.	-	-	148	2,924	3,646	31	29	-	-
Pa.	-	-	286	4,864	6,802	19	24	1	3
E.N. CENTRAL	8	2	1,367	32,802	39,444	153	160	2	1
Ohio	8	2	425	9,958	10,727	61	48	-	1
Ind.	-	-	-	3,906	3,534	31	32	1	-
Ill.	-	-	310	9,233	12,497	44	53	-	-
Mich.	-	-	410	7,750	9,546	10	8	1	-
Wis.	-	-	222	1,955	3,140	7	19	-	-
W.N. CENTRAL	-	-	896	8,810	8,912	33	41	-	1
Minn.	-	-	315	1,544	1,369	20	23	-	-
Iowa	-	-	125	602	695	1	-	-	-
Mo.	N	N	256	4,406	4,528	9	12	-	-
N. Dak.	-	-	11	28	19	-	4	-	-
S. Dak.	-	-	35	147	146	-	-	-	-
Nebr.	-	-	74	652	655	-	1	-	1
Kans.	-	-	80	1,431	1,500	3	1	-	-
S. ATLANTIC	-	-	1,317	45,205	48,705	224	224	1	1
Del.	-	-	26	879	907	-	-	-	-
Md.	-	-	53	4,539	4,815	54	58	1	-
D.C.	-	-	22	1,408	1,605	-	-	-	-
Va.	-	-	114	5,497	5,241	16	18	-	-
W. Va.	-	-	26	538	345	8	8	-	1
N.C.	-	-	-	8,932	8,797	21	32	-	-
S.C.	-	-	35	4,253	6,630	11	4	-	-
Ga.	-	-	503	8,051	9,124	67	59	-	-
Fla.	-	-	538	11,108	11,241	47	45	-	-
E.S. CENTRAL	1	1	173	15,464	17,635	37	56	1	-
Ky.	1	1	-	1,894	1,878	3	2	-	-
Tenn.	-	-	79	4,965	5,362	20	27	-	-
Ala.	-	-	94	5,250	5,998	9	25	1	-
Miss.	-	-	-	3,355	4,397	5	2	-	-
W.S. CENTRAL	-	-	95	25,577	28,931	34	34	2	1
Ark.	-	-	71	1,924	2,674	1	-	-	-
La.	-	-	1	6,397	6,853	2	6	-	-
Okla.	-	-	23	2,346	2,738	29	27	-	-
Tex.	-	-	-	14,910	16,666	2	1	2	1
MOUNTAIN	8	1	685	5,316	5,660	122	100	2	4
Mont.	-	-	36	55	72	-	-	-	-
Idaho	-	-	47	41	42	2	1	-	-
Wyo.	-	-	12	32	32	1	1	-	-
Colo.	8	1	226	1,855	1,721	22	28	-	-
N. Mex.	-	-	79	623	531	19	15	-	1
Ariz.	-	-	91	1,977	2,217	59	40	1	1
Utah	-	-	126	115	86	14	5	-	-
Nev.	-	-	68	618	959	5	10	1	2
PACIFIC	-	-	503	14,179	15,486	85	100	1	4
Wash.	-	-	190	1,545	1,604	2	1	1	-
Oreg.	-	-	213	446	627	43	31	-	-
Calif.	-	-	-	11,512	12,693	12	44	-	4
Alaska	-	-	50	341	214	1	3	-	-
Hawaii	-	-	50	335	348	27	21	-	-
Guam	-	-	-	-	26	-	-	-	-
P.R.	-	-	11	240	350	1	1	-	-
V.I.	-	-	-	17	14	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	11	U	-	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	<i>Haemophilus influenzae</i> , Invasive				Hepatitis (Viral, Acute), By Type					
	Age <5 Years				A		B		C; Non-A, Non-B	
	Non-Serotype B		Unknown Serotype		Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001						
UNITED STATES	143	149	15	18	4,537	4,971	3,517	3,806	1,858	2,299
NEW ENGLAND	7	10	-	-	186	286	122	72	20	27
Maine	-	-	-	-	6	5	4	5	-	-
N.H.	-	-	-	-	11	9	12	10	-	-
Vt.	-	-	-	-	1	6	3	5	12	6
Mass.	4	7	-	-	82	115	68	13	8	21
R.I.	-	-	-	-	27	12	17	12	-	-
Conn.	3	3	-	-	59	139	18	27	-	-
MID. ATLANTIC	21	20	-	3	563	650	769	761	924	675
Upstate N.Y.	8	6	-	1	113	149	81	70	34	18
N.Y. City	6	5	-	-	235	232	428	363	-	-
N.J.	4	3	-	-	64	159	148	161	874	618
Pa.	3	6	-	2	151	110	112	167	16	39
E.N. CENTRAL	23	29	1	1	634	598	446	459	61	109
Ohio	7	8	1	-	202	136	61	65	6	7
Ind.	7	5	-	1	32	46	18	25	-	1
Ill.	7	11	-	-	170	192	40	60	9	9
Mich.	1	-	-	-	131	182	327	286	46	92
Wis.	1	5	-	-	99	42	-	23	-	-
W.N. CENTRAL	2	2	3	3	195	212	122	120	506	707
Minn.	2	1	1	1	26	16	9	11	-	3
Iowa	-	-	-	-	48	20	11	12	1	-
Mo.	-	-	2	2	53	47	67	70	495	698
N. Dak.	-	1	-	-	1	2	4	-	-	-
S. Dak.	-	-	-	-	3	1	-	1	-	-
Nebr.	-	-	-	-	11	27	18	16	8	3
Kans.	-	-	-	-	53	99	13	10	2	3
S. ATLANTIC	34	30	2	5	1,366	928	912	694	90	37
Del.	-	-	-	-	9	4	7	14	5	2
Md.	2	4	-	1	165	135	74	76	6	4
D.C.	-	-	-	-	52	27	10	11	-	-
Va.	2	4	-	-	51	68	114	85	2	-
W. Va.	-	1	1	-	12	7	13	16	1	6
N.C.	3	1	-	4	135	85	143	111	14	10
S.C.	4	1	-	-	43	38	57	16	4	4
Ga.	16	14	-	-	316	495	285	208	24	-
Fla.	7	5	1	-	583	69	209	157	34	11
E.S. CENTRAL	8	11	1	2	157	205	190	257	108	144
Ky.	-	-	-	1	35	51	29	27	2	5
Tenn.	5	5	-	-	60	78	76	132	20	44
Ala.	3	5	1	1	24	59	41	51	4	2
Miss.	-	1	-	-	38	17	44	47	82	93
W.S. CENTRAL	6	4	-	-	76	554	221	439	23	474
Ark.	-	-	-	-	28	41	64	58	4	5
La.	1	-	-	-	19	59	28	71	15	103
Okla.	5	4	-	-	28	83	17	68	4	4
Tex.	-	-	-	-	1	371	112	242	-	362
MOUNTAIN	24	12	7	1	342	440	290	283	59	39
Mont.	-	-	-	-	9	8	3	2	-	1
Idaho	1	-	-	-	20	47	5	8	-	1
Wyo.	-	-	-	-	2	3	10	1	7	4
Colo.	2	-	-	-	58	41	52	65	24	5
N. Mex.	4	6	1	1	9	20	63	72	1	11
Ariz.	12	4	5	-	180	226	99	93	4	9
Utah	4	2	-	-	35	45	25	15	4	2
Nev.	1	-	1	-	29	50	33	27	19	6
PACIFIC	18	31	1	3	1,018	1,098	445	721	67	87
Wash.	1	-	-	1	100	64	35	72	14	16
Oreg.	4	5	-	-	49	71	79	91	13	11
Calif.	9	24	1	1	861	941	323	539	40	60
Alaska	1	1	-	-	7	12	4	5	-	-
Hawaii	3	1	-	1	1	10	4	14	-	-
Guam	-	-	-	-	-	1	-	-	-	-
P.R.	-	1	-	-	59	101	50	149	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	31	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).



**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	439	502	226	288	4,071	5,670	595	754	12†	85§
NEW ENGLAND	24	19	27	29	531	1,457	37	48	-	5
Maine	2	1	2	-	-	-	2	3	-	-
N.H.	4	4	2	1	64	29	5	2	-	-
Vt.	3	4	1	1	9	4	1	-	-	1
Mass.	11	5	16	15	347	658	15	23	-	3
R.I.	-	1	1	1	76	123	3	3	-	-
Conn.	4	4	5	11	35	643	11	17	-	1
MID. ATLANTIC	105	105	41	49	2,845	3,021	128	203	5	13
Upstate N.Y.	37	28	19	14	1,747	868	24	26	-	4
N.Y. City	19	12	11	13	77	47	80	125	5	3
N.J.	10	8	3	8	181	1,149	13	29	-	1
Pa.	39	57	8	14	840	957	11	23	-	5
E. N. CENTRAL	119	139	26	43	32	459	72	97	1	10
Ohio	59	61	9	8	27	10	12	14	1	3
Ind.	10	10	4	4	5	9	3	12	-	4
Ill.	-	18	1	14	-	23	17	40	-	3
Mich.	32	28	9	14	-	2	32	19	-	-
Wis.	18	22	3	3	U	415	8	12	-	-
W. N. CENTRAL	27	33	8	7	94	110	41	24	-	4
Minn.	2	7	-	-	54	69	14	6	-	2
Iowa	6	6	1	-	15	16	2	3	-	-
Mo.	10	11	5	4	20	20	11	8	-	2
N. Dak.	-	1	1	-	-	-	1	-	-	-
S. Dak.	2	3	-	-	-	-	-	-	-	-
Nebr.	7	4	-	1	1	3	5	2	-	-
Kans.	-	1	1	2	4	2	8	5	-	-
S. ATLANTIC	93	86	39	33	468	477	167	157	1	4
Del.	5	2	-	1	55	66	1	1	-	-
Md.	16	23	5	4	282	298	49	67	-	3
D.C.	5	7	-	-	12	7	7	10	-	-
Va.	8	11	3	6	25	75	12	31	-	-
W. Va.	N	N	-	4	5	8	2	1	-	-
N.C.	5	5	3	2	52	16	9	7	-	-
S.C.	5	4	6	3	5	2	5	4	-	-
Ga.	10	8	10	7	1	-	56	23	-	1
Fla.	39	26	12	6	31	5	26	13	1	-
E. S. CENTRAL	15	37	8	11	25	27	9	19	-	2
Ky.	7	9	2	4	12	10	2	7	-	2
Tenn.	3	16	3	3	7	8	2	7	-	-
Ala.	5	8	3	4	6	6	3	3	-	-
Miss.	-	4	-	-	-	3	2	2	-	-
W. S. CENTRAL	3	17	5	25	2	59	4	53	1	1
Ark.	-	-	-	1	-	-	1	3	-	-
La.	1	6	-	-	1	4	3	4	-	-
Okla.	2	3	5	1	-	-	-	2	-	-
Tex.	-	8	-	23	1	55	-	44	1	1
MOUNTAIN	19	29	19	25	13	6	29	31	1	1
Mont.	1	-	-	-	-	-	1	2	-	-
Idaho	-	2	2	1	2	3	-	3	-	1
Wyo.	1	2	-	1	-	1	-	-	-	-
Colo.	4	11	2	5	3	-	15	17	-	-
N. Mex.	1	2	2	6	1	-	1	2	-	-
Ariz.	5	8	9	6	2	-	5	3	-	-
Utah	6	2	3	1	4	-	4	2	-	-
Nev.	1	2	1	5	1	2	3	2	1	-
PACIFIC	34	37	53	66	61	54	108	122	3	45
Wash.	3	6	5	3	2	1	11	4	-	15
Oreg.	N	N	4	4	8	6	5	8	-	2
Calif.	31	26	39	58	50	45	84	102	3	22
Alaska	-	1	-	1	1	2	2	1	-	-
Hawaii	-	4	5	1	N	N	6	7	-	6
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	2	1	-	N	N	-	3	-	-
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 year 2001 and 2002 are provisional and cumulative (year-to-date).

† Of 12 cases reported, four were indigenous and eight were imported from another country.

§ Of 85 cases reported, 41 were indigenous and 44 were imported from another country.

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	979	1,527	157	127	3,484	2,774	2,945	3,806
NEW ENGLAND	66	74	7	-	335	260	433	344
Maine	5	1	-	-	5	-	26	40
N.H.	8	9	4	-	6	14	11	6
Vt.	4	4	-	-	64	24	63	37
Mass.	31	44	2	-	250	206	147	119
R.I.	5	2	-	-	4	2	34	30
Conn.	13	14	1	-	6	14	152	112
MID. ATLANTIC	104	162	14	14	161	201	552	634
Upstate N.Y.	32	45	2	2	114	104	330	390
N.Y. City	13	26	1	8	8	33	10	15
N.J.	21	28	1	-	3	8	87	101
Pa.	38	63	10	4	36	56	125	128
E.N. CENTRAL	147	212	18	17	434	346	41	47
Ohio	55	57	3	1	234	166	12	16
Ind.	23	23	2	1	24	27	8	1
Ill.	30	52	6	12	76	41	8	5
Mich.	27	49	6	2	32	31	13	18
Wis.	12	31	1	1	68	81	-	7
W.N. CENTRAL	91	99	11	5	327	128	223	206
Minn.	21	15	3	2	117	31	19	20
Iowa	12	21	-	-	108	16	37	44
Mo.	35	35	3	-	66	61	21	18
N. Dak.	-	5	1	-	-	-	11	24
S. Dak.	2	4	-	-	5	3	32	32
Nebr.	16	10	-	1	3	3	-	4
Kans.	5	9	4	2	28	14	103	64
S. ATLANTIC	168	234	17	17	214	126	1,248	1,326
Del.	6	3	-	-	2	-	24	22
Md.	4	32	3	4	21	19	165	269
D.C.	-	-	-	-	1	1	-	-
Va.	28	28	3	2	89	13	277	236
W. Va.	-	10	-	-	14	1	100	74
N.C.	19	55	1	1	20	41	373	327
S.C.	15	23	2	1	28	22	43	75
Ga.	25	34	4	7	16	17	132	212
Fla.	71	49	4	2	23	12	134	111
E.S. CENTRAL	61	100	11	3	106	61	93	147
Ky.	10	18	4	1	40	15	16	13
Tenn.	24	43	2	-	39	26	53	106
Ala.	16	29	2	-	20	17	24	28
Miss.	11	10	3	2	7	3	-	-
W.S. CENTRAL	58	239	11	9	822	256	67	747
Ark.	20	14	-	-	372	12	-	-
La.	21	59	1	2	4	4	-	5
Okla.	16	21	-	-	51	9	67	44
Tex.	1	145	10	7	395	231	-	698
MOUNTAIN	64	72	13	8	482	919	136	141
Mont.	2	3	-	-	2	13	7	20
Idaho	3	7	1	-	46	165	9	2
Wyo.	-	4	-	1	7	-	13	20
Colo.	20	27	2	2	188	173	22	-
N. Mex.	3	9	1	2	99	54	4	6
Ariz.	20	11	1	1	91	461	77	90
Utah	4	7	5	1	29	42	2	2
Nev.	12	4	3	1	20	11	2	1
PACIFIC	220	335	55	54	603	477	152	214
Wash.	44	44	-	1	264	79	-	-
Oreg.	34	40	N	N	114	32	2	-
Calif.	135	241	44	28	213	341	126	176
Alaska	1	2	-	1	4	2	24	38
Hawaii	6	8	11	24	8	23	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	3	4	-	-	1	-	46	62
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	1	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	Rocky Mountain Spotted Fever		Rubella				Salmonellosis	
	Cum. 2002	Cum. 2001	Rubella		Congenital Rubella		Cum. 2002	Cum. 2001
			Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001		
UNITED STATES	365	239	5	15	2	-	16,309	18,009
NEW ENGLAND	-	2	-	-	-	-	1,008	1,297
Maine	-	-	-	-	-	-	74	111
N.H.	-	-	-	-	-	-	65	103
Vt.	-	-	-	-	-	-	37	38
Mass.	-	2	-	-	-	-	559	754
R.I.	-	-	-	-	-	-	72	64
Conn.	-	-	-	-	-	-	201	227
MID. ATLANTIC	20	12	3	6	-	-	2,046	2,436
Upstate N.Y.	5	-	2	1	-	-	725	561
N.Y. City	2	1	-	4	-	-	657	659
N.J.	3	3	1	1	-	-	193	579
Pa.	10	8	-	-	-	-	471	637
E.N. CENTRAL	8	13	-	2	-	-	2,635	2,442
Ohio	6	1	-	-	-	-	720	707
Ind.	1	1	-	-	-	-	234	246
Ill.	-	11	-	2	-	-	804	674
Mich.	1	-	-	-	-	-	468	438
Wis.	-	-	-	-	-	-	409	377
W.N. CENTRAL	56	37	-	3	-	-	1,236	1,042
Minn.	-	-	-	-	-	-	294	322
Iowa	1	1	-	1	-	-	210	162
Mo.	51	34	-	1	-	-	440	260
N. Dak.	-	-	-	-	-	-	25	15
S. Dak.	-	2	-	-	-	-	44	72
Nebr.	4	-	-	-	-	-	70	73
Kans.	-	-	-	1	-	-	153	138
S. ATLANTIC	198	101	-	3	-	-	3,999	3,994
Del.	2	-	-	-	-	-	31	45
Md.	27	19	-	-	-	-	408	401
D.C.	-	-	-	-	-	-	41	39
Va.	12	10	-	-	-	-	434	735
W. Va.	1	-	-	-	-	-	57	54
N.C.	103	49	-	-	-	-	545	548
S.C.	32	13	-	2	-	-	245	368
Ga.	18	7	-	-	-	-	858	724
Fla.	3	3	-	1	-	-	1,380	1,080
E.S. CENTRAL	35	47	-	-	1	-	1,130	1,028
Ky.	2	1	-	-	-	-	170	177
Tenn.	24	36	-	-	1	-	281	265
Ala.	9	5	-	-	-	-	325	297
Miss.	-	5	-	-	-	-	354	289
W.S. CENTRAL	37	20	1	-	-	-	668	2,132
Ark.	2	4	-	-	-	-	351	292
La.	-	1	-	-	-	-	122	371
Okla.	35	15	-	-	-	-	193	153
Tex.	-	-	1	-	-	-	2	1,316
MOUNTAIN	9	7	-	-	-	-	1,070	1,098
Mont.	1	1	-	-	-	-	51	40
Idaho	-	1	-	-	-	-	64	71
Wyo.	2	2	-	-	-	-	32	35
Colo.	1	-	-	-	-	-	270	300
N. Mex.	-	1	-	-	-	-	148	128
Ariz.	-	-	-	-	-	-	294	318
Utah	-	2	-	-	-	-	100	117
Nev.	5	-	-	-	-	-	111	89
PACIFIC	2	-	1	1	1	-	2,517	2,540
Wash.	-	-	-	-	-	-	241	230
Oreg.	1	-	-	-	-	-	207	159
Calif.	1	-	1	-	-	-	1,886	1,934
Alaska	-	-	-	-	-	-	36	26
Hawaii	-	-	-	1	1	-	147	191
Guam	-	-	-	-	-	-	-	18
P.R.	-	-	-	3	-	-	106	502
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	21	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		<i>Streptococcus pneumoniae</i> , Drug Resistant, Invasive		<i>Streptococcus pneumoniae</i> , Invasive (<5 Years)	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	7,402	8,696	2,577	2,389	1,370	1,850	140	270
NEW ENGLAND	140	141	124	162	8	86	1	30
Maine	3	6	15	10	-	-	-	-
N.H.	5	2	25	N	-	-	N	N
Vt.	-	3	9	9	3	7	1	-
Mass.	93	98	62	52	N	N	N	N
R.I.	7	8	13	8	5	-	-	2
Conn.	32	24	-	83	-	79	-	28
MID. ATLANTIC	427	864	432	428	78	116	46	73
Upstate N.Y.	109	323	212	184	70	114	46	73
N.Y. City	203	233	115	125	U	U	U	U
N.J.	48	160	71	75	N	N	N	N
Pa.	67	148	34	44	8	2	-	-
E.N. CENTRAL	767	1,605	426	564	124	127	54	72
Ohio	365	893	149	139	N	N	N	N
Ind.	43	127	31	44	119	127	29	38
Ill.	210	279	53	186	2	-	-	34
Mich.	82	160	193	145	3	-	N	N
Wis.	67	146	-	50	N	N	25	-
W.N. CENTRAL	651	840	174	247	148	88	33	31
Minn.	139	255	90	104	48	40	33	24
Iowa	67	252	-	-	N	N	N	N
Mo.	86	144	37	55	6	9	-	-
N. Dak.	15	13	-	7	1	4	-	7
S. Dak.	149	87	9	7	1	3	-	-
Nebr.	141	42	14	29	25	9	N	N
Kans.	54	47	24	45	67	23	N	N
S. ATLANTIC	2,904	1,170	512	420	840	982	1	4
Del.	12	5	1	2	3	2	N	N
Md.	520	61	83	N	N	N	N	N
D.C.	35	30	5	15	46	5	1	3
Va.	520	117	50	60	N	N	N	N
W. Va.	4	6	13	17	34	37	-	1
N.C.	156	211	94	111	N	N	U	U
S.C.	52	144	28	7	132	199	N	N
Ga.	920	150	130	137	251	280	N	N
Fla.	685	446	108	71	374	459	N	N
E. S. CENTRAL	715	842	68	53	92	177	-	-
Ky.	77	310	12	19	10	18	N	N
Tenn.	33	55	56	34	82	158	N	N
Ala.	375	149	-	-	-	1	N	N
Miss.	230	328	-	-	-	-	-	-
W.S. CENTRAL	445	1,579	39	222	51	243	3	60
Ark.	115	391	5	-	5	14	-	-
La.	69	149	-	-	30	199	1	60
Okla.	260	21	33	31	N	N	2	-
Tex.	1	1,018	1	191	N	N	-	-
MOUNTAIN	318	466	456	253	29	30	2	-
Mont.	2	1	-	-	-	-	-	-
Idaho	3	21	5	4	N	N	N	N
Wyo.	3	2	7	7	9	5	-	-
Colo.	64	98	151	104	-	-	-	-
N. Mex.	58	65	69	53	19	23	-	-
Ariz.	148	216	199	82	-	-	N	N
Utah	23	28	25	3	1	-	2	-
Nev.	17	35	-	-	-	2	-	-
PACIFIC	1,035	1,189	346	40	-	1	-	-
Wash.	71	97	36	-	-	-	N	N
Oreg.	53	64	N	N	N	N	N	N
Calif.	875	996	268	-	N	N	N	N
Alaska	2	4	-	-	-	-	N	N
Hawaii	34	28	42	40	-	1	-	-
Guam	-	31	-	1	-	-	-	-
P.R.	5	13	N	N	-	-	N	N
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	-	-	U	U
C.N.M.I.	14	U	-	U	-	-	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 20, 2002, and July 21, 2001 (29th Week)\***

Reporting Area	Syphilis				Tuberculosis		Typhoid Fever	
	Primary & Secondary		Congenital		Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001				
UNITED STATES	3,354	3,151	169	291	6,168	7,239	137	172
NEW ENGLAND	69	28	-	3	210	254	10	8
Maine	-	-	-	-	5	10	-	1
N.H.	2	1	-	-	7	11	-	1
Vt.	1	2	-	-	-	4	-	-
Mass.	50	16	-	2	106	122	8	5
R.I.	2	3	-	-	28	38	-	-
Conn.	14	6	-	1	64	69	2	1
MID. ATLANTIC	368	275	28	42	1,131	1,214	36	58
Upstate N.Y.	20	11	3	2	161	173	5	13
N.Y. City	204	156	11	21	597	626	19	22
N.J.	71	52	13	19	263	276	9	20
Pa.	73	56	1	-	110	139	3	3
E.N. CENTRAL	572	551	24	42	626	741	14	23
Ohio	79	50	-	2	95	145	5	3
Ind.	43	97	-	6	59	49	2	2
Ill.	152	170	18	27	306	367	1	11
Mich.	290	217	6	4	125	141	3	4
Wis.	8	17	-	3	41	39	3	3
W.N. CENTRAL	56	46	-	7	293	285	6	6
Minn.	21	21	-	2	127	123	3	2
Iowa	2	3	-	-	17	18	-	-
Mo.	16	10	-	4	84	70	1	4
N. Dak.	-	-	-	-	1	3	-	-
S. Dak.	-	-	-	-	9	8	-	-
Nebr.	4	2	-	-	9	21	2	-
Kans.	13	10	-	1	46	42	-	-
S. ATLANTIC	898	1,109	41	75	1,246	1,352	19	21
Del.	8	9	-	-	13	9	-	-
Md.	108	141	8	2	145	116	4	6
D.C.	48	16	1	2	-	37	-	-
Va.	44	62	1	4	98	129	-	6
W. Va.	-	-	-	-	14	17	-	-
N.C.	163	256	14	8	167	188	1	1
S.C.	69	152	3	18	104	115	-	-
Ga.	169	188	1	16	201	261	7	6
Fla.	289	285	13	25	504	480	7	2
E. S. CENTRAL	295	338	10	21	393	454	4	-
Ky.	56	26	2	-	71	72	4	-
Tenn.	110	190	3	13	150	163	-	-
Ala.	97	61	4	4	120	149	-	-
Miss.	32	61	1	4	52	70	-	-
W.S. CENTRAL	448	385	39	48	844	1,153	-	11
Ark.	14	22	1	5	71	81	-	-
La.	69	75	-	-	-	65	-	-
Okla.	36	39	2	3	70	75	-	-
Tex.	329	249	36	40	703	932	-	11
MOUNTAIN	152	115	9	16	196	279	10	6
Mont.	-	-	-	-	6	-	-	1
Idaho	1	-	1	-	8	6	-	-
Wyo.	-	-	-	-	2	2	-	-
Colo.	11	15	1	1	27	71	5	-
N. Mex.	25	10	-	1	21	35	-	-
Ariz.	108	80	7	14	103	107	-	1
Utah	3	7	-	-	17	15	3	-
Nev.	4	3	-	-	12	43	2	4
PACIFIC	496	304	18	37	1,229	1,507	38	39
Wash.	27	32	1	-	128	129	4	3
Oreg.	7	7	1	-	50	54	2	3
Calif.	456	259	15	37	941	1,216	31	31
Alaska	-	-	-	-	33	25	-	-
Hawaii	6	6	1	-	77	83	1	2
Guam	-	2	-	-	-	37	-	2
P.R.	128	149	10	2	33	53	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	13	U	-	U	27	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities.\* week ending July 20, 2002 (29th 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	536	367	110	34	11	14	47	S. ATLANTIC	1,045	640	241	102	43	19	52
Boston, Mass.	161	104	31	13	6	7	12	Atlanta, Ga.	174	100	41	22	7	4	7
Bridgeport, Conn.	32	22	7	3	-	-	2	Baltimore, Md.	165	92	46	19	6	2	10
Cambridge, Mass.	11	6	4	1	-	-	-	Charlotte, N.C.	88	55	18	9	3	3	7
Fall River, Mass.	32	26	6	-	-	-	5	Jacksonville, Fla.	U	U	U	U	U	U	U
Hartford, Conn.	U	U	U	U	U	U	U	Miami, Fla.	90	62	17	7	4	-	3
Lowell, Mass.	23	20	3	-	-	-	4	Norfolk, Va.	56	33	15	3	2	3	2
Lynn, Mass.	18	13	4	-	1	-	3	Richmond, Va.	70	28	28	7	5	2	1
New Bedford, Mass.	27	21	4	2	-	-	2	Savannah, Ga.	62	43	11	4	3	1	6
New Haven, Conn.	35	18	10	4	-	3	3	St. Petersburg, Fla.	68	50	9	6	2	1	7
Providence, R.I.	63	43	14	3	1	2	1	Tampa, Fla.	172	121	32	11	5	3	8
Somerville, Mass.	2	2	-	-	-	-	-	Washington, D.C.	100	56	24	14	6	-	1
Springfield, Mass.	38	27	4	5	1	1	3	Wilmington, Del.	U	U	U	U	U	U	U
Waterbury, Conn.	27	20	4	2	-	1	1	E.S. CENTRAL	1,031	674	223	73	28	31	57
Worcester, Mass.	67	45	19	1	2	-	11	Birmingham, Ala.	190	126	43	12	3	4	17
MID. ATLANTIC	2,158	1,462	465	160	41	30	87	Chattanooga, Tenn.	71	41	19	4	3	4	2
Albany, N.Y.	73	49	12	7	3	2	9	Knoxville, Tenn.	106	70	20	9	3	4	3
Allentown, Pa.	21	18	2	1	-	-	1	Lexington, Ky.	88	58	21	7	2	-	6
Buffalo, N.Y.	98	75	17	2	-	4	5	Memphis, Tenn.	259	160	56	21	7	15	14
Camden, N.J.	21	12	4	3	1	1	2	Mobile, Ala.	91	67	15	4	4	1	4
Elizabeth, N.J.	15	6	6	2	1	-	-	Montgomery, Ala.	69	51	11	5	2	-	4
Erie, Pa.	30	23	2	3	1	1	-	Nashville, Tenn.	157	101	38	11	4	3	7
Jersey City, N.J.	47	26	15	4	-	2	-	W.S. CENTRAL	1,401	889	298	135	45	34	92
New York City, N.Y.	1,038	686	242	83	18	9	34	Austin, Tex.	91	62	15	8	4	2	5
Newark, N.J.	60	33	17	6	2	2	3	Baton Rouge, La.	61	35	13	9	1	3	2
Paterson, N.J.	22	10	6	5	-	1	1	Corpus Christi, Tex.	43	28	9	3	2	1	5
Philadelphia, Pa.	363	239	82	29	10	3	15	Dallas, Tex.	204	127	43	21	8	5	11
Pittsburgh, Pa. <sup>§</sup>	27	18	5	2	2	-	1	El Paso, Tex.	75	50	15	7	1	2	5
Reading, Pa.	25	19	5	1	-	-	1	Ft. Worth, Tex.	123	80	27	8	5	3	13
Rochester, N.Y.	111	79	22	6	1	3	4	Houston, Tex.	353	199	86	42	15	11	24
Schenectady, N.Y.	23	21	2	-	-	-	3	Little Rock, Ark.	59	38	13	6	1	1	2
Scranton, Pa.	29	22	4	3	-	-	1	New Orleans, La.	U	U	U	U	U	U	U
Syracuse, N.Y.	90	75	11	1	2	1	4	San Antonio, Tex.	225	147	51	20	5	2	16
Trenton, N.J.	20	15	2	2	-	1	1	Shreveport, La.	34	23	8	1	1	1	3
Utica, N.Y.	20	16	4	-	-	-	-	Tulsa, Okla.	133	100	18	10	2	3	6
Yonkers, N.Y.	25	20	5	-	-	-	2	MOUNTAIN	873	588	178	69	22	16	47
E.N. CENTRAL	1,609	1,107	333	101	37	31	108	Albuquerque, N.M.	129	86	25	13	3	2	6
Akron, Ohio	55	41	8	2	3	1	4	Boise, Idaho	44	31	9	3	1	-	2
Canton, Ohio	38	25	10	3	-	-	5	Colorado Springs, Colo.	60	43	10	5	-	2	2
Chicago, Ill.	U	U	U	U	U	U	U	Denver, Colo.	119	75	26	9	6	3	11
Cincinnati, Ohio	U	U	U	U	U	U	U	Las Vegas, Nev.	249	167	56	18	6	2	12
Cleveland, Ohio	150	89	45	8	6	2	4	Ogden, Utah	U	U	U	U	U	U	U
Columbus, Ohio	200	140	35	15	3	7	13	Phoenix, Ariz.	U	U	U	U	U	U	U
Dayton, Ohio	140	99	32	4	4	1	6	Pueblo, Colo.	29	23	5	1	-	-	3
Detroit, Mich.	194	103	54	25	8	4	13	Salt Lake City, Utah	103	65	23	8	3	4	4
Evansville, Ind.	38	30	6	1	-	1	-	Tucson, Ariz.	140	98	24	12	3	3	7
Fort Wayne, Ind.	61	40	13	5	2	1	5	PACIFIC	1,755	1,207	350	112	51	34	91
Gary, Ind.	17	11	5	-	-	1	-	Berkeley, Calif.	17	12	5	-	-	-	2
Grand Rapids, Mich.	47	29	8	6	1	3	2	Fresno, Calif.	172	116	35	16	3	2	14
Indianapolis, Ind.	200	148	39	10	-	3	12	Glendale, Calif.	19	13	3	2	1	-	-
Lansing, Mich.	66	53	12	1	-	-	10	Honolulu, Hawaii	70	46	12	5	3	4	1
Milwaukee, Wis.	128	93	27	2	1	5	15	Long Beach, Calif.	57	37	14	2	1	3	5
Peoria, Ill.	27	20	6	1	-	-	4	Los Angeles, Calif.	419	278	85	26	20	10	-
Rockford, Ill.	60	43	12	3	2	-	2	Pasadena, Calif.	21	19	1	1	-	-	-
South Bend, Ind.	45	31	6	4	4	-	5	Portland, Ore.	150	112	23	12	-	2	9
Toledo, Ohio	93	71	12	7	1	2	6	Sacramento, Calif.	207	153	39	12	3	-	18
Youngstown, Ohio	50	41	3	4	2	-	2	San Diego, Calif.	173	117	38	12	3	3	11
W.N. CENTRAL	656	426	128	61	28	13	45	San Francisco, Calif.	U	U	U	U	U	U	U
Des Moines, Iowa	56	42	12	2	-	-	11	San Jose, Calif.	243	169	44	17	9	4	20
Duluth, Minn.	28	20	6	2	-	-	3	Santa Cruz, Calif.	32	24	7	-	1	-	2
Kansas City, Kans.	70	48	17	3	2	-	6	Seattle, Wash.	109	66	32	5	4	2	3
Kansas City, Mo.	99	54	26	13	4	2	4	Spokane, Wash.	66	45	12	2	3	4	6
Lincoln, Nebr.	U	U	U	U	U	U	U	Tacoma, Wash.	U	U	U	U	U	U	U
Minneapolis, Minn.	66	42	7	9	6	2	5	TOTAL	11,064 <sup>¶</sup>	7,360	2,326	847	306	222	626
Omaha, Nebr.	53	34	10	6	-	3	2								
St. Louis, Mo.	U	U	U	U	U	U	U								
St. Paul, Minn.	66	49	10	4	2	1	4								
Wichita, Kans.	218	137	40	22	14	5	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.

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