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Tickborne Relapsing Fever Outbreak After a Family Gathering — New Mexico, August 2002

On August 2, 2002, the New Mexico Department of Health (NMDOH) and the Indian Health Service (IHS) were notified of a tickborne relapsing fever (TBRF) outbreak after a 1-day family gathering held in late July at a remote, previously uninhabited cabin located in a mountainous region of northern New Mexico (elevation: approximately 8,000 feet). Approximately 40 persons attended the event; at least half slept overnight in the cabin. This report summarizes the investigation of this outbreak, which indicates that prompt diagnosis and collaboration among clinicians and public health authorities can reduce morbidity associated with TBRF. Persons living in areas where TBRF is endemic should avoid sleeping in rodent-infested buildings, rodent-proof susceptible buildings, and consider fumigation of buildings that harbor rodents.

The index patient arrived with other family members 3 days before the event to clean the cabin. Four days after the event ended, the patient sought medical care at a local hospital for a 2-day history of fever, chills, myalgia, and a raised pruritic rash on the forearms. A laboratory technician identified spirochetes on a peripheral blood smear obtained from the patient, which led to a diagnosis of TBRF and prompted an epidemiologic investigation.

During July 27–August 7, a total of 39 attendees sought medical care or were visited by a public health nurse. A retrospective cohort study of these attendees was conducted to describe the outbreak, determine risk factors for infection, and assist the cabin owners with prevention measures. A case of TBRF was defined as laboratory-confirmed borreliosis (growth of *Borrelia hermsii* in blood culture or visualization of spirochetes on Giemsa- or Wright-stained peripheral blood smear) in a person who attended the gathering and had a fever. A total of 14 (36%) attendees had reported fever and at least one of the following: chills, diaphoresis, headache, myalgia, arthralgia, rash, or a tick bite. Peripheral blood smear examinations were performed on samples taken from all 14 symptomatic attendees; spirochetes were observed on samples from nine attendees. Blood samples from 13 of the 14 symptomatic attendees were sent to CDC for culture. Two samples that had not demonstrated spirochetes on peripheral smear examination grew *B. hermsii*. A total of 11 patients had laboratory findings consistent with the case definition, yielding an attack rate of 28% among attendees.

The median age of the 11 patients was 51 years (range: 4–80 years); eight (73%) were female. The median incubation period was 5 days (range: 3–7 days). Six (55%) patients had a documented fever of >100.4° F (>38.0° C), eight (73%) had headache, seven (64%) had body aches (arthralgias and/or myalgias), and four (36%) reported some kind of rash. All 14 symptomatic attendees received antibiotic therapy, and eight asymptomatic attendees received antibiotic prophylaxis. A total of 18 attendees received doxycycline alone, two had treatment with doxycycline and penicillin, and two received erythromycin. Nine patients were admitted to the hospital for treatment;

INSIDE

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six had a documented Jarisch-Herxheimer reaction (i.e., fever, chills, myalgias, increased heart and respiratory rate, and hypotension). Risk analysis revealed that persons who arrived early to clean the cabin were more likely to be patients than persons who did not arrive early (three of three versus eight of 36; risk ratio = 4.5; 95% confidence interval = 2.4–8.3).

Immediately after diagnosis of TBRF in the index patient, local clinicians and community public health nurses identified and treated symptomatic attendees. IHS environmental health-care workers and NMDOH staff visited the event site to inspect the cabin and its surroundings. The inspection revealed an abundance of rodent nesting material and droppings within the walls of the cabin (Figure 1). Gaps were observed in the exterior chinking and the foundation of the cabin that allowed rodents to have easy entry.

CDC led a second site visit to collect environmental samples and trap rodents; however, in the interim the cabin had been fumigated twice with a commercial over-the-counter fogger containing pyrethrin and permethrin. One live soft tick (*Ornithodoros hermsi*), four chipmunks, one wood rat, and two deer mice were recovered. The tick was allowed to feed on a laboratory mouse, that subsequently had *B. hermsii* spirochetemia, confirming that the tick was infected and supporting the mode of transmission. Blood samples from the trapped animals were negative for spirochetes. The cabin owner was provided written material to assist with rodent-proofing the premises.

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FIGURE 1. Rodent nesting material found inside the interior walls of a cabin — New Mexico, 2002

Photo/CDC.

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Editorial Note: TBRF is caused by infection with any of several species of the genus *Borrelia* (Box). In the United States, the majority of cases occur in western states and are caused by *B. hermsii* or *B. turicatae,* which are transmitted to humans by argasid (soft) ticks of the genus *Ornithodoros. O. hermsi* is typically found associated with active rodent nests at altitudes of >1,500 feet in warm, humid microenvironments. Although the primary tick hosts are chipmunks and other small rodents, ticks might bite persons, typically at night during sleep. Caves and rural mountain cabins accessible by rodents are often sites of human exposure to these ticks and have been associated with previous outbreaks (*1–3*).

Ornithodoros ticks feed for <1 hour; their bites are painless and typically unnoticed by humans. After a median incubation period of 7 days (range: 2–18 days), TBRF is characterized clinically by recurring fevers with a median duration of 3 days (range: 2–7 days) and alternating afebrile periods with a median duration of 7 days (range: 4–14 days). Fevers might be accompanied by headache, rigors, diaphoresis, arthralgia, myalgia, dizziness, nausea, or vomiting. Without treatment, up to 10 relapsing episodes might occur (*4,5*). Relapsing episodes are caused by antigenic variation that enables the organism to evade neutralizing antibodies (*1,6*). No relapsing episodes occurred in this outbreak, likely a result of rapid identification and treatment of the index patient and symptomatic attendees. Diagnosis of TBRF is confirmed by blood culture or visualization of spirochetes on examination of a peripheral blood smear. Paired acute and convalescent antibody titers can be used to confirm diagnosis when culture or blood smear is not available or nondiagnostic.

Although not a nationally notifiable disease, TBRF reporting to state and local health departments is required in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Texas, Utah, Washington, and Wyoming. During 1990–2000, a total of 247 cases were reported from these states, with the majority from California (82) and Washington (60) (Figure 2). The majority (90%) of cases were reported from 11 counties in six states and occurred in the late summer and early fall. In 2000, a neonatal death in Washington was the first reported neonatal TBRF death in the United States since 1969 (CDC, unpublished data, 2000).

Health-care providers should consider TBRF in the differential diagnosis of febrile patients with potential exposure to soft ticks. Penicillins or tetracyclines are the antibiotic treatment of choice, although cephalosporins, erythromycin, or

BOX. Epidemiology, diagnosis, treatment, prevention, and reporting of tickborne relapsing fever (TBRF)

Epidemiology

- TBRF is endemic in the western United States, especially in mountainous West and Southwest regions.
- During 1990–2000, a total of 247 cases were reported from western U.S. states.
- The majority of cases are caused by *Borrelia hermsii* or *B. turicatae.*
- TBRF can be transmitted by the bite of an *Ornithodoros* tick. Rodents are the typical environmental reservoir.
- Rustic cabins, caves, and house crawl spaces are common sites of tick exposure.

Clinical findings

- Tick bites rarely are perceived or apparent.
- Sudden onset of fever occurs after incubation of 2–18 days. Other symptoms include headache, rigors, diaphoresis, arthralgia, myalgia, dizziness, nausea, or vomiting.
- If infection remains untreated, up to 10 relapsing episodes might occur (recrudescent fever lasting 2–7 days, with intervening afebrile periods of 4–14 days).
- Differential diagnosis includes ehrlichiosis, babesiosis, Lyme disease, influenza, tularemia, brucellosis, Colorado tick fever, rickettsioses, leptospirosis, rat-bite fever, meningococcemia, and viral hepatitis.

Laboratory testing

- Diagnosis is confirmed by detection of spirochetes on Giemsa- or Wright-stained thick and thin blood smear, or by culture isolation. Experimental polymerase chain reaction testing is available in some laboratories.
- Paired acute and convalescent antibody titers might be used to document exposure. Serologic testing, available at CDC, should be coordinated through local and state health departments.

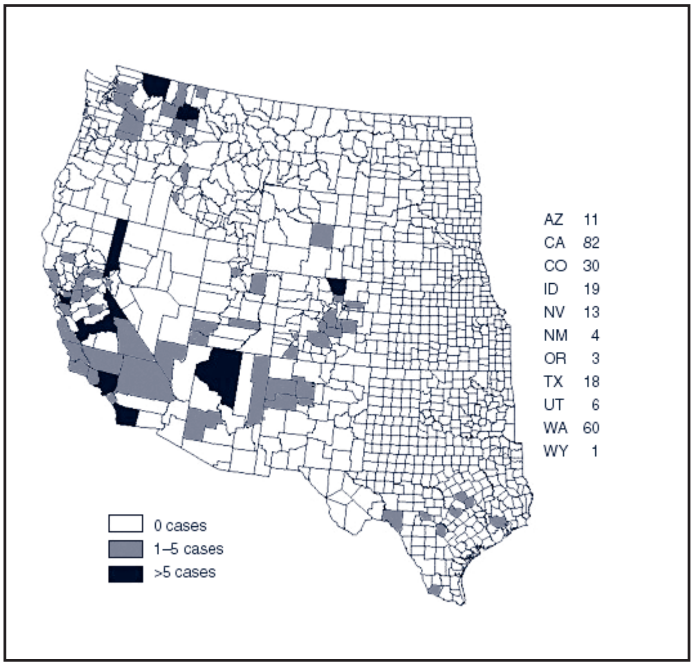
Recommended treatment

- Tetracyclines and penicillins are first-line therapy. Cephalosporins, macrolides, and chloramphenicol are effective in vitro.
- Jarisch-Herxheimer reaction (i.e., fever, chills, myalgias, increased heart and respiratory rate, and hypotension) is common after treatment.

Prevention and reporting

- Avoid sleeping in rodent-infested buildings, use insect repellent, rodent-proof buildings in areas where TBRF is endemic, and consider fumigation of rodent-infested buildings.
- Report all cases to local and state health departments where required.

FIGURE 2. Number* of reported cases of tickborne relapsing fever, by county — western United States, 1990–2000



* N = 247.

chloramphenicol also can be used (*4,5*). The Jarisch-Herxheimer reaction is common after the initiation of therapy (onset: 1–4 hours), with one case series reporting an incidence of 54% (*1*). Without treatment, case-fatality rates can approach 10%. Measures to prevent TBRF include avoiding sleeping in rodent-infested buildings, using insect repellents containing DEET, and rodent-proofing buildings in areas where disease is endemic (*7*). Fumigation with preparations containing pyrethrin and permethrin might reduce the tick burden in rodent-infested buildings; however, results from this investigation indicate that fumigation might not kill all infected ticks. Remediation also should include efforts to identify and remove rodent nesting material.

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Public Health and Aging

Nonfatal Physical Assault–Related Injuries Among Persons Aged ≥60 Years Treated in Hospital Emergency Departments — United States, 2001

As the U.S. population ages, public health efforts have expanded to ensure the independence, function, and safety of older adults. Such efforts focus on consequences associated with the normal aging process. The incidence and consequences of violent victimization are assumed to be a problem of young populations and not an area of concern among older populations (*1*), and little data are available to monitor the incidence or consequences of violence-related injuries among older adults. To characterize serious injuries from physical assaults among older adults, CDC analyzed data from the National Electronic Injury Surveillance System-All Injury Program (NEISS-AIP). This report summarizes the results of that analysis, which indicate that approximately 33,000 persons aged ≥60 years in the United States were treated in hospital emergency departments (EDs) for nonfatal assault–related injuries in 2001, with injuries occurring disproportionately among persons aged 60–69 years. NEISS-AIP data can increase the understanding of nonfatal physical assault–related injuries among older adults and guide the development and evaluation of prevention strategies.

NEISS-AIP provides data on approximately 500,000 injury- and consumer product–related ED cases each year (*2,3*). NEISS-AIP data are drawn from a nationally representative subsample of 66 out of 100 NEISS hospitals, which were selected as a stratified probability sample of hospitals with a minimum of six beds and a 24-hour ED in the United States and its territories. For this analysis, NEISS-AIP provided national, annualized, weighted estimates of nonfatal, nonsexual, physical assault–related injuries among persons aged ≥60 years who were treated in U.S. EDs during 2001. Data from these cases were weighted by the inverse of the probability of selection to provide annualized national estimates (*3*).

A direct variance estimation procedure was used to calculate 95% confidence intervals and to account for the complex sample design (*4*).

All cases were classified into mutually exclusive categories according to intent (i.e., physical assault, sexual assault, self-inflicted injury, injury related to legal intervention, and unintentional injury) of the most severe injury received. Annualized estimates for this report were based on weighted data for 488 nonfatal physical assault–related injuries treated in EDs during 2001. Suspected and confirmed instances of interpersonal violence were coded as assaults. Data were collected about sex, age, race/ethnicity, diagnosis, cause of injury, body part primarily affected, location, and disposition. To evaluate the "struck by/against" category of injury cause further, CDC analyzed verbatim text comments recorded in the NEISS-AIP database from ED patient charts for each injury. Subcategories of "struck by/against" were defined as body (e.g., hand, fist, elbow, or foot), blunt object (e.g., cane, baseball bat, or butt of gun), and push (i.e., injury sustained by fall secondary to being pushed). The remaining injuries in the "struck by/against" category were classified as unspecified.

During 2001, an estimated 33,026 persons aged ≥60 years were treated in U.S. hospital EDs for nonfatal assault–related injuries (rate: 72 per 100,000 population), compared with an estimated 1,154,579 persons aged 20–59 years (rate: 754.6); 21,309 (65%) persons were aged 60–69 years, 7,064 (21%) were aged 70–79 years, and 4,653 (14%) were aged ≥80 years (Table). Rates for persons aged 60–69 years (105) were more than two times greater than those for the two older age categories (44 and 49, respectively). The majority (55.4%) of adults aged ≥60 years who were examined in EDs were men. Older adults were at similar risk for being assaulted at home (25.9%) compared with a public area (27.5%). The types of injuries sustained were primarily contusion/abrasion (31.9%), laceration (21.1%), and fracture (12.7%). Of the classifiable cases, the majority of older adults (83.7%) were injured as a result of being struck by/against, most often by a body part (20.3%), followed by a blunt object (17.1%), push (14.4%), and an undetermined cause (31.8%); 91.3% of assaulted older adults were treated and released from EDs, and 8.3% required hospitalization. Compared with persons aged 20–59 years, a greater proportion of older assault victims were women (43.4% versus 39.1% $p = 0.11$), had fractures (12.7% versus 9.8% $p = 0.61$), and were hospitalized at the time of diagnosis (8.3% versus 6.4% $p = 0.52$); however, these differences were not statistically significant.

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Editorial Note: The findings in this report underscore the magnitude of nonfatal physical assault–related injuries among persons aged ≥60 years. Some of the reported injuries probably represent a form of elder maltreatment (EM). EM refers to acts of commission or omission that result in harm or threatened harm to the health or welfare of an older adult, occurring within any relationship in which there is an expectation of trust (*5*). The various forms of EM include physical, sexual, and psychological abuse; abandonment; exploitation; and neglect, either intentional or unintentional. Reported EM cases comprise only a fraction of cases. A national incidence study estimated that approximately half a million older persons were maltreated in 1996; however, for every reported incident of EM, an estimated five were unreported (*6*).

The findings in this report are consistent with previous studies that indicate that older adults are less likely to be victims of violent crime than younger persons (*7*), possibly because younger persons might be at greater risk for violent assault within the broader community. This hypothesis is supported by perpetrator data for fatal assaults among older persons (CDC, unpublished data, 2003). Among younger victims, perpetrators are more likely to be strangers. Among older victims, the perpetrators are more likely to be family members or acquaintances.

The findings in this report are subject to at least five limitations. First, NEISS-AIP data are based on information in ED records and are not linked to or supplemented by other data sources (e.g., Adult Protective Services [APS] records). Second, outcomes are specific to ED visits and do not include subsequent outcomes of the injuries. Third, NEISS-AIP data reflect only those injuries that were severe enough to require treatment in an ED. Fourth, NEISS-AIP data might provide a conservative estimate of the number of physical assault–related injuries among older adults treated in EDs because the violent intent of injury might not be reported. Finally, although limited data are presented for settings in which assaults occurred (i.e., home or public area), data for perpetrators of assault-related injuries were unavailable.

Injury is a physical sign for EM, and EDs are a key point of contact for its recognition (*8*). However, reporting rates of EM by hospitals are low, and the majority of ED physicians are uncertain about EM definitions or applicable state laws (*6,9*). Because the older adult population is expected to more

TABLE. Estimated number, percentage, and rate of nonfatal assault–related injuries among persons aged ≥60 years and those 20–59 years treated in hospital emergency departments, by selected characteristics — United States, 2001

Characteristic	≥60 years				20–59 years			
	No.	(%*)	Rate†	(95% CI§)	No.	(%)	Rate	(95% CI)
Sex								
Male	18,292	(55.4)	92.4	(61.0–123.9)	702,521	(60.9)	928.5	(708.6–1,148.5)
Female	14,734	(44.6)	56.2	(43.0–69.4)	451,796	(39.1)	584.1	(431.7–736.6)
Race/Ethnicity								
White, non-Hispanic	13,518	(40.9)	—**	—**	398,908	(34.6)	—**	—**
Black¶	10,084	(30.5)	—**	—**	362,739	(31.4)	—**	—**
Hispanic	3,028	(9.2)	—**	—**	125,762	(10.9)	—**	—**
Other, non-Hispanic	811	(2.5)	—**	—**	47,657	(4.1)	—**	—**
Unknown	5,585	(16.9)	—**	—**	219,512	(19.0)	—**	—**
Diagnosis								
Contusion/Abrasion	10,551	(31.9)	22.9	(19.2–26.6)	340,133	(29.5)	222.3	(192.8–251.9)
Fracture	4,191	(12.7)	9.1	(5.7–12.5)	113,511	(9.8)	74.2	(66.2–82.2)
Laceration	6,962	(21.1)	15.1	(8.7–21.6)	277,828	(24.1)	181.6	(134.9–228.3)
Internal injury/Concussion	2,939	(8.9)	6.4	(2.5–10.2)	101,508	(8.8)	66.3	(34.2–98.5)
Strain/Sprain	1,864	(5.6)	4.1	(2.5–5.6)	90,253	(7.8)	59.0	(49.1–68.9)
Other	6,519	(19.7)	—**	—**	231,347	(20.0)	—**	—**
Cause								
Cut/Pierce	1,901	(5.8)	4.1	(2.1–6.2)	103,806	(9.0)	67.8	(42.6–93.1)
Human bite	1,050	(3.2)	—**	—**	40,337	(3.5)	26.4	(17.9–34.8)
Firearm	542	(1.6)	—**	—**	31,007	(2.7)	20.3	(10.5–30.0)
Struck by/against	27,641	(83.7)	60.1	(44.9–75.2)	911,498	(78.9)	595.7	(459.0–732.5)
Other	1,771	(5.4)	3.8	(2.8–4.9)	63,693	(5.5)	41.6	(33.5–49.8)
Unknown	120	(0.4)	—**	—**	4,238	(0.4)	—**	—**
Body part primarily affected								
Head/Neck	17,486	(52.9)	38.0	(27.5–48.5)	603,160	(52.3)	394.2	(315.5–473.0)
Upper extremity	5,905	(17.9)	12.8	(8.0–17.7)	235,050	(20.4)	153.6	(106.6–200.6)
Lower extremity	2,192	(6.6)	4.8	(2.6–7.0)	71,949	(6.2)	47.0	(35.4–58.6)
Upper trunk	4,727	(14.3)	10.3	(6.2–14.3)	121,076	(10.5)	79.1	(61.0–97.3)
Lower trunk	1,537	(4.7)	3.3	(1.5–5.1)	57,276	(5.0)	37.4	(25.7–49.1)
Other	1,178	(3.5)	—**	—**	66,069	(5.7)	43.2	(21.5–64.9)
Location of assault								
Home	8,567	(25.9)	18.6	(13.7–23.5)	254,636	(22.1)	166.4	(126.5–206.4)
Public area	9,096	(27.5)	19.8	(13.1–26.4)	214,922	(18.6)	140.5	(111.4–169.5)
Other	6,059	(18.4)	—**	—**	255,077	(22.1)	—**	—**
Unknown	9,304	(28.2)	20.2	(11.8–28.7)	429,944	(37.2)	281.0	(197.8–364.2)
Disposition								
Treated/Released	30,150	(91.3)	65.5	(47.6–83.5)	1,074,241	(93.1)	702.1	(530.1–874.1)
Hospitalized/Transferred	2,757	(8.3)	6.0	(2.7–9.3)	73,330	(6.4)	47.9	(30.5–65.3)
Other	119	(0.4)	—**	—**	3,786	(0.3)	—**	—**
Unknown	3,222	(0.3)	—**	—**				
Total	**33,026**	**(100.0)**	**71.8**	**(53.5–90.0)**	**1,154,579**	**(100.0)**	**754.6**	**(574.7–934.5)**

* Percentages might not total 100% because of rounding.
† Per 100,000 population.
§ Confidence interval.
¶ Black includes Hispanic and non-Hispanic; Hispanic excludes black Hispanic. Rates should be interpreted with caution because of high percentage of unknowns.
** National estimates might be unstable because they are based on <20 cases or coefficient of variation is >30%.

than double by 2025 (*5*), the number of physical assault–related injuries among the elderly probably will increase, requiring more attention from clinicians and public health agencies. ED workers should be prepared to explore the cause of injuries suggestive of physical assault to ensure that proper referral is made when needed.

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Progress Toward Poliomyelitis Eradication — Angola and the Democratic Republic of Congo, January 2002–June 2003

Since the World Health Assembly resolved in 1988 to eradicate poliomyelitis worldwide, the estimated global incidence of polio has decreased by 99% (*1*). Implementation of polio eradication activities in Angola and the Democratic Republic of Congo (DRC) began in 1996. Angola and DRC are characterized by large geographic areas, dense urban populations, recent civil conflict, and a history of polio outbreaks (*2–5*). This report summarizes progress made toward polio eradication during January 2002–June 2003 and highlights the remaining challenges in Angola and DRC.

Routine Vaccination

In Angola, reported national routine vaccination coverage of infants aged <12 months with 3 doses of oral poliovirus vaccine (OPV3) was 33% in 2000, 44% in 2001, and 42% in 2002 (Angola Ministry of Health, unpublished data, 2003). In DRC, reported national routine OPV3 coverage was 42% in 2000, 33% in 2001, and 45% in 2002 (DRC Ministry of Health, unpublished data, 2003).

Supplementary Immunization Activities

Since 1996, supplementary immunization activities (SIAs) targeting children aged <5 years for vaccination with OPV have been conducted annually in Angola and DRC. During January 2002–May 2003, Angola implemented three rounds of National Immunization Days* (NIDs) and one round of subnational immunization days† (SNIDs) using house-to-house vaccination. The May 2002 SNID targeted 40 municipalities with high-risk areas and reached approximately 2.8 million children aged <5 years, including persons living in 28 camps for internally displaced persons (IDPs) and in five quartering areas for former combatants and their families (*4*). High-risk areas were identified on the basis of various indicators, including high population density, concentration of IDPs, history of inaccessibility during the war, low vaccination coverage during the 2001 NIDs, proximity to Angolan refugee populations in Zambia and DRC, and detection of wild poliovirus (WPV) in 2001. During June–August 2002, Angola conducted three rounds of NIDs, reaching approximately 4.5 million children aged <5 years during each round, in synchronization with NIDs conducted in DRC, Republic of Congo, Gabon, Zambia, Namibia, and Sao Tomé and Principe. During July–August 2003, Angola conducted two monthly rounds of NIDs.

During June–August 2002, DRC implemented three monthly rounds of NIDs, reaching approximately 12.5 million children aged <5 years during each round. During July–August 2003, two monthly rounds of SNIDs targeting high-risk areas were conducted in DRC. High-risk areas were identified on the basis of surveillance indicators, including clustering of polio-compatible cases, low vaccination coverage during the 2002 NIDs, and detection of WPV in 2000.

Acute Flaccid Paralysis Surveillance

The quality of public health surveillance for cases of acute flaccid paralysis (AFP) is evaluated by two key indicators established by the World Health Organization: annual reporting rate (target: nonpolio AFP rate of $\geq$1 case per 100,000 children aged <15 years) and completeness of specimen collection (target: two adequate stool specimens from $\geq$80% of persons with AFP). In 2002, the nonpolio AFP rate in Angola was 3.0 (Table). All 18 provinces achieved nonpolio AFP rates of >1.0. Although the geographic distribution of AFP cases detected in 2002 in western Angola was proportionate to population density, gaps existed in case detection in the central and eastern provinces (Figure). AFP cases were reported primarily from municipal centers. No cases were reported from several subprovincial areas bordering Zambia and DRC in which

* Mass campaigns over a short period (days) in which 2 doses of OPV are administered to all children in the target group (usually those aged <5 years) regardless of previous vaccination history.
† Campaigns similar to NIDs but confined to part of the country.

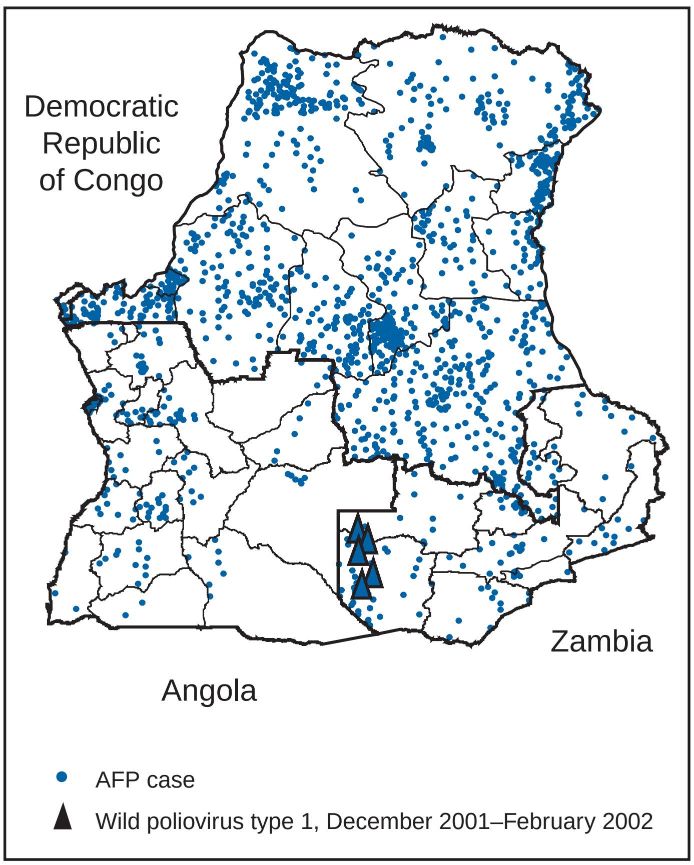
TABLE. Number of reported cases of acute flaccid paralysis (AFP) and key surveillance indicators, by year — Angola and the Democratic Republic of Congo (DRC), January 2002–June 2003*

	2002				January–June 2003			
Country	No. AFP cases	Nonpolio AFP rate†	% persons with AFP with adequate specimens§	No. polio-compatible cases¶	No. AFP cases	Nonpolio AFP rate	% persons with AFP with adequate specimens	No. polio-compatible cases
Angola	186	3.0	85	17	43	1.4	84	0
DRC	1,239	5.0	84	59	414	3.3	92	1

* As of July 29, 2003.
† Per 100,000 children aged <15 years.
§ Two stool specimens collected at an interval of at least 24 hours, within 14 days of onset of paralysis, and adequately shipped to the laboratory.
¶ In persons with AFP with inadequate stools, in whom paralytic polio cannot be reliably excluded.

access and security are concerns. In 2002, the proportion of cases of persons for whom two adequate stool specimens were collected was 85%. During January–June 2003, the annualized nonpolio AFP rate was 1.4, with 13 (72%) of 18 provinces reporting at least one AFP case. Adequate stool specimens were collected from 84% of persons with AFP. The nonpolio enterovirus (NPEV) isolation rate, a combined indicator for quality of specimen transport and sensitivity of laboratory processing, was 19.3% in 2002 and 33.0% during January–June 2003 (target: ≥10%). AFP cases in which paralytic polio could not be reliably excluded were classified as polio-compatible. In 2002, of 186 AFP cases reported, the Angola national polio expert committee classified 17 (9%) as polio-compatible. As of June 30, no AFP cases reported in 2003 were classified polio-compatible.

FIGURE. Distribution of reported cases of acute flaccid paralysis (AFP) — Angola, the Democratic Republic of Congo, and Zambia, 2002*



* As of July 29, 2003.

In 2002, the nonpolio AFP rate in DRC was 5.0, with all 11 provinces achieving nonpolio AFP rates of >1.0. During January–June 2003, the annualized nonpolio AFP rate was 3.3, with all 11 provinces reporting at least one AFP case. The proportion of AFP cases in persons for whom two adequate specimens were collected was 84% in 2002 and 92% during January–June 2003. The NPEV isolation rate for DRC was 17.5% in 2002 and 12.0% during January–June 2003. In 2002, the DRC national polio expert committee classified 59 (5%) of 1,239 AFP cases as polio-compatible; Orientale province, a site of ongoing conflict in which approximately 15% of the population reside, accounted for 24 (41%) of these 59 cases. Specimens from four (17%) of these 24 persons arrived at the laboratory in poor condition, and a single specimen existed for another case. For the remaining 19 patients with polio-compatible disease, the average time from onset of paralysis to collection of two specimens was 24 days (range: 15–37 days); for 14 (74%) patients, the period between onset of paralysis and notification was ≥14 days. As of July 29, one person with AFP had been classified as having polio-compatible disease during January–June 2003.

Incidence of Polio

During December 2001–February 2002, five cases of polio with isolation of WPV type 1 (P1) were detected among Angolan refugees in Western Zambia. Genetic sequencing confirmed that these isolates were related to WPV strains isolated most recently in Angola and DRC (*4*). The last laboratory-confirmed WPV in Angola was a P1 virus isolated in September 2001 from a person with AFP in Lunda Sul province. In 2000, a P1 outbreak in the Cape Verde islands was identified by genetic sequence analysis to have been imported from Angola (*6*). In 1999, a polio outbreak caused primarily by WPV type 3 affected approximately 1,100 Angolan children (*4,5*). In 2000, a total of 28 cases of laboratory-confirmed WPV in DRC were identified. The most recent laboratory-confirmed case of WPV was a P1 virus isolated in December 2000 from a person with AFP from Kasai Oriental province.

Reported by: *Ministry of Health; Country Office of the World Health Organization, Luanda, Angola. Ministry of Health; Country Office of the World Health Organization, Kinshasa, Democratic Republic of Congo. Regional Office of the World Health Organization for Africa, Harare, Zimbabwe. Vaccines and Biologicals Dept, World Health Organization, Geneva, Switzerland. Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Global Immunization Div, National Immunization Program, CDC.*

Editorial Note: Progress toward polio eradication has continued in both Angola and DRC despite armed conflict. During January 2002–June 2003, both countries met or exceeded WHO-recommended standards of surveillance quality at national and provincial levels. The absence of laboratory-confirmed WPV for the preceding 21 months in Angola and for the preceding 30 months in DRC under conditions of adequate surveillance suggests that Angola and DRC have made substantial progress toward the interruption of WPV transmission.

Although a cease-fire agreement ending 27 years of civil war in Angola was signed in April 2002, a legacy remains of devastated infrastructure, landmines, and displaced populations, particularly in the central and eastern provinces. Access has improved to areas never before covered by SIAs or AFP surveillance, but operations are still difficult to implement, and access in the southeastern provinces remains problematic. Although Angola achieved a nonpolio AFP rate of >1.0 in all 18 provinces in 2002, surveillance gaps exist at the subprovincial level in some areas of the eastern half of the country, and the possibility of low-grade polio virus transmission cannot be excluded. Because of the return of IDPs who had sought refuge in urban centers during the war, delivery of services to areas that were inaccessible previously should be a priority. Approximately 400,000 Angolan refugees reside in Zambia and DRC (United Nations High Commissioner for Refugees, unpublished data, 2003). The detection of WPV from five unvaccinated children of Angolan refugees in western Zambia highlights the potential for circulation of poliovirus in these poorly vaccinated, high-risk populations. Vaccination and surveillance activities should be supported and extended, particularly in areas where refugees or IDPs are likely to settle or congregate.

Although a peace accord ending >4 years of civil war in DRC was signed in April 2003, ethnic conflict continues in the northeastern part of the country, particularly in the Ituri region of Orientale province and in North Kivu province. As of January 2003, approximately 1.6 million IDPs resided in these provinces (United Nations Office for Coordination of Humanitarian Affairs, unpublished data, 2003). A substantial number of AFP cases detected in Orientale province in 2002 were classified as polio-compatible, primarily because of delayed notification and poor specimen condition. These compatible cases might be attributable to suboptimal surveillance because of the war, but uncertainty about possible low-grade poliovirus transmission exists. With the cessation of hostilities nationwide, the potential exists for improvement of surveillance quality in areas such as Orientale province. The aftermath of civil war in DRC poses a challenge to sustaining the gains made in polio eradication. Low routine vaccination coverage and the decision to implement only SNIDs might compromise the attainment of levels of population immunity required to ensure protection against a re-emergence of endemic poliovirus transmission.

Maintaining the highest quality surveillance uniformly within provinces and improving routine vaccination coverage are key priorities, particularly because the number and geographic scope of SIAs are being scaled down. Angola and its development partners have embarked on a phase of national reconstruction, and DRC has launched a representative interim government. To ensure that political commitment to polio eradication is maintained, every effort should be made to ensure that polio eradication remains a national priority. Sustained commitment from the national governments and donors[§] is critical for polio to be eradicated in Angola and the DRC.

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[§] Polio eradication efforts in Angola and DRC are supported by the governments of Angola, DRC, Belgium, Italy, Japan, and the Netherlands; the Department for International Development, United Kingdom; the Bill and Melinda Gates Foundation; the United Nations Foundation; Aventis Pasteur; DeBeers; the United Nations Children's Fund (UNICEF); Rotary International; the U.S. Agency for International Development; the Canadian International Development Agency; WHO; and CDC.

Update: Adverse Events Following Civilian Smallpox Vaccination — United States, 2003

During January 24–August 8, 2003, smallpox vaccine was administered to 38,257 civilian health-care and public health workers in 55 jurisdictions to prepare the United States for a possible terrorist attack using smallpox virus. This report updates information on vaccine-associated adverse events among civilians vaccinated since the beginning of the program and among contacts of vaccinees, received by CDC from the Vaccine Adverse Event Reporting System (VAERS) as of August 8.

In this vaccination program, CDC, the Food and Drug Administration, and state health departments are conducting surveillance for vaccine-associated adverse events among civilian vaccinees (*1,2*). As part of the vaccination program, civilian vaccinees receive routine follow-up, and reported adverse events after vaccination receive follow-up as needed. The U.S. Department of Defense is conducting surveillance for vaccine-associated adverse events among military vaccinees and providing follow-up care to those persons with reported adverse events.

Adverse events that have been associated with smallpox vaccination are classified on the basis of evidence supporting the reported diagnoses. Cases verified by virologic testing, or in some instances by other diagnostic testing, are classified as confirmed (Table 1). Cases are classified as probable if possible alternative etiologies are investigated and excluded and supportive information for the diagnosis is found. Cases are classified as suspected if they have clinical features compatible with the diagnosis, but either further investigation is required or investigation of the case did not provide supporting evidence for the diagnosis. All reports of events that follow vaccination (i.e., events associated temporally) are accepted; however, reported adverse events are not necessarily associated causally with vaccination, and some or all of these events might be coincidental. This report includes cases reported as of August 8 that are either under investigation or have a reported final diagnosis.

During June 21–August 8, one new case of inadvertent inoculation and one new case of myo/pericarditis were reported. During the vaccination program, no cases of eczema vaccinatum, erythema multiforme major, fetal vaccinia, or progressive vaccinia have been reported (Table 1).

TABLE 1. Number of cases* of selected adverse events associated with smallpox vaccination among civilians, by type — United States, January 24–August 8, 2003

	No. new cases (June 21–August 8)			Total (January 24–August 8)		
Adverse events	Suspected†	Probable§	Confirmed¶	Suspected	Probable	Confirmed
Eczema vaccinatum	—**	—	—	—	—	—
Fetal vaccinia	—	—	—	—	—	—
Generalized vaccinia	—	—	—	2	—	1
Inadvertent inoculation, nonocular	—	—	1	11	—	10
Ocular vaccinia	—	—	—	1	—	2
Progressive vaccinia	—	—	—	—	—	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—	—	—	—	—
Myo/pericarditis	—	1	—	17	5	—
Post vaccinial encephalitis or encephalomyelitis	—	—	—	1	—	—
Pyogenic infection of vaccination site	—	—	—	—	—	—

* Under investigation or completed as of August 8, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.
† Events are classified as suspected if they have clinical features compatible with the diagnosis, but either further investigation is required or additional investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis.
§ Events are classified as probable if possible alternative etiologies are investigated and supportive information is found.
¶ The first six events listed are classified as confirmed if virologic tests are positive. The last four events are classified as confirmed on the basis of diagnostic testing (e.g., histopathology); confirmation of events thought to be immunologically mediated (i.e., erythema multiforme, myo/pericarditis, postvaccinial encephalitis, or encephalomyelitis) does not establish causality.
** No cases reported.

During June 21–August 8, five other serious adverse events were reported, including one case with diplopia, ptosis, slurred speech, and paresis (Table 2). Also during this period, 44 other nonserious events were reported (Table 2). Among the 653 vaccinees with reported other nonserious adverse events during January 24–August 8, the most common signs and symptoms were fever (n = 126), rash (n = 126), pain (n = 107) headache (n = 105), and pruritus (n = 90) (Table 2). All of these commonly reported events are consistent with mild expected reactions following receipt of smallpox vaccine. Some vaccinees reported multiple signs and symptoms.

During this reporting period, no vaccinia immune globulin was released for civilian vaccinees. No cases of vaccine transmission from civilian vaccinees to their contacts have been reported during the vaccination program (Table 3). A total of 16 cases of transmission from military personnel to civilian contacts have been reported. Surveillance for adverse events during the civilian and military smallpox vaccination programs is ongoing; regular surveillance reports will be published in *MMWR*.

Reported by: *Smallpox vaccine adverse events coordinators; National Immunization Program, CDC.*

References

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TABLE 2. Number of cases* of other adverse events reported after smallpox vaccination among civilians, by severity — United States, January 24–August 8, 2003

Adverse events	No. new cases (June 21–August 8)	Total (January 24–August 8)
Other serious adverse events†	5§	77
Other nonserious adverse events¶	44	653

* Under investigation or completed as of August 8, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.
† Events that result in hospitalization, permanent disability, life-threatening illness, or death. These events are temporally associated with vaccination but are not necessarily causally associated with vaccination.
§ Includes one case of chest pain; one case of asthma; one case of acute prostatitis; one case with diploplia, ptosis, slurred speech and paresis; and one case of pneumodediastinum related to scuba-diving.
¶ Include expected self-limited responses to smallpox vaccination (e.g., fatigue, headache, pruritis, local reaction at vaccination site, regional lymphadenopathy, lymphangitis, fever, myalgia and chills, and nausea); additional events are temporally associated with smallpox vaccination but are not necessarily causally associated with vaccination.

TABLE 3. Vaccinia immune globulin release and vaccinia transmission to contacts — United States, January 24–August 8, 2003

Events	No. new cases (June 21–August 8)	Total (January 24–August 8)
Vaccinia immune globulin release	0	1
Vaccinia transmission to contacts*		
Health-care settings	0	0
Other settings	0	0

* No cases of transmission from civilian vaccinees have been reported; 16 cases of transmission from military personnel to civilian contacts have been reported and are included in Table 1 (14 cases of inadvertent inoculation, nonocular, and two cases of ocular vaccinia).

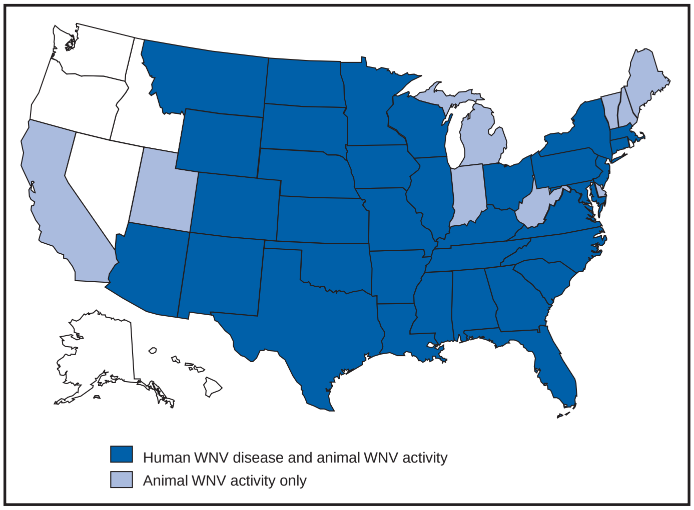
West Nile Virus Activity — United States, August 21–27, 2003

This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET as of 3 a.m., Mountain Daylight Time, August 27, 2003.

During the reporting week of August 21–27, a total of 727 human cases of WNV infection were reported from 26 states (Alabama, Arizona, Arkansas, Colorado, Connecticut, Georgia, Illinois, Iowa, Kansas, Maryland, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, and Wyoming), including seven fatal cases from five states (Kansas, Mississippi, Nebraska, New Mexico, and South Dakota). During the same period, WNV infections were reported in 817 dead birds, 207 horses, five unidentified species, and 683 mosquito pools.

During 2003, a total of 1,442 human cases of WNV infection have been reported from Colorado (n = 635), South Dakota (n = 204), Nebraska (n = 190), Texas (n = 106), New Mexico (n = 41), Wyoming (n = 31), Louisiana (n = 30), North Dakota (n = 28), Pennsylvania (n = 27), Mississippi (n = 20), Montana (n = 19), Alabama (n = 14), Kansas (n = 14), Minnesota (n = 13), Oklahoma (n = 12), Iowa (n = 11), Ohio (n = 11), Arkansas (n = five), Florida (n = four), Georgia (n = three), Kentucky (n = three), Tennessee (n = three), Illinois (n = two), Maryland (n = two), Missouri (n = two), New Jersey (n = two), North Carolina (n = two), Virginia (n = two), Arizona (n = one), Connecticut (n = one), Massachusetts (n = one), New York (n = one), South Carolina (n = one), and Wisconsin (n = one) (Figure). Among 750 (52%) cases for which demographic data were available, 419 (56%) occurred among males; the median age was 48 years (range: 3 months–97 years), and the dates of illness onset ranged from March 28 to August 25. Of the 750 cases, 21 fatal cases were reported from Colorado (n = six), Nebraska (n = four), Alabama (n = two), New Mexico (n = two), South Dakota (n = two), Texas (n = two), Kansas (n = one), Mississippi (n = one), and Ohio (n = one). A total of 150 presumptive WNV viremic blood donors have been reported from Nebraska (n = 72), South Dakota (n = 40), Texas (n = 20), New Mexico (n = seven), Mississippi (n = three), Minnesota (n = two), Montana (n = two), Oklahoma (n = two), Florida (n = one), and Louisiana (n = one) . Of these donors, 11 had WNV fever, and none had WNV meningoencephalitis. In addition, 4,222 dead birds with WNV infection were reported from 39 states and New York City; 910 WNV infections in horses have been reported from 32 states, four WNV infections were reported in dogs, one infection in a squirrel, and

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2003*



* As of 3:00 a.m., Mountain Daylight Time, August 27, 2003.

10 infections in unidentified animal species. During 2003, WNV seroconversions have been reported in 391 sentinel chicken flocks from 12 states. Louisiana and South Dakota each reported three seropositive sentinel horses. A total of 2,642 WNV-positive mosquito pools have been reported from 32 states and New York City.

Additional information about WNV activity is available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm and http://www.cindi.usga.gov/hazard/event/west_nile/west_nile.html.

Notice to Readers

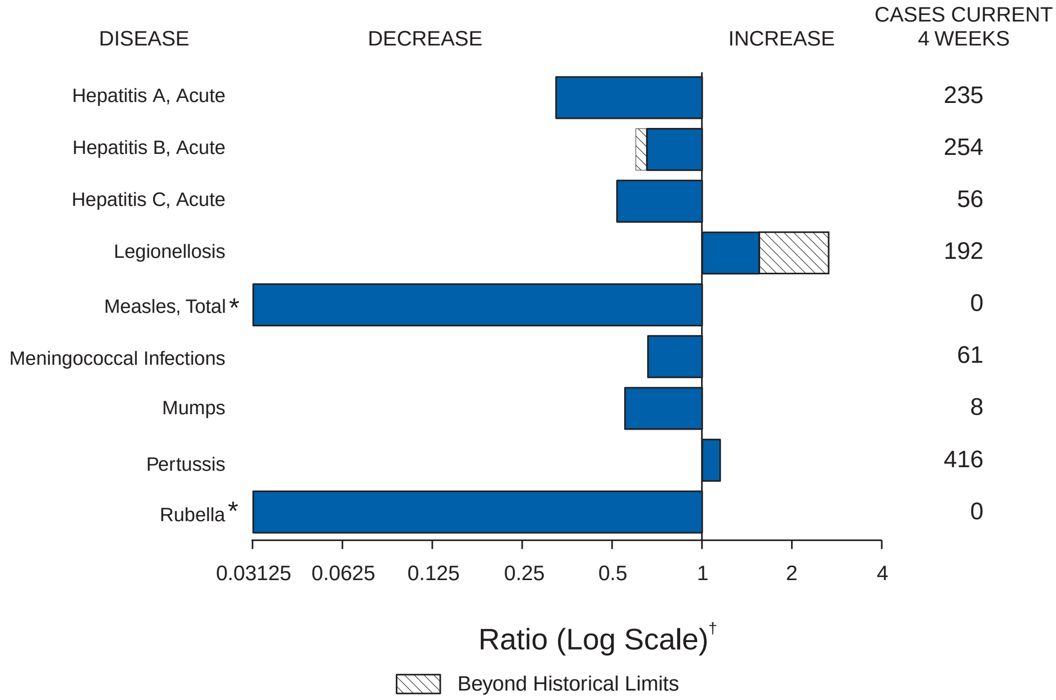
National Inventors' Month®, August 2003

August is National Inventors' Month®. In fulfilling CDC's mission to promote health and quality of life by preventing and controlling disease, injury, and disability, CDC scientists and engineers have invented vaccines to prevent diseases, kits to diagnose infections, and devices to make the workplace safer.

In 1986, Congress passed the Federal Technology Transfer Act to improve the link between the federal laboratories' technology base and U.S. businesses. This law and related legislation authorized federal laboratories to patent and license inventions to businesses and to collaborate with commercial firms on research and development projects. These activities benefit the public by transferring scientific expertise and technology from government laboratories, thereby encouraging the development of improved health-care products and services.

Additional information about CDC inventions, many of which are available for licensing, is available from CDC's Technology Transfer Office at http://www.cdc.gov/tto; by telephone, 770-488-8600; or by e-mail, tto@cdc.gov.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 23, 2003, with historical data



* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 34 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending August 23, 2003 (34th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	2	Hansen disease (leprosy)†	37	64
Botulism:	-	-	Hantavirus pulmonary syndrome†	12	14
foodborne	7	19	Hemolytic uremic syndrome, postdiarrheal†	68	128
infant	37	47	HIV infection, pediatric†§	144	109
other (wound & unspecified)	17	10	Measles, total	31¶	25**
Brucellosis†	45	75	Mumps	133	185
Chancroid	28	47	Plague	1	-
Cholera	1	1	Poliomyelitis, paralytic	-	-
Cyclosporiasis†	47	137	Psittacosis†	13	12
Diphtheria	-	1	Q fever†	47	34
Ehrlichiosis:	-	-	Rabies, human	-	1
human granulocytic (HGE)†	178	182	Rubella	6	10
human monocytic (HME)†	76	116	Rubella, congenital	-	1
other and unspecified	14	14	Streptococcal toxic-shock syndrome†	116	81
Encephalitis/Meningitis:	-	-	Tetanus	8	16
California serogroup viral†	11	39	Toxic-shock syndrome	85	72
eastern equine†	4	1	Trichinosis	1	13
Powassan†	-	1	Tularemia†	48	51
St. Louis†	-	12	Yellow fever	-	-
western equine†	40	-			

-: 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 July 27, 2003.
¶ Of 31 cases reported, 27 were indigenous, and four were imported from another country.
** Of 25 cases reported, 12 were indigenous, and 13 were imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 23, 2003, and August 24, 2002 (34th Week)*

Reporting area	AIDS		Chlamydia[†]		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003[§]	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	26,605	25,756	507,233	531,311	2,311	2,845	1,390	1,662	183	684
NEW ENGLAND	905	1,095	17,531	17,554	-	-	92	109	-	2
Maine	49	23	1,277	998	N	N	9	6	-	-
N.H.	22	22	978	1,020	-	-	10	19	-	-
Vt.	11	8	620	563	-	-	20	19	-	-
Mass.	371	578	7,132	7,031	-	-	36	43	-	2
R.I.	69	70	1,739	1,788	-	-	12	13	-	-
Conn.	383	394	5,785	6,154	N	N	5	9	-	-
MID. ATLANTIC	6,223	5,862	57,094	59,178	-	-	189	214	13	14
Upstate N.Y.	665	477	12,309	10,649	N	N	59	56	1	-
N.Y. City	3,189	3,354	21,125	19,791	-	-	49	90	-	10
N.J.	1,044	961	7,774	8,749	-	-	4	12	-	4
Pa.	1,325	1,070	15,886	19,989	N	N	77	56	12	-
E.N. CENTRAL	2,625	2,562	81,562	97,373	7	18	333	527	9	250
Ohio	466	448	17,947	24,575	-	-	58	82	9	19
Ind.	345	345	9,607	10,665	N	N	40	26	-	-
Ill.	1,238	1,174	24,947	30,901	-	2	34	73	-	209
Mich.	451	460	19,458	20,297	7	16	69	72	-	11
Wis.	125	135	9,603	10,935	-	-	132	274	-	11
W.N. CENTRAL	486	464	30,048	29,655	1	1	190	201	44	16
Minn.	95	105	6,416	6,796	N	N	73	92	5	-
Iowa	55	50	2,676	3,250	N	N	39	19	4	-
Mo.	230	218	11,144	10,020	-	-	17	23	-	13
N. Dak.	2	1	700	788	N	N	11	10	-	-
S. Dak.	8	3	1,642	1,377	-	-	22	7	9	3
Nebr.[¶]	35	43	2,948	2,839	1	1	9	38	16	-
Kans.	61	44	4,522	4,585	N	N	19	12	10	-
S. ATLANTIC	7,717	7,824	100,842	99,959	3	3	200	193	13	12
Del.	149	142	1,959	1,681	N	N	3	2	-	-
Md.	882	1,196	10,676	10,173	3	3	12	12	-	2
D.C.	725	371	1,898	2,140	-	-	9	4	-	-
Va.	627	554	10,632	11,232	-	-	21	7	-	-
W. Va.	54	57	1,669	1,566	N	N	3	2	-	-
N.C.	799	536	17,001	15,955	N	N	21	25	-	-
S.C.[¶]	504	559	9,225	9,287	-	-	3	4	1	-
Ga.	1,202	1,163	21,617	20,585	-	-	70	77	2	9
Fla.	2,775	3,246	26,165	27,340	N	N	58	60	10	1
E.S. CENTRAL	1,144	1,189	33,863	34,253	N	N	66	91	2	143
Ky.	98	172	5,338	5,607	N	N	16	3	1	2
Tenn.	517	494	12,510	10,501	N	N	25	47	1	-
Ala.	271	248	8,245	10,704	-	-	22	36	-	3
Miss.	258	275	7,770	7,441	N	N	3	5	-	138
W.S. CENTRAL	2,737	2,932	65,139	71,332	-	7	19	42	80	247
Ark.	107	175	4,977	5,001	-	-	5	7	2	-
La.	402	685	11,431	12,652	N	N	2	8	2	153
Okla.	139	143	6,828	7,501	N	N	8	8	-	-
Tex.	2,089	1,929	41,903	46,178	-	7	4	19	76	94
MOUNTAIN	967	821	30,000	32,924	1,594	1,894	80	101	22	-
Mont.	10	8	1,284	1,387	N	N	14	4	19	-
Idaho	15	23	1,580	1,596	N	N	16	18	-	-
Wyo.	6	6	638	578	1	-	3	7	1	-
Colo.	215	178	6,730	9,092	N	N	20	38	-	-
N. Mex.	75	53	4,416	4,860	4	6	6	15	2	-
Ariz.	432	315	8,848	9,747	1,557	1,854	4	11	-	-
Utah	40	46	2,945	1,790	8	10	11	5	-	-
Nev.	174	192	3,559	3,874	24	24	6	3	-	-
PACIFIC	3,801	3,007	91,154	89,083	705	921	221	184	-	-
Wash.	290	299	10,398	9,524	N	N	25	22	-	-
Oreg.	165	213	4,378	4,403	-	-	28	25	-	-
Calif.	3,271	2,397	71,999	69,911	705	921	168	136	-	-
Alaska	13	17	2,350	2,372	-	-	-	-	-	-
Hawaii	62	81	2,029	2,873	-	-	-	1	-	-
Guam	6	1	-	408	-	-	-	-	-	-
P.R.	724	667	1,241	1,686	N	N	N	N	-	-
V.I.	22	62	142	123	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	-	U	-	U	-	U

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

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

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

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update July 27, 2003.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 23, 2003, and August 24, 2002 (34th Week)*

	Escherichia coli, Enterohemorrhagic (EHEC)									
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped		Giardiasis		Gonorrhea	
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	1,158	1,922	134	112	75	30	10,092	12,050	191,790	225,709
NEW ENGLAND	74	159	24	29	8	4	705	1,107	4,500	4,932
Maine	6	23	1	4	-	-	106	114	130	80
N.H.	11	19	2	-	-	-	20	31	72	76
Vt.	6	5	-	1	-	-	59	82	48	70
Mass.	29	74	3	15	8	4	304	599	1,807	2,119
R.I.	1	5	-	-	-	-	74	92	609	554
Conn.	21	33	18	9	-	-	142	189	1,834	2,033
MID. ATLANTIC	134	219	9	1	20	4	2,003	2,482	22,965	27,015
Upstate N.Y.	56	101	5	-	9	-	599	693	4,795	5,437
N.Y. City	3	12	-	-	-	-	686	949	8,183	8,080
N.J.	5	39	-	-	-	-	157	288	4,923	4,972
Pa.	70	67	4	1	11	4	561	552	5,064	8,526
E.N. CENTRAL	263	458	16	23	12	3	1,651	2,037	36,124	47,045
Ohio	50	79	13	8	11	2	531	535	9,694	13,795
Ind.	51	39	-	-	-	-	-	-	3,698	4,611
Ill.	42	117	-	6	-	-	420	596	11,109	15,666
Mich.	45	77	-	3	-	1	435	523	8,358	9,074
Wis.	75	146	3	6	1	-	265	383	3,265	3,899
W.N. CENTRAL	208	288	23	19	16	3	1,084	1,127	10,473	11,542
Minn.	63	92	13	16	1	-	431	376	1,701	2,018
Iowa	45	67	-	-	-	-	147	174	607	762
Mo.	54	41	7	-	1	-	289	298	5,372	5,695
N. Dak.	6	4	-	-	7	-	22	13	30	45
S. Dak.	13	27	3	1	-	-	29	47	133	163
Nebr.	13	36	-	2	-	-	69	110	954	965
Kans.	14	21	-	-	7	3	97	109	1,676	1,894
S. ATLANTIC	90	154	42	18	4	-	1,646	1,789	49,817	57,590
Del.	4	5	N	N	N	N	23	31	767	1,018
Md.	4	17	-	-	-	-	67	70	5,095	5,765
D.C.	1	-	-	-	-	-	28	29	1,489	1,731
Va.	22	33	5	2	-	-	208	141	4,926	6,458
W. Va.	3	3	-	-	-	-	25	32	560	643
N.C.	5	25	12	-	-	-	N	N	9,717	10,606
S.C.	-	3	-	-	-	-	68	59	4,978	5,847
Ga.	18	37	2	7	-	-	555	586	10,766	11,258
Fla.	33	31	23	9	4	-	672	841	11,519	14,264
E.S. CENTRAL	52	67	2	-	6	9	196	225	16,398	19,677
Ky.	17	18	2	-	6	9	N	N	2,314	2,318
Tenn.	22	28	-	-	-	-	96	103	5,104	6,025
Ala.	10	13	-	-	-	-	100	122	5,086	6,884
Miss.	3	8	-	-	-	-	-	-	3,894	4,450
W.S. CENTRAL	34	73	1	-	3	3	180	139	26,844	31,847
Ark.	5	5	-	-	-	-	97	93	2,610	3,066
La.	3	2	-	-	-	-	5	2	6,826	7,785
Okla.	16	16	-	-	-	-	78	42	2,691	3,172
Tex.	10	50	1	-	3	3	-	2	14,717	17,824
MOUNTAIN	154	192	15	16	6	4	896	946	6,350	7,133
Mont.	10	13	-	-	-	-	58	58	69	60
Idaho	31	27	10	8	-	-	101	70	47	57
Wyo.	2	6	-	1	-	-	14	20	30	38
Colo.	35	63	2	4	6	4	252	318	1,566	2,230
N. Mex.	6	4	3	3	-	-	29	104	722	977
Ariz.	22	23	N	N	N	N	156	122	2,421	2,370
Utah	32	38	-	-	-	-	210	173	285	174
Nev.	16	18	-	-	-	-	76	81	1,210	1,227
PACIFIC	149	312	2	6	-	-	1,731	2,198	18,319	18,928
Wash.	45	90	1	-	-	-	158	254	1,754	1,854
Oreg.	24	63	1	6	-	-	221	262	581	549
Calif.	72	124	-	-	-	-	1,248	1,553	15,189	15,706
Alaska	1	5	-	-	-	-	49	62	330	396
Hawaii	7	30	-	-	-	-	55	67	465	423
Guam	N	N	-	-	-	-	-	7	-	35
P.R.	-	1	-	-	-	-	35	45	137	243
V.I.	-	-	-	-	-	-	-	-	36	31
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 23, 2003, and August 24, 2002 (34th Week)*

Reporting area	*Haemophilus influenzae*, invasive† All ages All serotypes Cum. 2003	Cum. 2002	Age <5 years Serotype b Cum. 2003	Cum. 2002	Non-serotype b Cum. 2003	Cum. 2002	Unknown serotype Cum. 2003	Cum. 2002	Hepatitis (viral, acute), by type A Cum. 2003	Cum. 2002
UNITED STATES	1,142	1,156	9	25	64	91	124	107	3,699	6,026
NEW ENGLAND	91	75	1	-	6	8	5	2	185	216
Maine	2	1	-	-	-	-	1	-	9	7
N.H.	11	6	1	-	-	-	-	-	8	11
Vt.	6	5	-	-	-	-	-	-	5	1
Mass.	43	35	-	-	6	4	3	2	107	95
R.I.	4	10	-	-	-	-	1	-	11	29
Conn.	25	18	-	-	-	4	-	-	45	73
MID. ATLANTIC	250	212	-	2	1	11	32	20	713	758
Upstate N.Y.	97	83	-	2	1	4	9	6	83	124
N.Y. City	41	50	-	-	-	-	8	9	227	272
N.J.	40	42	-	-	-	-	6	5	85	127
Pa.	72	37	-	-	-	7	9	-	318	235
E.N. CENTRAL	161	227	1	3	5	9	26	30	415	756
Ohio	51	62	-	-	-	1	8	7	76	211
Ind.	32	33	-	1	3	7	-	-	45	33
Ill.	55	83	-	-	-	-	14	15	127	197
Mich.	15	11	1	2	2	1	2	-	129	161
Wis.	8	38	-	-	-	-	2	8	38	154
W.N. CENTRAL	85	49	-	1	6	2	10	3	122	218
Minn.	34	30	-	1	6	2	2	1	33	32
Iowa	-	1	-	-	-	-	-	-	20	50
Mo.	34	10	-	-	-	-	8	2	43	61
N. Dak.	1	4	-	-	-	-	-	-	-	1
S. Dak.	1	1	-	-	-	-	-	-	-	3
Nebr.	2	-	-	-	-	-	-	-	6	15
Kans.	13	3	-	-	-	-	-	-	20	56
S. ATLANTIC	267	260	1	5	10	13	14	19	894	1,665
Del.	-	-	-	-	-	-	-	-	4	10
Md.	61	65	-	2	5	2	-	1	93	202
D.C.	-	-	-	-	-	-	-	-	27	56
Va.	38	22	-	-	-	-	5	3	48	71
W. Va.	13	13	-	-	-	-	-	1	13	14
N.C.	23	24	-	-	2	3	1	-	46	151
S.C.	3	10	-	-	-	-	-	2	25	48
Ga.	50	55	-	-	-	-	5	9	351	341
Fla.	79	71	1	3	3	8	3	3	287	772
E.S. CENTRAL	49	50	1	1	-	4	6	9	102	191
Ky.	2	4	-	-	-	1	-	-	22	40
Tenn.	29	24	-	-	-	-	4	6	56	75
Ala.	16	14	1	1	-	3	1	1	11	29
Miss.	2	8	-	-	-	-	1	2	13	47
W.S. CENTRAL	45	42	-	2	6	7	3	2	177	659
Ark.	6	1	-	-	1	-	-	-	17	40
La.	7	6	-	-	-	-	2	2	38	58
Okla.	30	33	-	-	5	7	1	-	10	33
Tex.	2	2	-	2	-	-	-	-	112	528
MOUNTAIN	125	132	4	4	17	21	19	12	310	371
Mont.	-	-	-	-	-	-	-	-	7	10
Idaho	3	2	-	-	-	-	1	1	-	23
Wyo.	1	2	-	-	-	-	-	-	1	2
Colo.	23	25	-	-	-	-	5	2	45	58
N. Mex.	15	20	-	-	4	4	2	1	12	13
Ariz.	64	61	4	2	6	13	8	6	181	201
Utah	11	14	-	1	4	3	3	-	27	28
Nev.	8	8	-	1	3	1	-	2	37	36
PACIFIC	69	109	1	7	13	16	9	10	781	1,192
Wash.	7	2	-	1	5	1	1	-	38	120
Oreg.	33	43	-	-	-	-	3	3	41	45
Calif.	16	36	1	6	8	15	4	3	689	1,000
Alaska	-	1	-	-	-	-	-	1	7	7
Hawaii	13	27	-	-	-	-	1	3	6	20
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	-	-	-	-	24	152
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).
† 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.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 23, 2003, and August 24, 2002 (34th Week)*

	Hepatitis (viral, acute), by type									
	B		C		Legionellosis		Listeriosis		Lyme disease	
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	3,930	4,790	866	1,225	1,039	660	351	362	8,694	11,665
NEW ENGLAND	154	181	2	18	40	61	30	38	1,579	2,515
Maine	1	6	-	-	1	2	5	4	123	49
N.H.	11	12	-	-	5	4	3	4	74	159
Vt.	2	3	2	12	2	25	-	2	18	19
Mass.	124	102	-	6	17	21	14	19	275	1,526
R.I.	8	21	-	-	3	1	-	1	286	158
Conn.	8	37	U	U	12	8	8	8	803	604
MID. ATLANTIC	606	1,016	114	65	244	162	66	93	5,695	6,878
Upstate N.Y.	70	79	33	27	78	42	16	29	2,536	3,016
N.Y. City	249	509	-	-	16	29	11	25	2	53
N.J.	109	205	-	4	4	23	7	15	544	1,804
Pa.	178	223	81	34	146	68	32	24	2,613	2,005
E.N. CENTRAL	258	411	101	69	226	176	43	51	390	989
Ohio	92	63	7	-	146	67	17	14	34	42
Ind.	22	31	4	-	14	12	3	6	11	13
Ill.	1	82	9	13	3	19	5	13	-	42
Mich.	120	199	81	53	52	50	14	12	4	20
Wis.	23	36	-	3	11	28	4	6	341	872
W.N. CENTRAL	203	138	144	539	42	35	10	10	198	182
Minn.	29	13	7	2	3	6	3	-	147	112
Iowa	5	12	1	1	9	8	-	1	18	29
Mo.	137	74	135	527	19	10	4	6	25	32
N. Dak.	1	4	-	-	1	-	-	1	-	-
S. Dak.	2	-	-	-	1	2	-	-	-	-
Nebr.	16	19	1	9	2	9	3	1	2	5
Kans.	13	16	-	-	7	-	-	1	6	4
S. ATLANTIC	1,264	1,170	112	134	315	119	80	50	687	876
Del.	5	12	-	-	14	6	N	N	113	130
Md.	82	91	11	7	75	21	14	10	409	532
D.C.	7	13	-	-	8	5	-	-	6	17
Va.	104	136	4	2	57	13	7	3	44	67
W. Va.	20	18	1	2	12	-	5	-	11	8
N.C.	111	172	8	18	25	7	11	4	56	70
S.C.	95	75	23	4	5	6	2	8	1	10
Ga.	404	315	3	58	19	9	20	9	12	1
Fla.	436	338	62	43	100	52	20	16	35	41
E.S. CENTRAL	257	245	82	89	64	24	16	9	34	41
Ky.	45	40	8	4	26	10	4	2	9	13
Tenn.	119	96	41	21	26	8	4	4	12	13
Ala.	41	49	6	5	11	6	6	3	1	7
Miss.	52	60	27	59	1	-	2	-	12	8
W.S. CENTRAL	210	665	194	188	13	18	15	22	33	101
Ark.	38	84	3	10	2	-	1	-	-	2
La.	46	86	46	62	-	4	1	1	3	3
Okla.	31	35	2	4	5	3	1	6	-	-
Tex.	95	460	143	112	6	11	12	15	30	96
MOUNTAIN	400	406	48	43	44	24	21	21	12	11
Mont.	13	3	1	-	2	3	1	-	-	-
Idaho	-	6	-	-	3	-	1	2	2	3
Wyo.	23	13	-	5	2	1	-	-	-	1
Colo.	52	51	24	5	9	5	9	4	4	-
N. Mex.	20	115	-	2	2	1	2	2	-	1
Ariz.	198	151	6	4	9	6	6	9	-	2
Utah	42	27	-	4	13	7	-	3	3	3
Nev.	52	40	17	23	4	1	2	1	3	1
PACIFIC	578	558	69	80	51	41	70	68	66	72
Wash.	38	49	12	16	5	3	2	7	1	6
Oreg.	75	95	10	10	N	N	3	8	14	11
Calif.	445	402	45	53	46	38	62	47	48	53
Alaska	8	6	1	-	-	-	-	-	3	2
Hawaii	12	6	1	1	-	-	3	6	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	39	125	-	-	-	-	-	2	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 23, 2003, and August 24, 2002 (34th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	577	890	1,070	1,293	4,035	5,072	3,379	4,914	376	629
NEW ENGLAND	27	55	51	74	389	442	340	563	-	2
Maine	3	3	5	4	12	5	34	31	-	-
N.H.	2	6	3	9	50	9	13	27	-	-
Vt.	-	2	-	4	46	85	21	74	-	-
Mass.	9	23	33	39	273	307	125	183	-	2
R.I.	1	3	2	5	7	10	41	43	-	-
Conn.	12	18	8	13	1	26	106	205	-	-
MID. ATLANTIC	127	226	133	164	392	222	296	791	19	42
Upstate N.Y.	35	30	33	38	219	146	233	452	2	-
N.Y. City	59	142	25	29	-	11	1	10	6	9
N.J.	10	29	19	25	22	-	62	108	5	16
Pa.	23	25	56	72	151	65	-	221	6	17
E.N. CENTRAL	57	121	163	189	304	599	94	99	6	26
Ohio	13	14	45	60	150	285	38	19	4	10
Ind.	1	9	33	24	32	57	9	21	-	3
Ill.	19	52	38	42	-	101	11	20	-	11
Mich.	19	36	33	30	57	37	31	27	2	2
Wis.	5	10	14	33	65	119	5	12	-	-
W.N. CENTRAL	32	49	99	107	200	415	410	330	37	82
Minn.	19	16	20	24	59	176	24	26	1	-
Iowa	3	3	16	15	45	107	69	47	2	3
Mo.	2	14	47	39	56	78	18	32	27	75
N. Dak.	1	1	1	-	3	5	40	29	-	-
S. Dak.	2	1	1	2	3	5	67	68	3	-
Nebr.	-	5	7	21	4	6	58	-	2	4
Kans.	5	9	7	6	30	38	134	128	2	-
S. ATLANTIC	173	198	210	201	378	280	1,703	1,754	226	286
Del.	3	2	7	6	1	2	26	24	-	-
Md.	45	70	25	6	53	45	244	276	64	31
D.C.	8	15	-	-	-	1	-	-	-	-
Va.	20	17	20	29	64	104	342	380	14	21
W. Va.	4	3	4	3	6	26	62	129	5	1
N.C.	13	12	27	24	86	27	528	459	97	167
S.C.	3	5	19	19	67	28	159	83	12	42
Ga.	28	32	22	22	29	22	244	281	26	18
Fla.	49	42	86	92	72	25	98	122	8	6
E.S. CENTRAL	9	15	53	73	91	157	127	163	52	84
Ky.	3	5	12	12	31	62	28	18	-	3
Tenn.	4	3	14	29	42	60	84	108	42	48
Ala.	2	3	13	17	14	27	15	35	3	11
Miss.	-	4	14	15	4	8	-	2	7	22
W.S. CENTRAL	18	44	74	156	322	1,253	167	818	28	92
Ark.	4	1	11	20	16	448	25	-	-	21
La.	3	3	25	32	6	7	-	-	-	-
Okla.	4	6	13	17	12	34	142	79	27	61
Tex.	7	34	25	87	288	764	-	739	1	10
MOUNTAIN	27	35	56	76	651	622	107	198	8	13
Mont.	-	1	3	2	2	4	16	10	1	1
Idaho	1	-	6	3	51	51	4	22	1	-
Wyo.	1	-	2	-	119	10	3	14	2	4
Colo.	13	20	15	23	218	237	21	35	2	2
N. Mex.	1	2	7	3	41	122	5	7	-	1
Ariz.	8	5	15	23	122	108	47	102	1	-
Utah	2	4	1	4	75	56	8	5	1	-
Nev.	1	3	7	18	23	34	3	3	-	5
PACIFIC	107	147	231	253	1,308	1,082	135	198	-	2
Wash.	16	13	22	50	371	323	-	-	-	-
Oreg.	7	7	38	35	317	144	5	11	-	2
Calif.	79	119	162	160	610	588	127	161	-	-
Alaska	-	2	1	2	-	4	3	26	-	-
Hawaii	5	6	8	6	10	23	-	-	-	-
Guam	-	-	-	1	-	2	-	-	-	-
P.R.	-	1	2	5	-	2	48	57	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 23, 2003, and August 24, 2002 (34th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive: Drug resistant, all ages		*Streptococcus pneumoniae*, invasive: Age <5 years	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	22,129	24,831	12,633	11,371	3,802	3,353	1,526	1,737	307	226
NEW ENGLAND	1,293	1,345	193	203	322	258	40	81	6	2
Maine	89	87	6	3	22	20	-	-	-	-
N.H.	89	80	5	8	20	28	-	-	N	N
Vt.	41	46	6	-	16	9	6	4	3	1
Mass.	777	773	133	133	153	89	N	N	N	N
R.I.	62	100	7	7	9	14	10	11	3	1
Conn.	235	259	36	52	102	98	24	66	U	U
MID. ATLANTIC	2,492	3,372	1,407	1,025	624	551	94	82	72	58
Upstate N.Y.	633	882	232	166	284	221	52	72	55	48
N.Y. City	697	876	238	296	92	128	U	U	U	U
N.J.	211	703	161	387	42	117	N	N	N	N
Pa.	951	911	776	176	206	85	42	10	17	10
E.N. CENTRAL	3,306	3,629	1,144	1,286	856	723	325	153	130	82
Ohio	934	846	243	426	246	164	213	28	76	1
Ind.	358	309	100	62	89	41	112	123	34	40
Ill.	1,029	1,265	540	575	179	207	-	2	-	-
Mich.	502	607	178	108	294	228	N	N	N	N
Wis.	483	602	83	115	48	83	N	N	20	41
W.N. CENTRAL	1,539	1,535	520	738	247	187	126	329	42	40
Minn.	354	366	60	145	123	95	-	220	36	36
Iowa	224	254	35	90	N	N	N	N	N	N
Mo.	596	508	277	114	53	38	9	5	2	1
N. Dak.	25	24	3	16	10	-	3	1	4	3
S. Dak.	62	65	9	151	18	10	1	1	-	-
Nebr.	95	108	89	158	21	16	-	25	N	N
Kans.	183	210	47	64	22	28	113	77	N	N
S. ATLANTIC	5,844	5,883	4,975	3,579	690	552	788	802	14	23
Del.	53	50	144	38	6	2	1	3	N	N
Md.	496	577	434	717	209	86	-	-	-	18
D.C.	24	50	45	42	11	6	2	-	5	3
Va.	572	555	262	580	85	58	N	N	N	N
W. Va.	80	88	-	7	30	16	54	34	9	2
N.C.	701	796	596	215	80	102	N	N	U	U
S.C.	339	377	269	76	30	29	111	141	N	N
Ga.	1,120	1,100	1,297	822	84	105	188	201	N	N
Fla.	2,459	2,290	1,928	1,082	155	148	432	423	N	N
E.S. CENTRAL	1,381	1,766	572	862	146	78	97	109	-	-
Ky.	260	212	68	90	37	14	13	13	N	N
Tenn.	456	446	204	47	109	64	84	96	N	N
Ala.	296	466	177	447	-	-	-	-	N	N
Miss.	369	642	123	278	-	-	-	-	-	-
W.S. CENTRAL	1,881	2,591	1,718	1,728	140	220	33	147	39	18
Ark.	411	538	69	139	5	6	8	6	-	-
La.	258	473	144	308	1	1	25	141	10	5
Okla.	271	287	553	312	64	35	N	N	24	2
Tex.	941	1,293	952	969	70	178	N	N	5	11
MOUNTAIN	1,320	1,391	633	434	348	408	20	34	4	3
Mont.	66	64	2	3	2	-	-	-	-	-
Idaho	114	90	20	3	14	6	N	N	N	N
Wyo.	65	40	5	6	2	7	4	10	-	-
Colo.	297	400	108	94	98	85	-	-	-	-
N. Mex.	125	173	119	78	87	77	16	24	-	-
Ariz.	416	370	313	200	135	206	-	-	N	N
Utah	136	111	34	20	9	27	-	-	4	3
Nev.	101	143	32	30	1	-	-	-	-	-
PACIFIC	3,073	3,319	1,471	1,516	429	376	3	-	-	-
Wash.	334	316	105	101	38	46	-	-	N	N
Oreg.	246	233	148	66	N	N	N	N	N	N
Calif.	2,310	2,549	1,184	1,309	315	284	N	N	N	N
Alaska	53	43	5	3	-	-	-	-	N	N
Hawaii	130	178	29	37	76	46	3	-	-	-
Guam	-	29	-	19	-	-	-	4	-	-
P.R.	159	305	2	24	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 23, 2003, and August 24, 2002 (34th Week)*

Reporting area	Syphilis Primary & secondary Cum. 2003	Syphilis Primary & secondary Cum. 2002	Syphilis Congenital Cum. 2003	Syphilis Congenital Cum. 2002	Tuberculosis Cum. 2003	Tuberculosis Cum. 2002	Typhoid fever Cum. 2003	Typhoid fever Cum. 2002	Varicella (Chickenpox) Cum. 2003
UNITED STATES	4,309	4,252	233	258	6,812	8,237	168	194	8,353
NEW ENGLAND	136	90	1	-	201	263	19	10	1,245
Maine	6	2	1	-	5	10	-	-	633
N.H.	13	2	-	-	7	8	2	-	-
Vt.	-	1	-	-	3	4	-	-	492
Mass.	89	61	-	-	126	134	10	7	117
R.I.	13	4	-	-	27	37	2	-	3
Conn.	15	20	-	-	33	70	5	3	-
MID. ATLANTIC	500	451	44	36	1,313	1,418	21	49	23
Upstate N.Y.	26	23	13	1	173	210	5	4	N
N.Y. City	307	265	24	16	740	682	10	25	-
N.J.	82	90	7	18	215	314	5	13	-
Pa.	85	73	-	1	185	212	1	7	23
E.N. CENTRAL	581	799	42	40	729	806	11	21	3,768
Ohio	136	98	2	2	135	127	1	5	927
Ind.	31	39	7	2	86	72	3	2	-
Ill.	218	307	14	29	334	395	1	7	-
Mich.	186	337	19	7	140	165	6	3	2,265
Wis.	10	18	-	-	34	47	-	4	576
W.N. CENTRAL	93	81	3	-	295	354	2	9	38
Minn.	32	40	-	-	116	147	-	3	N
Iowa	4	2	-	-	17	21	1	-	N
Mo.	33	18	3	-	77	98	1	2	-
N. Dak.	-	-	-	-	-	4	-	-	38
S. Dak.	1	-	-	-	16	10	-	-	-
Nebr.	3	5	-	-	8	17	-	4	-
Kans.	20	16	-	-	61	57	-	-	-
S. ATLANTIC	1,161	1,051	43	60	1,362	1,710	35	24	1,553
Del.	4	9	-	-	-	13	-	-	20
Md.	202	127	8	12	144	185	7	5	-
D.C.	35	35	-	1	-	-	-	-	22
Va.	55	50	1	1	159	181	10	2	427
W. Va.	2	2	-	-	12	20	-	-	916
N.C.	106	195	13	16	198	210	6	1	N
S.C.	71	82	4	7	103	115	-	-	168
Ga.	281	219	4	9	200	339	6	4	-
Fla.	405	332	13	14	546	647	6	12	N
E.S. CENTRAL	202	339	13	19	420	504	5	4	-
Ky.	29	65	1	3	80	91	-	4	N
Tenn.	86	124	6	6	141	198	2	-	N
Ala.	71	116	4	7	139	133	3	-	-
Miss.	16	34	2	3	60	82	-	-	-
W.S. CENTRAL	555	558	39	56	959	1,259	7	24	1,331
Ark.	37	20	-	4	64	80	-	-	-
La.	81	98	-	-	-	-	-	-	4
Okla.	34	43	1	1	90	104	-	-	N
Tex.	403	397	38	51	805	1,075	7	24	1,327
MOUNTAIN	195	201	21	9	223	248	3	7	395
Mont.	-	-	-	-	5	6	-	-	N
Idaho	6	1	-	-	5	10	-	-	N
Wyo.	-	-	-	-	3	2	-	-	42
Colo.	12	42	3	1	43	55	3	3	-
N. Mex.	35	22	-	-	6	23	-	-	-
Ariz.	128	124	18	8	115	121	-	-	4
Utah	5	4	-	-	24	18	-	2	349
Nev.	9	8	-	-	22	13	-	2	-
PACIFIC	886	682	27	38	1,310	1,675	65	46	-
Wash.	50	36	-	1	160	155	2	4	-
Oreg.	27	11	-	-	65	74	3	2	-
Calif.	807	628	27	36	1,010	1,317	59	39	-
Alaska	-	-	-	-	38	32	-	-	-
Hawaii	2	7	-	1	37	97	1	1	-
Guam	-	6	-	-	-	42	-	-	-
P.R.	118	161	1	21	33	67	-	-	275
V.I.	1	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending August 23, 2003 (34th Week)

Reporting Area	All causes, by age (years) All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total
NEW ENGLAND	400	278	90	18	7	7	25
Boston, Mass.	138	84	39	6	5	4	10
Bridgeport, Conn.	36	21	12	1	-	2	2
Cambridge, Mass.	18	14	4	-	-	-	2
Fall River, Mass.	29	24	4	1	-	-	2
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	22	18	3	1	-	-	-
Lynn, Mass.	8	4	3	1	-	-	2
New Bedford, Mass.	22	17	4	1	-	-	-
New Haven, Conn.	24	14	7	1	1	1	4
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	4	2	1	1	-	-	-
Springfield, Mass.	39	32	4	3	-	-	-
Waterbury, Conn.	U	U	U	U	U	U	U
Worcester, Mass.	60	48	9	2	1	-	3
MID. ATLANTIC	2,127	1,454	438	161	39	23	95
Albany, N.Y.	48	36	10	1	-	1	2
Allentown, Pa.	14	13	1	-	-	-	-
Buffalo, N.Y.	80	51	21	4	4	-	8
Camden, N.J.	11	9	1	1	-	-	2
Elizabeth, N.J.	22	13	5	4	-	-	-
Erie, Pa.	47	33	9	3	2	-	-
Jersey City, N.J.	49	33	11	4	1	-	-
New York City, N.Y.	1,151	784	230	95	15	15	47
Newark, N.J.	54	27	18	8	1	-	2
Paterson, N.J.	30	18	8	3	1	-	1
Philadelphia, Pa.	265	174	57	23	8	3	14
Pittsburgh, Pa.§	30	20	4	3	1	2	-
Reading, Pa.	19	15	2	1	-	1	1
Rochester, N.Y.	145	103	32	7	2	1	11
Schenectady, N.Y.	25	18	7	-	-	-	1
Scranton, Pa.	33	26	6	-	1	-	-
Syracuse, N.Y.	61	47	8	3	3	-	5
Trenton, N.J.	14	10	4	-	-	-	-
Utica, N.Y.	15	11	4	-	-	-	-
Yonkers, N.Y.	14	13	-	1	-	-	1
E.N. CENTRAL	1,909	1,243	426	130	57	51	106
Akron, Ohio	44	29	11	2	1	1	4
Canton, Ohio	29	21	6	2	-	-	5
Chicago, Ill.	327	197	82	25	13	8	18
Cincinnati, Ohio	73	50	13	5	3	2	9
Cleveland, Ohio	111	67	32	6	2	4	4
Columbus, Ohio	144	94	33	10	6	1	5
Dayton, Ohio	152	109	31	6	5	1	5
Detroit, Mich.	210	115	57	22	6	10	12
Evansville, Ind.	49	37	6	4	-	2	4
Fort Wayne, Ind.	75	51	17	6	1	-	5
Gary, Ind.	17	11	2	1	3	-	-
Grand Rapids, Mich.	47	32	10	2	1	2	2
Indianapolis, Ind.	186	116	39	14	5	12	7
Lansing, Mich.	30	24	3	1	1	1	3
Milwaukee, Wis.	116	80	28	7	-	1	5
Peoria, Ill.	52	38	7	2	1	4	5
Rockford, Ill.	48	34	8	3	2	1	4
South Bend, Ind.	50	36	9	3	2	-	4
Toledo, Ohio	90	58	23	6	3	-	4
Youngstown, Ohio	59	44	9	3	2	1	1
W.N. CENTRAL	500	341	98	36	14	11	25
Des Moines, Iowa	46	32	10	3	1	-	3
Duluth, Minn.	25	19	5	-	1	-	3
Kansas City, Kans.	30	19	7	3	-	1	2
Kansas City, Mo.	69	43	17	4	4	1	3
Lincoln, Nebr.	27	24	2	-	1	-	2
Minneapolis, Minn.	55	31	12	8	1	3	1
Omaha, Nebr.	112	80	18	8	2	4	7
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	53	38	7	2	4	2	1
Wichita, Kans.	83	55	20	8	-	-	3

Reporting Area	All causes, by age (years) All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total
S. ATLANTIC	1,083	670	249	108	31	23	58
Atlanta, Ga.	119	66	32	19	1	1	1
Baltimore, Md.	142	84	31	16	4	6	9
Charlotte, N.C.	118	85	25	3	3	2	13
Jacksonville, Fla.	153	90	33	20	5	5	6
Miami, Fla.	76	41	25	7	2	1	6
Norfolk, Va.	40	25	11	2	2	-	1
Richmond, Va.	60	34	13	10	3	-	3
Savannah, Ga.	43	26	12	4	-	1	2
St. Petersburg, Fla.	42	28	10	1	1	2	2
Tampa, Fla.	186	115	47	15	5	3	10
Washington, D.C.	80	58	7	9	4	2	2
Wilmington, Del.	24	18	3	2	1	-	3
E.S. CENTRAL	815	534	178	61	27	14	51
Birmingham, Ala.	166	109	37	9	6	4	14
Chattanooga, Tenn.	54	40	9	4	1	-	4
Knoxville, Tenn.	97	71	17	5	1	3	-
Lexington, Ky.	61	41	13	2	5	-	6
Memphis, Tenn.	183	104	46	21	11	1	6
Mobile, Ala.	84	60	18	4	2	-	5
Montgomery, Ala.	31	19	5	4	-	3	7
Nashville, Tenn.	139	90	33	12	1	3	9
W.S. CENTRAL	1,544	959	329	135	74	47	103
Austin, Tex.	111	70	27	7	5	2	5
Baton Rouge, La.	U	U	U	U	U	U	U
Corpus Christi, Tex.	65	51	7	5	2	-	4
Dallas, Tex.	178	101	47	16	8	6	15
El Paso, Tex.	71	54	10	5	2	-	3
Ft. Worth, Tex.	157	101	29	9	9	9	8
Houston, Tex.	470	254	102	60	36	18	35
Little Rock, Ark.	75	47	21	3	3	1	1
New Orleans, La.	45	25	11	5	3	1	-
San Antonio, Tex.	175	114	41	10	3	7	17
Shreveport, La.	29	15	7	4	1	2	3
Tulsa, Okla.	168	127	27	11	2	1	12
MOUNTAIN	895	591	182	79	31	12	55
Albuquerque, N.M.	102	67	15	16	4	-	9
Boise, Idaho	48	31	7	6	3	1	3
Colo. Springs, Colo.	86	63	15	7	-	1	4
Denver, Colo.	104	57	26	11	5	5	6
Las Vegas, Nev.	249	154	65	22	8	-	11
Ogden, Utah	28	19	8	-	1	-	1
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	33	29	3	-	-	1	4
Salt Lake City, Utah	80	48	19	8	5	-	9
Tucson, Ariz.	165	123	24	9	5	4	8
PACIFIC	1,385	957	283	82	40	23	114
Berkeley, Calif.	11	5	4	1	-	1	-
Fresno, Calif.	96	72	17	4	2	1	13
Glendale, Calif.	13	11	1	1	-	-	-
Honolulu, Hawaii	73	59	10	1	1	2	6
Long Beach, Calif.	53	38	11	3	-	1	8
Los Angeles, Calif.	245	164	49	17	11	4	22
Pasadena, Calif.	22	18	3	1	-	-	4
Portland, Oreg.	94	56	24	11	2	1	2
Sacramento, Calif.	184	125	40	12	6	1	15
San Diego, Calif.	170	118	30	11	4	7	13
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	149	104	30	8	5	2	17
Santa Cruz, Calif.	U	U	U	U	U	U	U
Seattle, Wash.	108	67	27	9	3	2	8
Spokane, Wash.	62	43	14	-	4	1	-
Tacoma, Wash.	105	77	23	3	2	-	6
TOTAL	10,658¶	7,027	2,273	810	320	211	632

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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