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Outbreaks of Avian Influenza A (H5N1) in Asia and Interim Recommendations for Evaluation and Reporting of Suspected Cases — United States, 2004

During December 2003–February 2004, outbreaks of highly pathogenic avian influenza A (H5N1) among poultry were reported in Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam. As of February 9, 2004, a total of 23 cases of laboratory-confirmed influenza A (H5N1) virus infections in humans, resulting in 18 deaths, had been reported in Thailand and Vietnam. In addition, approximately 100 suspected cases in humans are under investigation by national health authorities in Thailand and Vietnam. CDC, the World Health Organization (WHO), and national health authorities in Asian countries are working to assess and monitor the situation, provide epidemiologic and laboratory support, and assist with control efforts. This report summarizes information about the human infections and avian outbreaks in Asia and provides recommendations to guide influenza A (H5N1) surveillance, diagnosis, and testing in the United States.

Poultry Outbreaks

On December 12, 2003, an outbreak of avian influenza A (H5N1) among poultry in South Korea was reported. Subsequent influenza A (H5N1) outbreaks among poultry were confirmed in Vietnam (January 8, 2004), on a single farm in Japan (January 12), in Thailand (January 23), in Cambodia (January 24), in China (January 27), in Laos (January 27), and in Indonesia (February 2). On January 19, a single peregrine falcon found dead in Hong Kong also tested positive for influenza A (H5N1) virus, but no poultry outbreak has been identified.

In Vietnam, as of February 9, a total of 18 human influenza A (H5N1) infections had been reported, resulting in 13 deaths. Patients ranged in age from 4 to 30 years; 10 patients were aged <18 years. The cases included fatal infections in two sisters who were part of a cluster of four cases of severe respiratory illness in a single family.

In Thailand, influenza A (H5N1) infection was confirmed in four males, aged 6–7 years, and one female, aged 58 years. All five patients died (*1*). Other cases are under investigation.

Analysis of Viruses

Antigenic analysis and genetic sequencing distinguish between influenza viruses that usually circulate among birds and those that usually circulate among humans. Sequencing of the H5N1 viruses obtained from five persons in Vietnam and Thailand, including one sister from the cluster in Vietnam, has indicated that all of the genes of these viruses are of avian origin. No evidence of genetic reassortment between avian and human influenza viruses has been identified. If reassortment occurs, the likelihood that the H5N1 virus can be transmitted more readily from person to person will increase. Although all the genes are of avian origin, the current H5N1 viruses are antigenically distinguishable from those isolated from humans in Hong Kong in 1997 and 2003.

Genetic sequencing of the five human H5N1 isolates from Thailand and Vietnam also indicates that the viruses have genetic characteristics associated with resistance to the influenza antiviral drugs amantadine and rimantadine. Antiviral susceptibility testing confirms this finding. Testing for susceptibility of the H5N1 isolates to the neuraminidase

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inhibitor oseltamivir has demonstrated the sensitivity of these viruses to the drug; testing to determine susceptibility to the neuraminidase inhibitor zanamavir is under way.

Interim Recommendations for U.S. Surveillance and Diagnostic Evaluation

CDC recommends that state and local health departments, hospitals, and clinicians enhance their efforts to identify patients who could be infected by influenza A (H5N1) virus and take infection-control precautions when influenza A (H5N1) is suspected (Box). Testing of hospitalized patients for influenza A (H5N1) infection is indicated when both of the following exist: 1) radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness for which an alternative diagnosis has not been established and 2) a history of travel within 10 days

BOX. Interim recommended infection-control precautions* for influenza A (H5N1)

- All patients with a febrile respiratory illness should be asked about their recent travel history and managed using *Respiratory Hygiene/Cough Etiquette in HealthCare Settings* guidelines†.
- Isolation precautions for all hospitalized patients who have or are under evaluation for influenza A (H5N1) are the same as those that should be used for severe acute respiratory syndrome (SARS), as follows:
  - — Pay careful attention to hand hygiene before and after all patient contact.
  - — Use gloves and gown for all patient contact.
  - — Wear eye protection when within 3 feet of the patient.
  - — Place the patient in an airborne isolation room (i.e., monitored negative air pressure in relation to surrounding areas with six to 12 air changes per hour).
  - — When entering the patient's room, use a fit-tested respirator at least as protective as an N95 filtering-facepiece respirator approved by the National Institute for Occupational Safety and Health.
- Outpatients or hospitalized patients discharged in <14 days should be isolated in the home setting on the basis of principles for home isolation of SARS patients§.
- These precautions should be continued for 14 days after onset of symptoms until an alternative diagnosis is established or diagnostic test results indicate that the patient is not infected with influenza A virus.

* Additional information about health-care isolation precautions is available at http://www.cdc.gov/ncidod/hip/isolat/isolat.htm.
† Available at http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm.
§ Available at http://www.cdc.gov/ncidod/sars/guidance.

of symptom onset to a country with documented H5N1 avian influenza infections in poultry or humans. Ongoing listings of countries affected by avian influenza are available from the World Organization for Animal Health*.

Testing for influenza A (H5N1) also should be considered on a case-by-case basis in consultation with state and local health departments for hospitalized or ambulatory patients with all of the following: 1) documented temperature of >100.4°F (>38°C); 2) cough, sore throat, or shortness of breath; and 3) history of contact with poultry or domestic birds (e.g., visited a poultry farm, a household raising poultry, or a bird market) or a known or suspected patient with influenza A (H5N1) in an H5N1-affected country within 10 days of symptom onset.

Recommended Laboratory Testing Procedures

The highly pathogenic avian influenza A (H5N1) virus requires Biosafety Level (BSL)-3+ laboratory conditions for certain procedures. CDC recommends that virus isolation studies on respiratory specimens from patients who meet the testing criteria should not be performed unless all BSL-3+ conditions are met. However, clinical specimens can be tested by polymerase chain reaction (PCR) assays by using standard BSL-2 work practices in a Class II biological safety cabinet. CDC has developed real-time PCR protocols† for various respiratory pathogens, including SARS and influenza A and B viruses. In addition, commercially available antigen-detection tests can be used under BSL-2 levels to test for influenza. Although these rapid tests for human influenza also can detect avian influenza A (H5N1) viruses, the sensitivity of these tests is substantially lower than that of virus culture or PCR (*2*).

Specimens from persons meeting clinical and epidemiologic indications for testing should be sent to CDC if they test positive for influenza A either by PCR or antigen detection testing, or if PCR assays for influenza are not available locally. CDC also will accept, for follow-up testing, specimens from persons meeting the clinical and epidemiologic indications but testing negative on the rapid tests when PCR assay was not available. Requests for testing by CDC should come through local and state health departments, which should contact CDC's Emergency Operations Center, telephone 770-488-7100.

Reported by: *CDC/WHO Avian Influenza Response Team.*

Editorial Note: Since 1997, human infection with avian influenza viruses has been confirmed on five occasions§. The ability of avian viruses to transmit from person to person appears limited. Rare person-to-person infection was noted in the A (H5N1) outbreak in Hong Kong in 1997 (*3,4*) and in the A (H7N7) outbreak in the Netherlands in 2003 (*5*), but these secondary cases did not result in sustained chains of transmission or communitywide outbreaks. These previous experiences with avian influenza viruses suggest that limited person-to-person transmission of the current H5N1 viruses could occur.

The majority of the human H5N1 cases are apparently associated with direct exposure to infected birds or to surfaces contaminated with excretions from infected birds. The family respiratory illness cluster in Vietnam suggests the possibility of limited person-to-person transmission. However, other possibilities (e.g., transmission through exposure to surfaces contaminated by H5N1-infected poultry feces) cannot be ruled out. Although no evidence for sustained person-to-person transmission of influenza A (H5N1) has been identified, influenza viruses have the capacity to change quickly. Continued monitoring for new transmission patterns is an important aspect of the current investigation.

In 1997, the influenza A (H5N1) outbreak among persons in Hong Kong ended abruptly after the culling of poultry. However, the current outbreaks present challenges because of the large geographic areas and numbers of affected poultry. Asian poultry populations are maintained both on large commercial farms and in backyard flocks. In addition, infections among wild bird populations might be extensive, and the resources to address this problem are limited in certain affected countries. Because of increasing evidence that avian influenza viruses infect humans, persons involved in the slaughter of poultry potentially infected with avian influenza viruses or their contaminated environments should follow WHO recommendations for worker protection¶.

Because the influenza A (H5N1) virus could develop the ability to maintain sustained person-to-person transmission, WHO collaborating centers are working to coordinate vaccine development. Efforts are under way in the United Kingdom and the United States to develop influenza A (H5N1) reference viruses for use in vaccine preparation. The minimum estimated time necessary to complete reference virus development and safety testing is 3 months. Production by vaccine manufacturers of pilot lots of vaccine for clinical test-

* Available at http://www.oie.int/eng/en_index.htm.

† These protocols are available to public health laboratories and have been posted, under SARS (password required), by the Association of Public Health Laboratories at http://www.aphl.org/members_only/index.cfm.

§ Influenza A (H5N1) in Hong Kong in 1997 and 2003, influenza A (H9N2) in Hong Kong in 1999 and 2003, and influenza A (H7N7) in the Netherlands in 2003.

¶ Available at http://www.wpro.who.int/avian/docs/recommendations.asp.

ing can begin only after reference virus development and safety testing have been completed. Decisions on whether to proceed with vaccine manufacture will depend, in part, on the evolution of the current outbreaks.

On February 4, CDC issued an order for an immediate ban** on the import of all birds from Cambodia, China (including Hong Kong), Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam. Birds from these affected countries potentially can infect humans with influenza A (H5N1). This order complements a similar action taken by the U.S. Department of Agriculture (USDA).

CDC advises that travelers to countries in Asia with documented H5N1 outbreaks should avoid poultry farms, contact with animals in live food markets, and any surfaces that appear to be contaminated with feces from poultry or other animals. More information on travel is available from CDC at http://www.cdc.gov/travel. Additional information on influenza viruses and avian influenza is available from CDC at http://www.cdc.gov/flu. Updated information on human infections is available from WHO at http://www.who.int/en.

**Additional information on the embargo is available at http://www.cdc.gov/flu/avian/embargo.htm.

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Cases of Influenza A (H5N1) — Thailand, 2004

Since mid-December 2003, eight Asian countries (Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam) have reported an epizootic of highly pathogenic avian influenza in poultry and various other birds caused by influenza A (H5N1). As of February 9, 2004, a total of 23 laboratory-confirmed human cases of influenza A (H5N1) had been reported in Thailand and Vietnam. In 18 (78%) of these cases, the patients died. Clinical experience with avian H5N1 disease in humans is limited (*1*). The human H5N1 viruses identified in Asia in 2004 are antigenically and genetically distinguishable from the 1997 and February 2003 viruses. To aid surveillance and clinical activities, this report provides a preliminary clinical description of the initial five confirmed cases in Thailand.

Of the five laboratory-confirmed cases in Thailand, four were in male children aged 6–7 years, and one was in a female aged 58 years; all patients were previously healthy (Table). Four patients reported deaths in poultry owned by the patient's family, and two patients reported touching an infected chicken. One patient had infected chickens in his neighborhood and was reported to have played near a chicken cage. None of the confirmed cases occurred among persons involved in the mass culling of chickens.

Patients reported to hospitals 2–6 days after onset of fever and cough (Table). Other early symptoms included sore throat (four), rhinorrhea (two), and myalgia (two). Shortness of breath was reported in all patients 1–5 days after symptom onset. On admission, clinically apparent pneumonia with chest radiograph changes was observed in all patients, with patchy infiltrates in four and interstitial infiltrates in one. Diarrhea and vomiting were not reported. Peripheral leukocytes were normal or decreased, and four patients had lymphopenia (<1,000/μL). Mild-to-moderate elevations in hepatic transaminases were found in four patients.

All patients had respiratory failure and required intubation a median of 7 days (range: 4–10 days) after onset of illness. Two patients had a pneumothorax. Three patients required inotropic support for decreased cardiac function; two patients had renal impairment as a later manifestation. None had documented evidence of secondary bacterial infection.

Late in the course of illness, three patients were treated with oseltamivir for 3–5 days. All received empiric broad-spectrum antibiotics for community-acquired pneumonia while the cause of illness was under investigation. Four were treated with systemic steroids for increasing respiratory distress and clinically diagnosed acute respiratory distress syndrome (ARDS) with compatible chest radiograph changes.

Three children died 2–4 weeks after symptom onset, and one child and the adult died 8 days after symptom onset. All patients had laboratory evidence of influenza A (H5N1) by reverse transcriptase–polymerase chain reaction. In three cases, the virus was isolated in tissue culture, and in three cases, the viral antigens were identified by immunofluorescent assay.

Reported by: *T Chotpitayasunondh, S Lochindarat, P Srisan, Queen Sirikit National Institute of Child Health; K Chokepaibulkit, Faculty of Medicine, Siriraj Hospital, Mahidol Univ, Bangkok; J Weerakul, Buddhachinaraj Hospital, Phitsanulok; M Maneerattanaporn, 17th*

up-to-the-minute: *adj*

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

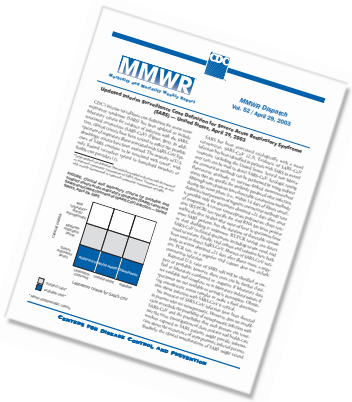

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TABLE. Clinical features, treatment, and outcomes in five patients with laboratory-confirmed influenza A (H5N1), by sex and age of patient — Thailand, 2004

Sex	Age (yrs)	Signs and symptoms on admission*	Subsequent complications	Initial investigative findings	Treatment and outcome
Male	7	Fever, cough, sore throat for 6 days. Dyspnea on day 6; CXR† bilateral interstitial infiltrates.	Respiratory failure on day 10; cardiac failure, pneumothorax, ARDS§, gastrointestinal bleeding.	Leukocytes: 4,100/μL Lymphocytes: 1,440/μL Platelets: 304,000/μL AST¶: 120, ALT**: 52	Oseltamivir on days 18–22. Died on day 29.
Male	6	Fever, cough, rhinorrhea for 5 days. Dyspnea on day 6; CXR patchy infiltrates in right lower lobe.	Respiratory failure on day 8; hepatitis, ARDS.	Leukocytes: 1,200/μL Lymphocytes: 624 /μL Platelets: 89,000/μL AST: 790, ALT: 150 Proteinuria: ≥3	Oseltamivir on days 18–20. Died on day 20.
Male	6	Fever, cough, rhinorrhea, sore throat for 4 days. Dyspnea on day 5; CXR multifocal patchy infiltrates.	Respiratory failure on day 6; pneumothorax, ARDS.	Leukocytes: 2,200/μL Lymphocytes: 638/μL Platelets: 150,000/μL AST: 175, ALT: 43	Died on day 18.
Female	58	Fever, cough, sore throat, myalgia for 2 days. Dyspnea on day 2; CXR multifocal patchy infiltrates.	Respiratory failure on day 4; cardiac failure, renal failure, ARDS.	Leukocytes: 5,680/μL Lymphocytes: 454/μL Platelets: 185,000/μL BUN††: 39 mg/dL Creatinine: 2.3 mg/dL	Died on day 8.
Male	6	Fever, cough, sore throat, myalgia for 4 days. Dyspnea on day 5; CXR multifocal patchy infiltrates.	Respiratory failure on day 5; cardiac failure, renal failure, ARDS.	Leukocytes: 2,900/μL Lymphocytes: 696/μL Platelets: 87,000/μL AST: 280, ALT: 50 BUN: 54 mg/dL Creatinine: 4.6 mg/dL	Oseltamivir on days 5–8. Died on day 8.

* No patients had an underlying illness reported.
† Chest radiograph.
§ Acute respiratory distress syndrome.
¶ Aspartate aminotransferase.
** Alanine aminotransferase.
†† Blood urea nitrogen.

Somdejprasangkaraj Hospital, Suphanburi; P Sawanpanyalert, Dept of Medical Sciences, Ministry of Public Health, Thailand. World Health Organization, Thailand. CDC International Emerging Infections Program, Thailand.

Editorial Note: The 1997 outbreak of influenza A (H5N1) in Hong Kong established that highly pathogenic avian influenza viruses can infect humans directly, with resulting illness that was fatal in six (33%) of 18 patients. The viruses were not transmitted efficiently from person to person, and human infections stopped after the culling of poultry (*2*). The 2003–2004 avian outbreak is more widespread, with poultry disease reported across much of east and southeast Asia. Direct infection of humans with H5N1 viruses has been confirmed in Thailand and Vietnam. However, no evidence of sustained person-to-person transmission has been identified.

Despite the antigenic and genetic differences in the H5N1 viruses causing the current Asian outbreaks, certain clinical features of the five human cases described in this report are similar to those of severely affected patients from the 1997 outbreak in Hong Kong (*3*). In all five cases, disease was severe, with pneumonia progressing to respiratory failure and death. Early distinguishing features included fever, sore throat, cough, and lymphopenia. Other organ involvement included mild-to-moderate hepatitis and later cardiac and renal impairment. In contrast with the cases reported from Hong Kong, gastrointestinal symptoms were not prominent features.

Because of the severity of disease and the concern for the safety of health-care personnel, the Ministry of Public Health in Thailand recommends that hospitalized patients with suspected avian influenza be cared for by using precautions to minimize the risk for airborne transmission. Broad-spectrum antibacterial drugs should be used as empiric treatment for the major causes of pneumonia (e.g., *Streptococcus pneumoniae*), including possible superinfection with *Staphylococcus aureus*. Testing of a limited number of human isolates demonstrates resistance to amantadine and rimantadine (*4*). For this reason, treatment with neuraminidase inhibitors should be initiated early. The effectiveness of antiviral drugs against H5N1 infections and the period after which these drugs will provide little or no benefit is not known. A more detailed understanding of the pathogenesis is needed to direct therapeutic approaches such as the use of immunomodulating drugs.

Updated recommendations for hospital infection control and treatment are available from the World Health Organization at http://www.who.int/csr/disease/avian_influenza/en.

The epidemiology of influenza A (H5N1) in Thailand and neighboring countries remains incompletely described, but the confirmed human infections have occurred in geographic areas with recognized avian disease, and two patients reported direct physical contact with ill or dead chickens. Of the five laboratory-confirmed cases in Thailand, four were in boys aged 6–7 years, which suggests that boys in this age group might be subject to particular high-risk exposures. Case-control studies in Thailand and Vietnam should help define specific risk factors for infection and allow for the development of evidence-based public health interventions.

Control of highly pathogenic avian influenza should include surveillance for affected flocks, aggressive culling on the basis of international guidelines to eradicate foci of infection, careful protection of cullers through the use of personal protective equipment, and use of the currently licensed human trivalent influenza vaccine to reduce the risk for co-infection in poultry workers and cullers, which might lead to genetic reassortment of avian and human influenza viruses (*2,3*). In recent weeks, Thailand has moved aggressively to 1) identify geographic areas with confirmed H5N1 disease in poultry (e.g., cull-affected flocks and flocks within a 5-kilometer radius), 2) establish controls on the transport of poultry and poultry products out of affected areas, and 3) promote safe food-handling practices.

Clinicians should be aware of the clinical features of the current human influenza A (H5N1) disease and the potential risk factors for infection so that health-care workers are protected and patients can be identified quickly and managed appropriately. Interim U.S. recommendations for infection-control precautions and the diagnostic evaluation of persons with specific epidemiologic and clinical criteria have been developed (*4*). Additional information is available from CDC at http://www.cdc.gov/flu/avian/index.htm.

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Secondary and Tertiary Transfer of Vaccinia Virus Among U.S. Military Personnel — United States and Worldwide, 2002–2004

In December 2002, the Department of Defense (DoD) began vaccinating military personnel as part of the pre-event vaccination program (*1*). Because vaccinia virus is present on the skin at the site of vaccination, it can spread to other parts of the body (i.e., autoinoculation) or to contacts of vaccinees (i.e., contact transfer). To prevent autoinoculation and contact transfer, DoD gave vaccinees printed information that focused on hand washing, covering the vaccination site, and limiting contact with infants (*1,2*). This report describes cases of contact transfer of vaccinia virus among vaccinated military personnel since December 2002; findings indicate that contact transfer of vaccinia virus is rare. Continued efforts are needed to educate vaccinees about the importance of proper vaccination-site care in preventing contact transmission, especially in household settings.

DoD conducts surveillance for vaccine-associated adverse events by using automated immunization registries, military communication channels, and the Vaccine Adverse Events Reporting System (VAERS). Contact transfer cases are defined as those in which vaccinia virus is confirmed by viral culture or polymerase chain reaction (PCR) assays. Other cases are classified as suspected on the basis of lesion description and reported linkage to a vaccinated person 3–9 days before lesion development.

During December 2002–January 2004, a total of 578,286 military personnel were vaccinated; 508,546 (88%) were male, and 407,923 (71%) were primary vaccinees (i.e., received smallpox vaccination for the first time). The median age of vaccinees was 29 years (range: 17–76 years). Among vaccinees, cases of suspected contact transfer of vaccinia were identified among 30 persons: 12 spouses, eight adult intimate contacts, eight adult friends, and two children in the same household. These cases were reported from Colorado (four), North Carolina (four), Texas (four), Alaska (two), California (two), Connecticut (one), Kansas (one), New Jersey (one), Ohio (one), South Carolina (one), Washington state (one), West Virginia (one), and overseas (seven). The sources of suspected contact transfer were all male service members who were primary vaccinees. Except for six male sports partners, all infected contacts were female.

Vaccinia virus was confirmed in 18 (60%) of the 30 cases by viral culture or PCR. Sixteen (89%) of the 18 confirmed cases involved uncomplicated infections of the skin; two (11%) involved the eye (*3*). None resulted in eczema vaccinatum or

progressive vaccinia. Twelve (67%) of the 18 confirmed cases were among spouses or adult intimate contacts. The observed rate of contact transfer was 5.2 per 100,000 vaccinees overall or 7.4 per 100,000 primary vaccinees. Among 27,700 smallpox-vaccinated DoD health-care workers, no transmission of vaccinia from a vaccinated health-care worker to an unvaccinated patient or from a vaccinated patient to an unvaccinated health-care worker has been identified.

Two (11%) of the 18 confirmed cases of transfer of vaccinia virus resulted from tertiary transfer. One involved a service member, his wife, and their breastfed infant; the other involved serial transmission among male sports partners.

Case Reports

Case 1. In early May 2003, a service member received his primary smallpox vaccination. Approximately 6–8 days after vaccination, he experienced a major reaction (i.e., an event that indicates a successful take; is characterized by a papule, vesicle, ulcer, or crusted lesion, surrounded by an area of induration; and usually results in a scar) (*4*). The vaccinee reported no substantial pruritus. He slept in the same bed as his wife and kept the vaccination site covered with bandages. After bathing, he reportedly dried the vaccination site with tissue, which he discarded into a trash receptacle. He also used separate towels to dry himself, rolled them so the area that dried his arm was inside, and placed them in a laundry container. His wife handled bed linen, soiled clothing, and towels; she reported that she did not see any obvious drainage on clothing or linen and had no direct contact with the vaccination site.

In mid-May, the wife had vesicular skin lesions on each breast near the areola but continued to breastfeed. Approximately 2 weeks later, she was examined at a local hospital, treated for mastitis, and continued to breastfeed. The same day, the infant had a vesicular lesion on the upper lip, followed by another lesion on the left cheek (*5*). Three days later, the infant was examined by a pediatrician, when another lesion was noted on her tongue. Because of possible early atopic dermatitis lesions on the infant's cheeks, contact vaccinia infection with increased risk for eczema vaccinatum was considered. The infant was transferred to a military referral medical center for further evaluation. On examination, the infant had seborrheic dermatitis and no ocular involvement. Skin lesion specimens from the mother and infant tested positive for vaccinia by viral culture and PCR at the Alaska Health Department Laboratory and at Madigan Army Medical Center. Because both patients were stable clinically and the lesions were healing without risk for more serious complications, vaccinia immune globulin was not administered. Neither patient had systemic complications from the infection.

Case 2. In July 2003, a service member who had been vaccinated was wrestling with an unvaccinated service member at a military recreational function when the bandages covering the vaccination site fell off. The unvaccinated service member subsequently wrestled with another unvaccinated service member. Six days later, both unvaccinated service members had lesions on their forearms, neck, and face. Skin lesion specimens from both men tested positive for vaccinia virus by PCR and viral culture at Tripler Army Medical Center's microbiology laboratory.

Reported by: *TW Barkdoll, MD, Okinawa, Japan. RB Cabiad, Fort Richardson; MS Tankersley, MD, JL Adkins, MD, Elmendorf Air Force Base; B Jilly, PhD, G Herriford, Alaska Public Health Laboratory. AC Whelen, PhD, CA Bell, PhD, Tripler Army Medical Center, Honolulu, Hawaii. MP Fairchok, MD, LC Raynor, MD, VA Garde, MD, VM Rothmeyer, SD Mahlen, PhD, Madigan Army Medical Center, Fort Lewis, Washington. RJ Engler, MD, LC Collins, MD, LL Duran, Vaccine Healthcare Center Network, Walter Reed Army Medical Center; MT Huynh, MD, RD Bradshaw, MD, Bolling Air Force Base, Washington, DC. JD Grabenstein, PhD, Military Vaccine Agency, U.S. Dept of Defense.*

Editorial Note: The findings in this report indicate that the primary risk for secondary transfer of vaccinia was among persons who shared a bed; 12 of the 18 confirmed cases were spouses or adult intimate contacts. However, the majority of vaccinated DoD personnel who shared a bed did not transfer vaccinia virus to their contacts. The frequency of contact transfer in the military vaccination program is comparable to rates observed during the 1960s, although persons are less likely to be immune to vaccinia today and thus are more susceptible to contact transfer (*1*).

The first case of tertiary transfer described in this report underscores the need for breastfeeding mothers with household contact with vaccinees to take precautions to prevent inadvertent transmission of vaccinia to their infants. Direct contact is presumed to be the major mode of transmission, but clothing and bed linen might act as vectors for secondary transmission. Tertiary transmission, although rare, is facilitated when the secondary infection is not recognized.

Programs that educate health-care workers, vaccinees, and contacts should note that new vesicles or pustules that appear <15 days after the vaccinia scab falls off from the vaccination site might be vaccinia infections. Although an infant living in the home is not a contraindication to vaccination of a family member in a nonoutbreak setting, measures to prevent transmission include having vaccinees launder their own linens and towels and change their bandages away from other household members.

During the 1960s, the rate of unintentional infection with vaccinia in secondary contacts was two to six cases per 100,000 primary vaccinees (*4,6,7*). During that period, two thirds of reported contact infections occurred among children, typically siblings. Such spread could manifest as an inadvertent infection or, in more severe fashion, as eczema vaccinatum or progressive vaccinia. Infections of the skin predominated, with rarer ocular involvement posing a risk for scarring or keratitis. In the current DoD smallpox vaccination program, no cases of eczema vaccinatum have occurred, although the population of atopic dermatitis patients might have increased substantially since the 1960s (*8*). During the 1960s, eczema vaccinatum resulted in deaths, and two thirds of such cases were related to contact transfer of vaccinia virus (*6*). In the current DoD smallpox vaccination program, careful screening of DoD vaccinees and their household contacts for skin diseases along with targeted education likely contributed to both screening out vaccine candidates with personal or close-contact contraindications and educating vaccinees about proper infection-control measures.

Health-care workers and the public should report suspected cases of contact transfer of vaccinia virus to their state or local health departments and to VAERS at http://www.vaers.org, or by telephone 800-822-7967. Viral culture or PCR assays, important for confirming vaccinia virus, are available from the majority of state public health laboratories.

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

During January 24–December 31, 2003, smallpox vaccine was administered to 39,213 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) during August 9–December 31.

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 (*3*).

Adverse events 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 December 31 that are either under investigation or have a reported final diagnosis.

During August 9–December 31, no new cases of selected adverse events were reported (Table 1). During the vaccination program, no cases of eczema vaccinatum, erythema multiforme major, fetal vaccinia, or progressive vaccinia have been reported.

During August 9–December 31, a total of 20 other serious adverse events were reported (Table 2). Also during this period, 59 other nonserious events were reported. Among the 712 vaccinees with reported other nonserious adverse events during January 24–December 31 (Table 2), the most common signs and symptoms were rash (n = 142), fever (n = 135), pain (n = 122), headache (n = 111), and fatigue (n = 97). All of these commonly reported events are consistent with mild expected reactions following receipt of smallpox vaccine. Some vaccinees reported multiple signs and symptoms.

TABLE 1. Number of cases* of selected adverse events associated with smallpox vaccination among civilians, by type — United States, January 24–December 31, 2003

	No. new cases (August 9–December 31)			Total no. cases (January 24–December 31)		
Adverse events	Suspected†	Probable§	Confirmed¶	Suspected	Probable	Confirmed
Eczema vaccinatum	—**	—	—	—	—	—
Fetal vaccinia	—	—	—	—	—	—
Generalized vaccinia	—	—	—	2	—	1
Inadvertent inoculation, nonocular	—	—	—	11	—	9
Ocular vaccinia	—	—	—	1	—	2
Progressive vaccinia	—	—	—	—	—	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—	—	—	—	—
Myo/pericarditis	—	—	—	16	5	—
Postvaccinial encephalitis or encephalomyelitis	—	—	—	1	—	—
Pyogenic infection of vaccination site	—	—	—	—	—	—

* Under investigation or completed as of December 31, 2003; numbers and classifications of adverse events will be updated regularly on CDC's website at http://www.cdc.gov/od/oc/media/spadverse.htm.
† 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 excluded and supportive information for the diagnosis 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.

TABLE 2. Number of cases* of other adverse events reported after smallpox vaccination among civilians, by severity — United States, January 24–December 31, 2003

Adverse events	No. new cases (August 9–December 31)	Total no. cases (January 24–December 31)
Other serious adverse events†	20§	**97**
Other nonserious adverse events¶	59	**712**

* Under investigation or completed as of December 31, 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.
§ Include nine cases of chest pain, two cases of myocardial infarction, two cases of unspecfied neurologic disorder, and one case each of angina, dilated cardiomyopathy, Parkinson's disease, lymphoma, appendicitis, seizure, and cellulitis secondary to trauma.
¶ 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.

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). Surveillance for adverse events during the civilian and military smallpox vaccination programs is ongoing.

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

TABLE 3. Vaccinia immune globulin release and vaccinia transmission to contacts — United States, January 24–December 31, 2003

Event	No. new cases (August 9–December 31)	Total no. cases (January 24–December 31)
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. Sixteen 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).

References

1. CDC. Smallpox vaccine adverse events monitoring and response system for the first stage of the smallpox vaccination program. MMWR 2003;52:88–9, 99.
2. CDC. Update: adverse events following civilian smallpox vaccination—United States, 2003. MMWR 2003;52:819–20.
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Brief Report

Global Polio Eradication Initiative Strategic Plan, 2004

Since the 1988 World Health Assembly resolution to eradicate poliomyelitis (*1*), the number of polio-endemic countries has decreased from 125 in 1988 to six in 2003 (i.e., Afghanistan, Egypt, India, Niger, Nigeria, and Pakistan), and the number of cases reported worldwide has decreased from approximately 350,000 to 682. In 2003, approximately 90% of cases were reported from Nigeria (305), India (220), and Pakistan (99); epidemiologic and virologic data demonstrated focal endemic transmission in Afghanistan and Niger, with repeated importations from Pakistan and Nigeria, respectively, and localized transmission in Egypt. On January 15, 2004, the World Health Organization (WHO) released an updated Global Polio Eradication Initiative Strategic Plan outlining activities required to 1) interrupt poliovirus transmission globally, 2) achieve global certification of polio eradication, and 3) prepare for global cessation of childhood vaccination with oral poliovirus vaccine (OPV) (*2*). The discontinuation of mass vaccination campaigns in the majority of polio-free countries has left these areas vulnerable to importations of wild poliovirus (WPV) from the remaining countries in which polio is endemic. For polio to be eradicated, all remaining poliovirus reservoirs must be eliminated.

Objective 1 details the immunization and surveillance activities required to interrupt transmission in the remaining countries where polio is endemic. During 2004, supplementary immunization activities (SIAs) in India, Nigeria, and Pakistan will be intensified. The suspension in 2003 of OPV campaigns in the highly polio-endemic areas of northern Nigeria led to a marked increase in the number of reported cases from that country, resulting in WPV transmission in previously polio-free areas within Nigeria and importation of WPV into at least six neighboring countries. For polio to be eradicated, all children aged <5 years in Nigeria, the other five countries in which polio also is endemic, and those countries with imported cases must be vaccinated during intensified SIAs in 2004.

Objectives 2 and 3 outline activities for certifying the world polio-free and preparing for the cessation of use of OPV. Objective 2 focuses on improving surveillance quality (especially in the 19 countries that have not achieved certification-standard surveillance), reversing declines in surveillance sensitivity in the WHO regions that have been certified polio-free, and working to complete WPV laboratory containment. Objective 3 outlines the development of policies for the postcertification era, including detection and notification of circulating polioviruses as public health emergencies, long-term

containment of all poliovirus strains, polio vaccine stockpiles and outbreak response mechanisms, and routine vaccination.

Objective 4 outlines how to incorporate the human resources, physical infrastructure, and institutional arrangements that have been established for polio eradication into other disease-control programs and recommends that those polio-eradication activities that must be continued indefinitely (i.e., surveillance, vaccine stockpiles, and laboratory containment) be undertaken by existing national, WHO, and United Nations Children's Fund (UNICEF) programs.

More information about the Global Polio Eradication Initiative is available from CDC at http://www.cdc.gov/nip/global/stopteam/backgrd.htm. Copies of the Global Polio Eradication Initiative Strategic Plan are available from WHO, e-mail, polioepi@who.int or at http://www.polioeradication/all/news/document.asp.

Reported by: *Polio Eradication Initiative/Office of the Director-General and Dept of Immunization, Vaccines and Biologicals/Family and Community Health, World Health Organization, Geneva, Switzerland. United Nations Children's Fund, New York, New York. Rotary International, Evanston, Illinois. Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Global Immunization Div, National Immunization Program, CDC.*

References

1. World Health Assembly. Global eradication of poliomyelitis by the year 2000: resolution of the 41st World Health Assembly. Geneva, Switzerland: World Health Organization, 1988 (WHA resolution no. 41.28).
2. Polio Eradication Initiative, Office of the Director-General and Department of Immunization, Vaccines and Biologicals, Family and Community Health. The Global Polio Eradication Initiative Strategic Plan 2004–2008. Geneva, Switzerland: World Health Organization, 2004.

Notice to Readers

Limited Supply of Pneumococcal Conjugate Vaccine: Suspension of Recommendation for Fourth Dose

In December 2003, CDC reported that Wyeth Vaccines, the only U.S. supplier of 7-valent pneumococcal conjugate vaccine (PCV7, marketed as Prevnar®), was experiencing production constraints that could cause delays in shipments and was implementing an allocation plan to ensure the equitable distribution of available vaccine (*1*). In February 2004, Wyeth advised CDC that production constraints had not been resolved and that supplies will remain limited at least through July 2004. Until full production capacity is resumed, local shortages might occur. Effective immediately, CDC recom-

mends that health-care providers temporarily suspend routine use of the fourth dose of PCV7 to conserve vaccine and minimize the likelihood of shortages.

PCV7 is a highly effective vaccine. In October 2000, a primary series of three PCV7 injections and one booster was recommended for all children (*2*). In 2001, the incidence of invasive pneumococcal disease among children aged <2 years was 69% less than during 1998–1999, before the recommendation (*3*). Preliminary data from CDC's Active Bacterial Core Surveillance program indicate that effectiveness, at least for the short term, is not compromised by delaying administration of the fourth dose. A case-control study comparing the effectiveness of a 3-dose series with a 4-dose series found that 3 doses were 90% effective (95% confidence interval [CI] = 74%–96%) against invasive disease caused by serotypes represented in the vaccine, whereas 4 doses were 96% effective (95% CI = 68%–100%); this difference was not statistically significant.

Because precise allocation of PCV7 is difficult, spot shortages are inevitable when supplies are limited. To ensure that every child can be protected against pneumococcal disease despite the limited supply, and on the basis of the short-term effectiveness of the 3-dose primary series of PCV7 at ages 2, 4, and 6 months, CDC, in consultation with the American Academy of Family Physicians, the American Academy of Pediatrics, and the Advisory Committee on Immunization Practices, recommends that all health-care providers, regardless of the amount of PCV7 in their inventories, help conserve the national PCV7 supply by temporarily discontinuing administration of the fourth dose of PCV7 for healthy children. Health-care providers should continue to administer the fourth dose to children at increased risk for severe disease*. Children whose booster dose is deferred should receive PCV7 on their first visit after supplies are restored. If all health-care providers comply with this temporary recommendation, >1 million doses will be conserved by July 2004, making widespread or prolonged disruptions in vaccination services less likely.

This recommendation reflects CDC's assessment of the existing national PCV7 supply and may be changed if the supply changes. Updated information about vaccine supplies is available from CDC at http://www.cdc.gov/nip/news/shortages.

*Includes children with sickle cell disease and other hemoglobinopathies, anatomic asplenia, chronic diseases (e.g., chronic cardiac and pulmonary disease and diabetes), cerebrospinal fluid leak, human immunodeficiency virus infection and other immunocompromising conditions, immunosuppressive chemotherapy or long-term systemic corticosteroid use; children who have undergone solid organ transplantation (*2*); and children who either have received or will receive cochlear implants (*4*). All these children have been identified as being at either "high risk" or "presumed high risk" for severe invasive pneumoccocal disease (*5*).

References

1. CDC. Limited supply of pneumococcal conjugate vaccine. MMWR 2003;52:1234.
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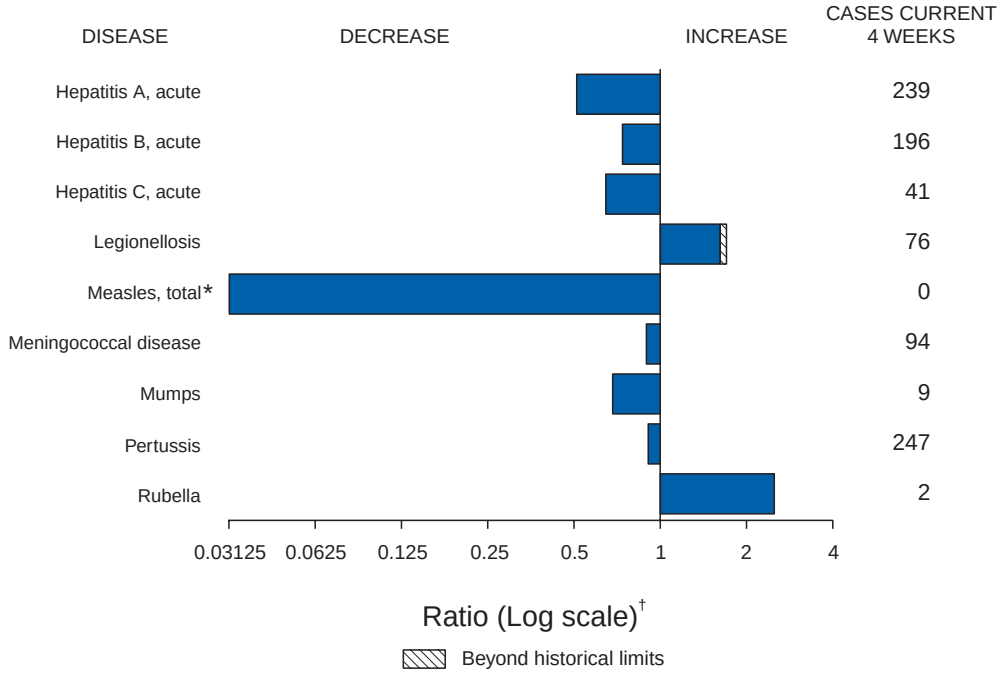
4. CDC. Pneumococcal vaccination for cochlear implant candidates and recipients: updated recommendations of the Advisory Committee on Immunization Practices. MMWR 2003;52:739–40.
5. American Academy of Pediatrics. Table 3.43. In: Pickering LK, ed. 2003 Red Book: Report of the Committee on Infectious Diseases, 26th ed. Elk Grove Village, Illinois: American Academy of Pediatrics, 2003.

Erratum: Vol. 53, No. 4

In the report, "Child Passenger Deaths Involving Drinking Drivers—United States, 1997–2002," on page 77 in the third sentence of the first paragraph, the number of children who died in alcohol-related crashes was incorrect. The correct number is 2,335.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals February 7, 2004, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 5 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 February 7, 2004 (5th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	4	15
Botulism:	-	-	HIV infection, pediatric†§	-	27
foodborne	2	1	Measles, total	2¶	-
infant	5	9	Mumps	15	25
other (wound & unspecified	2	1	Plague	-	-
Brucellosis†	4	18	Poliomyelitis, paralytic	-	-
Chancroid	3	2	Psittacosis†	-	5
Cholera	1	-	Q fever†	1	12
Cyclosporiasis†	2	17	Rabies, human	-	-
Diphtheria	-	-	Rubella	2	-
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	-
human granulocytic (HGE)†	3	10	SARS-associated coronavirus disease† **	-	-
human monocytic (HME)†	3	16	Smallpox† ††	-	NA
human, other and unspecified	-	1	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† ††	2	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† ††	-	NA
eastern equine†	-	2	Streptococcal toxic-shock syndrome†	12	19
Powassan†	-	-	Tetanus	-	4
St. Louis†	-	2	Toxic-shock syndrome	8	4
western equine†	-	-	Trichinosis	1	-
Hansen disease (leprosy)†	3	16	Tularemia†	2	3
Hantavirus pulmonary syndrome†	2	4	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 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 December 28, 2003.
¶ Of two cases reported, one was indigenous, and one was imported from another country.
** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
†† Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 7, 2004, and February 1, 2003 (5th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2004§	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	-	5,274	57,460	74,252	105	346	161	280	2	57
NEW ENGLAND	-	192	2,163	2,587	-	-	5	10	-	-
Maine	-	-	102	167	N	N	2	-	-	-
N.H.	-	3	-	147	-	-	-	-	-	-
Vt.	-	5	71	94	-	-	2	1	-	-
Mass.	-	111	1,408	933	-	-	1	7	-	-
R.I.	-	16	429	269	-	-	-	1	-	-
Conn.	-	57	153	977	N	N	-	1	-	-
MID. ATLANTIC	-	1,541	7,664	9,402	-	-	21	21	1	-
Upstate N.Y.	-	77	1,371	922	N	N	7	3	-	-
N.Y. City	-	942	2,757	3,001	-	-	2	10	-	-
N.J.	-	170	1,125	1,548	-	-	1	1	-	-
Pa.	-	352	2,411	3,931	N	N	11	7	1	-
E.N. CENTRAL	-	632	8,945	14,792	-	1	32	34	-	-
Ohio	-	95	483	3,764	-	-	15	7	-	-
Ind.	-	84	1,429	1,755	N	N	2	-	-	-
Ill.	-	290	2,301	4,983	-	-	-	8	-	-
Mich.	-	143	3,954	2,636	-	1	10	4	-	-
Wis.	-	20	778	1,654	-	-	5	15	-	-
W.N. CENTRAL	-	60	3,139	4,126	-	-	14	9	-	-
Minn.	-	9	192	1,024	N	N	2	4	-	-
Iowa	-	17	-	269	N	N	1	2	-	-
Mo.	-	25	1,620	1,565	-	-	3	1	-	-
N. Dak.	-	-	90	63	N	N	-	-	-	-
S. Dak.	-	1	249	204	-	-	4	2	-	-
Nebr.¶	-	-	444	270	-	-	-	-	-	-
Kans.	-	8	544	731	N	N	4	-	-	-
S. ATLANTIC	-	1,118	9,219	12,093	-	-	36	143	1	57
Del.	-	30	263	293	N	N	-	1	-	-
Md.	-	103	1,633	1,532	-	-	2	3	-	-
D.C.	-	179	202	348	-	-	-	-	-	-
Va.	-	176	992	1,327	-	-	3	-	-	-
W. Va.	-	6	275	230	N	N	-	-	-	-
N.C.	-	123	1,951	2,120	N	N	10	2	-	-
S.C.¶	-	45	893	973	-	-	-	1	-	-
Ga.	-	309	280	1,908	-	-	8	7	-	-
Fla.	-	147	2,730	3,362	N	N	13	129	1	57
E.S. CENTRAL	-	80	3,873	4,909	N	N	11	10	-	-
Ky.	-	28	509	694	N	N	3	1	-	-
Tenn.	-	21	1,681	1,456	N	N	5	4	-	-
Ala.	-	12	1,268	1,376	-	-	2	4	-	-
Miss.	-	19	415	1,383	N	N	1	1	-	-
W.S. CENTRAL	-	698	10,178	9,386	-	-	8	4	-	-
Ark.	-	14	635	551	-	-	5	1	-	-
La.	-	15	3,221	1,564	N	N	-	-	-	-
Okla.	-	16	622	645	N	N	2	-	-	-
Tex.	-	653	5,700	6,626	-	-	1	3	-	-
MOUNTAIN	-	204	2,699	4,566	3	286	5	6	-	-
Mont.	-	7	26	128	N	N	-	-	-	-
Idaho	-	1	120	151	N	N	-	3	-	-
Wyo.	-	1	96	104	-	-	1	-	-	-
Colo.	-	23	200	1,228	N	N	4	2	-	-
N. Mex.	-	14	31	638	-	-	-	-	-	-
Ariz.	-	112	2,134	1,587	-	282	-	1	-	-
Utah	-	6	92	191	3	1	-	-	-	-
Nev.	-	40	-	539	-	3	-	-	-	-
PACIFIC	-	749	9,580	12,391	102	59	29	43	-	-
Wash.	-	72	1,444	1,313	N	N	-	-	-	-
Oreg.	-	47	676	414	-	-	3	2	-	-
Calif.	-	618	7,197	9,852	102	59	26	41	-	-
Alaska	-	6	252	305	-	-	-	-	-	-
Hawaii	-	6	11	507	-	-	-	-	-	-
Guam	-	1	-	-	-	-	-	-	-	-
P.R.	-	145	135	24	N	N	N	N	-	-
V.I.	-	2	-	30	-	-	-	-	-	-
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. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2003 and 2004 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 December 28, 2003.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 7, 2004, and February 1, 2003 (5th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	72	130	11	37	9	15	961	2,429	21,200	30,547
NEW ENGLAND	2	6	1	-	1	1	57	75	490	760
Maine	-	-	-	-	-	-	12	10	17	13
N.H.	-	-	-	-	-	-	-	4	-	11
Vt.	-	-	-	-	-	-	5	7	4	11
Mass.	-	3	-	-	1	1	37	53	325	271
R.I.	-	-	-	-	-	-	3	1	98	105
Conn.	2	3	1	-	-	-	-	-	46	349
MID. ATLANTIC	6	12	-	-	1	2	198	273	2,689	4,191
Upstate N.Y.	1	2	-	-	-	-	47	32	559	477
N.Y. City	2	1	-	-	-	-	53	116	922	1,291
N.J.	-	3	-	-	1	-	18	42	452	1,026
Pa.	3	6	-	-	-	2	80	83	756	1,397
E.N. CENTRAL	18	24	2	2	1	1	143	278	3,460	7,020
Ohio	10	4	-	-	1	1	82	95	248	2,104
Ind.	2	-	-	-	-	-	-	-	565	677
Ill.	1	5	-	-	-	-	13	83	892	2,318
Mich.	5	6	-	-	-	-	43	68	1,539	1,312
Wis.	-	9	2	2	-	-	5	32	216	609
W.N. CENTRAL	11	12	3	2	6	1	79	130	1,077	1,548
Minn.	3	6	-	2	-	-	21	6	83	304
Iowa	-	1	-	-	-	-	20	28	-	39
Mo.	5	2	3	-	1	-	21	58	639	839
N. Dak.	-	-	-	-	3	1	1	2	4	3
S. Dak.	-	-	-	-	-	-	3	3	23	7
Nebr.	1	3	-	-	-	-	5	15	123	72
Kans.	2	-	-	-	2	-	8	18	205	284
S. ATLANTIC	5	48	4	28	-	10	178	1,288	4,528	6,430
Del.	-	-	N	N	N	N	1	5	103	147
Md.	1	-	-	-	-	-	12	10	799	791
D.C.	-	-	-	-	-	-	3	-	130	272
Va.	-	1	1	-	-	-	18	11	374	644
W. Va.	-	-	-	-	-	-	1	-	87	81
N.C.	-	-	2	3	-	-	N	N	1,144	1,303
S.C.	-	-	-	-	-	-	1	4	452	571
Ga.	1	-	-	-	-	-	53	123	207	974
Fla.	3	47	1	25	-	10	89	1,135	1,232	1,647
E.S. CENTRAL	2	6	-	-	-	-	20	29	1,911	2,716
Ky.	-	-	-	-	-	-	N	N	218	331
Tenn.	-	4	-	-	-	-	11	14	709	776
Ala.	1	2	-	-	-	-	9	15	753	901
Miss.	1	-	-	-	-	-	-	-	231	708
W.S. CENTRAL	-	3	-	2	-	-	19	16	4,015	4,096
Ark.	-	1	-	-	-	-	13	13	320	388
La.	-	-	-	-	-	-	-	-	1,478	919
Okla.	-	-	-	-	-	-	6	3	302	269
Tex.	-	2	-	2	-	-	-	-	1,915	2,520
MOUNTAIN	9	4	-	2	-	-	64	118	848	1,074
Mont.	1	-	-	-	-	-	1	2	8	10
Idaho	1	1	-	1	-	-	17	17	3	7
Wyo.	-	-	-	-	-	-	1	2	3	5
Colo.	4	1	-	-	-	-	18	37	202	343
N. Mex.	-	-	-	1	-	-	3	6	4	101
Ariz.	1	1	N	N	N	N	-	27	616	427
Utah	2	1	-	-	-	-	24	14	12	25
Nev.	-	-	-	-	-	-	-	13	-	156
PACIFIC	19	15	1	1	-	-	203	222	2,182	2,712
Wash.	3	3	-	-	-	-	13	3	265	247
Oreg.	3	1	1	1	-	-	30	26	87	73
Calif.	10	11	-	-	-	-	151	173	1,789	2,242
Alaska	-	-	-	-	-	-	4	8	40	51
Hawaii	3	-	-	-	-	-	5	12	1	99
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	4	10	5
V.I.	-	-	-	-	-	-	-	-	-	7
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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 7, 2004, and February 1, 2003 (5th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	143	253	2	5	7	11	13	25	379	878
NEW ENGLAND	11	16	-	-	1	-	-	1	77	15
Maine	1	-	-	-	-	-	-	-	4	-
N.H.	-	3	-	-	-	-	-	-	-	-
Vt.	1	4	-	-	-	-	-	-	4	1
Mass.	2	7	-	-	-	-	-	1	62	10
R.I.	1	-	-	-	-	-	-	-	-	-
Conn.	6	2	-	-	1	-	-	-	7	4
MID. ATLANTIC	32	23	-	-	-	-	4	3	53	85
Upstate N.Y.	10	3	-	-	-	-	1	1	5	3
N.Y. City	3	7	-	-	-	-	1	2	10	40
N.J.	5	3	-	-	-	-	1	-	9	13
Pa.	14	10	-	-	-	-	1	-	29	29
E.N. CENTRAL	25	19	-	1	3	1	4	4	31	62
Ohio	16	3	-	-	-	-	3	1	6	9
Ind.	1	1	-	-	-	-	1	-	3	1
Ill.	-	10	-	-	-	-	-	3	7	26
Mich.	5	3	-	1	3	1	-	-	13	18
Wis.	3	2	-	-	-	-	-	-	2	8
W.N. CENTRAL	2	10	-	-	-	-	-	3	14	14
Minn.	-	1	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	4	5
Mo.	1	8	-	-	-	-	-	3	4	3
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	1	-	-	-	-	-	-	-	1	2
Kans.	-	1	-	-	-	-	-	-	5	4
S. ATLANTIC	41	138	-	1	-	8	1	9	82	512
Del.	-	-	-	-	-	-	-	-	-	1
Md.	14	7	-	-	-	1	-	-	16	19
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	7	2	-	-	-	-	-	-	6	4
W. Va.	1	-	-	-	-	-	-	-	-	-
N.C.	1	1	-	-	-	-	-	-	5	4
S.C.	-	1	-	-	-	-	-	-	-	6
Ga.	7	4	-	-	-	-	1	-	26	67
Fla.	11	123	-	1	-	7	-	9	29	411
E.S. CENTRAL	9	11	-	-	-	-	1	2	10	14
Ky.	-	1	-	-	-	-	-	-	-	1
Tenn.	4	4	-	-	-	-	-	1	7	9
Ala.	5	6	-	-	-	-	1	1	-	3
Miss.	-	-	-	-	-	-	-	-	3	1
W.S. CENTRAL	3	9	-	-	1	1	-	-	8	44
Ark.	-	1	-	-	-	-	-	-	4	-
La.	-	4	-	-	-	-	-	-	-	6
Okla.	3	4	-	-	1	1	-	-	3	-
Tex.	-	-	-	-	-	-	-	-	1	38
MOUNTAIN	15	17	-	1	2	1	2	2	6	24
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	1	-
Wyo.	-	-	-	-	-	-	-	-	1	-
Colo.	3	3	-	-	-	-	1	-	1	1
N. Mex.	4	2	-	-	1	-	-	-	-	-
Ariz.	7	7	-	1	1	-	-	1	-	15
Utah	1	3	-	-	-	-	1	1	3	3
Nev.	-	2	-	-	-	1	-	-	-	5
PACIFIC	5	10	2	2	-	-	1	1	98	108
Wash.	3	-	2	-	-	-	1	-	4	2
Oreg.	2	4	-	-	-	-	-	1	7	8
Calif.	-	4	-	2	-	-	-	-	86	96
Alaska	-	-	-	-	-	-	-	-	-	1
Hawaii	-	2	-	-	-	-	-	-	1	1
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	1
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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 7, 2004, and February 1, 2003 (5th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	332	1,233	93	290	104	244	31	72	402	743
NEW ENGLAND	13	28	-	-	1	4	1	2	5	30
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	1	-	-
Vt.	1	1	-	-	-	1	-	-	-	3
Mass.	12	18	-	-	-	2	-	1	1	27
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	9	U	U	1	1	1	-	4	-
MID. ATLANTIC	31	103	11	7	21	21	6	11	337	541
Upstate N.Y.	3	-	1	-	3	3	1	2	105	139
N.Y. City	-	48	-	-	-	4	-	4	-	-
N.J.	13	25	-	-	4	2	3	1	31	116
Pa.	15	30	10	7	14	12	2	4	201	286
E.N. CENTRAL	20	54	5	16	34	30	4	3	11	16
Ohio	13	18	1	1	24	13	3	1	11	2
Ind.	-	-	-	-	1	-	-	-	-	1
Ill.	-	-	-	3	-	8	-	2	-	-
Mich.	7	25	4	12	9	9	-	-	-	-
Wis.	-	11	-	-	-	-	1	-	U	13
W.N. CENTRAL	31	31	41	13	2	2	-	2	7	2
Minn.	1	-	-	-	-	-	-	1	-	-
Iowa	-	1	-	-	-	1	-	-	2	1
Mo.	28	27	41	13	1	-	-	-	3	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	1	-	-	-	-	-
Nebr.	1	2	-	-	-	-	-	1	-	-
Kans.	1	1	-	-	-	1	-	-	2	-
S. ATLANTIC	141	799	24	84	23	164	10	42	33	124
Del.	-	1	-	-	1	-	N	N	-	11
Md.	11	8	2	2	6	7	2	1	24	27
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	6	4	1	-	1	2	-	-	-	-
W. Va.	-	-	1	-	-	-	1	-	-	-
N.C.	23	12	1	1	4	2	3	1	5	5
S.C.	-	-	-	-	-	-	-	1	-	-
Ga.	40	138	4	2	-	2	2	1	-	1
Fla.	61	636	15	79	11	151	2	38	4	80
E.S. CENTRAL	20	28	3	10	3	1	1	2	-	6
Ky.	3	2	2	2	-	-	1	-	-	-
Tenn.	6	4	1	2	2	1	-	-	-	1
Ala.	2	11	-	-	1	-	-	2	-	-
Miss.	9	11	-	6	-	-	-	-	-	5
W.S. CENTRAL	4	66	3	149	1	13	-	1	-	12
Ark.	-	5	-	1	-	-	-	-	-	-
La.	4	14	3	19	-	-	-	-	-	2
Okla.	-	2	-	-	1	2	-	-	-	-
Tex.	-	45	-	129	-	11	-	1	-	10
MOUNTAIN	10	54	1	3	6	4	-	5	1	2
Mont.	-	2	-	-	-	-	-	1	-	-
Idaho	1	1	-	-	1	1	-	-	-	1
Wyo.	1	1	-	-	2	-	-	-	-	-
Colo.	4	7	-	2	1	-	-	2	-	-
N. Mex.	-	3	-	-	-	-	-	-	-	-
Ariz.	-	30	1	-	-	2	-	2	-	-
Utah	4	4	-	-	2	1	-	-	1	-
Nev.	-	6	-	1	-	-	-	-	-	1
PACIFIC	62	70	5	8	13	5	9	4	8	10
Wash.	4	1	1	-	2	-	1	-	1	-
Oreg.	11	14	1	2	N	N	3	-	1	3
Calif.	47	53	2	5	11	5	5	4	6	7
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	2	1	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	1	5	-	-	-	-	-	-	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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 7, 2004, and February 1, 2003 (5th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	71	171	169	236	515	596	206	490	50	43
NEW ENGLAND	8	4	4	7	184	82	16	40	3	-
Maine	-	1	-	-	-	-	1	2	-	-
N.H.	-	-	-	-	-	-	-	2	-	-
Vt.	-	-	1	-	5	14	3	2	-	-
Mass.	6	3	3	6	179	67	7	15	3	-
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	2	-	-	1	-	1	5	19	-	-
MID. ATLANTIC	9	16	22	18	142	53	26	60	3	5
Upstate N.Y.	4	2	6	2	96	20	26	18	-	-
N.Y. City	2	8	2	5	-	-	-	1	1	-
N.J.	-	2	2	2	8	12	-	15	-	4
Pa.	3	4	12	9	38	21	-	26	2	1
E.N. CENTRAL	7	10	30	22	61	45	1	1	1	1
Ohio	2	2	16	6	50	32	1	-	1	1
Ind.	-	-	2	4	-	-	-	-	-	-
Ill.	-	5	1	3	-	-	-	-	-	-
Mich.	2	2	9	5	10	4	-	1	-	-
Wis.	3	1	2	4	1	9	-	-	-	-
W.N. CENTRAL	7	4	9	9	32	16	24	47	1	1
Minn.	4	2	-	1	-	-	6	3	-	-
Iowa	-	2	2	2	5	3	6	4	-	1
Mo.	2	-	2	5	23	9	2	-	1	-
N. Dak.	-	-	-	-	-	-	5	5	-	-
S. Dak.	-	-	1	-	-	-	-	6	-	-
Nebr.	-	-	-	-	-	-	-	3	-	-
Kans.	1	-	4	1	4	4	5	26	-	-
S. ATLANTIC	31	109	32	119	23	156	105	315	38	33
Del.	-	-	-	4	1	-	1	-	-	-
Md.	10	10	3	2	8	10	12	28	2	5
D.C.	-	-	-	-	1	-	-	-	-	-
Va.	-	1	2	2	3	1	-	33	-	-
W. Va.	-	1	3	-	-	-	6	4	-	-
N.C.	1	2	3	3	-	17	49	46	35	10
S.C.	1	-	1	-	2	-	7	11	-	-
Ga.	2	3	4	1	-	14	30	35	1	-
Fla.	17	92	16	107	8	114	-	158	-	18
E.S. CENTRAL	1	2	7	7	8	12	8	10	3	1
Ky.	-	-	-	-	-	2	1	3	-	-
Tenn.	-	-	4	2	5	3	5	6	1	1
Ala.	1	2	1	2	1	7	2	1	1	-
Miss.	-	-	2	3	2	-	-	-	1	-
W.S. CENTRAL	1	8	9	19	-	-	11	5	-	2
Ark.	1	-	2	1	-	-	4	-	-	-
La.	-	1	3	5	-	-	-	-	-	-
Okla.	-	-	1	2	-	-	7	5	-	-
Tex.	-	7	3	11	-	-	-	-	-	2
MOUNTAIN	1	2	7	5	36	68	8	7	-	-
Mont.	-	-	-	-	3	-	-	1	-	-
Idaho	-	-	1	-	6	2	-	-	-	-
Wyo.	-	-	1	-	2	-	-	-	-	-
Colo.	-	1	4	-	20	28	-	-	-	-
N. Mex.	1	-	-	1	-	10	-	-	-	-
Ariz.	-	1	1	3	3	15	8	6	-	-
Utah	-	-	-	-	2	8	-	-	-	-
Nev.	-	-	-	1	-	5	-	-	-	-
PACIFIC	6	16	49	30	29	164	7	5	1	-
Wash.	-	2	3	2	13	2	-	-	-	-
Oreg.	-	4	9	7	16	17	-	-	-	-
Calif.	6	10	35	20	-	145	7	4	1	-
Alaska	-	-	-	-	-	-	-	1	-	-
Hawaii	-	-	2	1	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	1	-	-	7	3	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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 7, 2004, and February 1, 2003 (5th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,799	6,823	681	4,432	384	700	298	773	26	45
NEW ENGLAND	83	87	22	28	13	42	-	12	-	-
Maine	3	3	-	1	1	-	-	-	-	-
N.H.	-	4	-	-	-	1	-	-	N	N
Vt.	3	1	-	-	-	2	-	2	-	-
Mass.	58	60	17	20	10	22	N	N	N	N
R.I.	4	4	-	2	2	-	-	-	-	-
Conn.	15	15	5	5	-	17	-	10	U	U
MID. ATLANTIC	186	282	80	164	47	93	15	12	6	6
Upstate N.Y.	38	23	34	12	19	22	5	4	2	5
N.Y. City	49	99	17	46	1	14	U	U	U	U
N.J.	31	62	12	53	7	18	N	N	N	N
Pa.	68	98	17	53	20	39	10	8	4	1
E.N. CENTRAL	260	362	69	149	78	125	83	41	19	30
Ohio	90	121	24	28	39	30	73	41	16	21
Ind.	17	11	3	5	1	2	10	-	3	1
Ill.	63	133	22	77	-	41	-	-	-	-
Mich.	51	50	12	24	35	35	N	N	N	N
Wis.	39	47	8	15	3	17	N	N	-	8
W.N. CENTRAL	121	113	33	76	25	21	25	29	-	2
Minn.	21	28	6	3	-	-	-	-	-	1
Iowa	24	24	2	2	N	N	N	N	N	N
Mo.	38	34	9	37	8	10	1	-	-	-
N. Dak.	3	2	1	-	2	-	-	-	-	1
S. Dak.	5	5	1	4	3	3	-	-	-	-
Nebr.	10	8	1	22	1	4	-	-	N	N
Kans.	20	12	13	8	11	4	24	29	N	N
S. ATLANTIC	537	5,133	252	3,372	115	265	158	654	1	-
Del.	-	6	1	47	-	1	-	-	N	N
Md.	42	58	16	91	18	17	-	1	-	-
D.C.	-	-	4	-	-	-	-	-	1	-
Va.	38	26	7	18	5	1	N	N	N	N
W. Va.	1	-	-	-	1	-	4	3	-	-
N.C.	64	136	24	92	11	8	N	N	U	U
S.C.	9	38	15	11	1	1	9	9	N	N
Ga.	128	200	55	264	53	6	64	30	N	N
Fla.	255	4,669	130	2,849	26	231	81	611	N	N
E.S. CENTRAL	105	167	30	82	17	7	8	9	-	-
Ky.	7	21	1	10	5	2	3	-	N	N
Tenn.	27	53	16	19	12	5	5	9	N	N
Ala.	49	61	10	37	-	-	-	-	N	N
Miss.	22	32	3	16	-	-	-	-	-	-
W.S. CENTRAL	47	196	41	255	13	54	4	14	-	6
Ark.	19	18	5	1	1	1	1	-	-	-
La.	4	32	6	39	-	-	3	14	-	1
Okla.	19	5	24	38	7	5	N	N	-	2
Tex.	5	141	6	177	5	48	N	N	-	3
MOUNTAIN	98	128	44	69	19	60	5	2	-	1
Mont.	6	4	1	-	-	-	-	-	-	-
Idaho	22	9	-	1	1	4	N	N	N	N
Wyo.	2	2	1	1	2	-	3	-	-	-
Colo.	16	52	7	17	6	13	-	-	-	-
N. Mex.	18	10	16	21	8	10	2	2	-	-
Ariz.	21	25	12	25	-	31	-	-	N	N
Utah	13	11	7	2	2	2	-	-	-	1
Nev.	-	15	-	2	-	-	-	-	-	-
PACIFIC	362	355	110	237	57	33	-	-	-	-
Wash.	22	15	5	-	-	-	-	-	N	N
Oreg.	29	16	5	6	N	N	N	N	N	N
Calif.	273	298	94	225	39	20	N	N	N	N
Alaska	13	11	-	2	-	-	-	-	N	N
Hawaii	25	15	6	4	18	13	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	5	20	1	-	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 7, 2004, and February 1, 2003 (5th Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Primary & secondary		Congenital							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	451	643	16	52	344	573	11	33	951	1,677
NEW ENGLAND	8	9	-	-	7	14	1	1	119	371
Maine	-	-	-	-	-	-	-	-	5	221
N.H.	-	1	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	114	116
Mass.	5	6	-	-	6	3	1	-	-	34
R.I.	2	-	-	-	-	2	-	-	-	-
Conn.	1	2	-	-	1	9	-	1	-	-
MID. ATLANTIC	61	73	2	9	103	126	-	3	6	2
Upstate N.Y.	3	1	2	1	-	4	-	-	-	-
N.Y. City	40	34	-	3	102	81	-	2	-	-
N.J.	12	23	-	5	-	16	-	1	-	-
Pa.	6	15	-	-	1	25	-	-	6	2
E.N. CENTRAL	39	86	7	12	95	35	1	3	457	831
Ohio	12	13	-	1	9	7	1	-	68	199
Ind.	7	4	-	4	13	10	-	2	-	-
Ill.	8	35	-	6	60	16	-	-	-	-
Mich.	9	32	7	1	8	-	-	1	357	525
Wis.	3	2	-	-	5	2	-	-	32	107
W.N. CENTRAL	10	22	-	-	28	26	-	-	22	1
Minn.	-	6	-	-	8	5	-	-	-	-
Iowa	-	1	-	-	-	2	-	-	N	N
Mo.	9	8	-	-	-	6	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	11	1
S. Dak.	-	-	-	-	-	4	-	-	11	-
Nebr.	1	-	-	-	-	-	-	-	-	-
Kans.	-	7	-	-	20	9	-	-	-	-
S. ATLANTIC	128	149	1	9	7	108	2	17	167	270
Del.	1	1	-	-	-	-	-	-	-	1
Md.	25	22	-	2	2	6	-	2	-	-
D.C.	9	3	-	-	-	-	-	-	4	-
Va.	1	6	-	-	-	3	1	-	-	50
W. Va.	-	-	-	-	2	1	-	-	156	214
N.C.	12	20	-	-	2	2	1	-	-	-
S.C.	5	8	-	3	1	2	-	-	7	5
Ga.	8	23	-	3	-	31	-	-	-	-
Fla.	67	66	1	1	-	63	-	15	-	-
E.S. CENTRAL	28	32	1	1	18	22	-	-	-	-
Ky.	5	7	-	-	-	-	-	-	-	-
Tenn.	15	11	1	1	7	3	-	-	-	-
Ala.	7	12	-	-	11	12	-	-	-	-
Miss.	1	2	-	-	-	7	-	-	-	-
W.S. CENTRAL	93	74	5	5	8	130	-	-	-	195
Ark.	5	7	-	-	4	4	-	-	-	-
La.	17	9	-	-	-	-	-	-	-	3
Okla.	4	4	-	-	4	4	-	-	-	-
Tex.	67	54	5	5	-	122	-	-	-	192
MOUNTAIN	37	31	-	8	17	11	1	2	180	7
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	3	-	-	-	-	-	-	-	-	-
Wyo.	1	-	-	-	-	1	-	-	9	2
Colo.	-	6	-	1	7	5	-	2	87	-
N. Mex.	-	8	-	4	-	-	-	-	4	-
Ariz.	33	15	-	3	6	5	-	-	-	-
Utah	-	1	-	-	4	-	1	-	80	5
Nev.	-	1	-	-	-	-	-	-	-	-
PACIFIC	47	167	-	8	61	101	6	7	-	-
Wash.	8	7	-	-	18	18	-	-	-	-
Oreg.	5	5	-	-	2	6	-	2	-	-
Calif.	34	154	-	8	29	60	5	5	-	-
Alaska	-	-	-	-	2	4	-	-	-	-
Hawaii	-	1	-	-	10	13	1	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	10	8	-	-	-	-	-	-	28	29
V.I.	-	1	-	-	-	-	-	-	-	-
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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending February 7, 2004 (5th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	543	386	96	46	7	8	73
Boston, Mass.	158	102	30	17	3	6	20
Bridgeport, Conn.	37	26	7	3	1	-	9
Cambridge, Mass.	22	14	6	2	-	-	5
Fall River, Mass.	32	24	5	3	-	-	5
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	27	17	6	4	-	-	1
Lynn, Mass.	13	10	1	2	-	-	2
New Bedford, Mass.	43	35	6	2	-	-	4
New Haven, Conn.	30	24	3	1	-	2	6
Providence, R.I.	62	48	10	2	2	-	4
Somerville, Mass.	U	U	U	U	U	U	U
Springfield, Mass.	36	25	8	2	1	-	7
Waterbury, Conn.	19	10	5	4	-	-	1
Worcester, Mass.	64	51	9	4	-	-	9
MID. ATLANTIC	2,191	1,598	415	129	26	22	168
Albany, N.Y.	47	34	12	1	-	-	3
Allentown, Pa.	24	20	3	1	-	-	4
Buffalo, N.Y.	90	62	20	5	1	2	9
Camden, N.J.	29	14	9	4	-	2	3
Elizabeth, N.J.	21	17	3	-	1	-	-
Erie, Pa.	39	34	4	1	-	-	2
Jersey City, N.J.	68	49	16	3	-	-	-
New York City, N.Y.	1,045	754	196	68	11	15	75
Newark, N.J.	50	23	20	5	2	-	5
Paterson, N.J.	30	14	10	1	4	1	3
Philadelphia, Pa.	281	207	53	19	2	-	15
Pittsburgh, Pa.§	32	23	8	1	-	-	6
Reading, Pa.	28	24	2	2	-	-	6
Rochester, N.Y.	156	130	19	6	1	-	13
Schenectady, N.Y.	24	23	1	-	-	-	2
Scranton, Pa.	26	21	3	1	1	-	3
Syracuse, N.Y.	125	96	17	7	3	2	15
Trenton, N.J.	41	28	12	1	-	-	-
Utica, N.Y.	13	11	2	-	-	-	2
Yonkers, N.Y.	22	14	5	3	-	-	2
E.N. CENTRAL	2,360	1,642	484	128	55	51	164
Akron, Ohio	45	31	11	2	1	-	5
Canton, Ohio	46	32	9	3	-	2	7
Chicago, Ill.	355	224	80	35	8	8	26
Cincinnati, Ohio	85	59	20	2	3	1	5
Cleveland, Ohio	276	200	51	12	4	9	15
Columbus, Ohio	195	138	47	3	3	4	15
Dayton, Ohio	165	118	32	6	6	3	19
Detroit, Mich.	200	112	51	23	8	6	7
Evansville, Ind.	48	40	4	2	-	2	4
Fort Wayne, Ind.	61	44	13	2	1	1	2
Gary, Ind.	21	11	6	1	3	-	-
Grand Rapids, Mich.	90	74	11	2	1	2	4
Indianapolis, Ind.	243	164	53	9	12	5	13
Lansing, Mich.	51	37	11	2	1	-	3
Milwaukee, Wis.	137	96	36	4	-	1	13
Peoria, Ill.	39	26	6	4	1	2	5
Rockford, Ill.	51	42	6	1	-	2	5
South Bend, Ind.	69	51	12	5	1	-	5
Toledo, Ohio	110	83	20	4	2	1	10
Youngstown, Ohio	73	60	5	6	-	2	1
W.N. CENTRAL	611	422	129	32	14	14	75
Des Moines, Iowa	73	52	15	5	-	1	9
Duluth, Minn.	36	30	4	-	-	2	6
Kansas City, Kans.	36	24	8	2	2	-	7
Kansas City, Mo.	96	70	17	5	3	1	4
Lincoln, Nebr.	45	33	8	3	-	1	9
Minneapolis, Minn.	79	59	13	3	2	2	8
Omaha, Nebr.	76	54	15	5	1	1	9
St. Louis, Mo.	2	2	-	-	-	-	2
St. Paul, Minn.	62	41	17	2	1	1	9
Wichita, Kans.	106	57	32	7	5	5	12
S. ATLANTIC	1,498	952	347	117	45	37	104
Atlanta, Ga.	208	121	59	20	7	1	11
Baltimore, Md.	194	126	38	23	7	-	24
Charlotte, N.C.	138	90	33	7	4	4	16
Jacksonville, Fla.	213	135	50	11	8	9	4
Miami, Fla.	145	87	29	23	4	2	10
Norfolk, Va.	62	36	16	2	2	6	3
Richmond, Va.	75	41	23	4	3	4	6
Savannah, Ga.	68	42	15	4	3	4	8
St. Petersburg, Fla.	65	47	14	2	1	1	2
Tampa, Fla.	207	150	40	11	2	4	15
Washington, D.C.	99	57	27	9	4	2	3
Wilmington, Del.	24	20	3	1	-	-	2
E.S. CENTRAL	860	581	201	54	11	11	79
Birmingham, Ala.	218	154	48	12	-	2	26
Chattanooga, Tenn.	98	61	29	6	1	1	10
Knoxville, Tenn.	117	77	23	11	5	1	1
Lexington, Ky.	107	77	25	1	1	3	10
Memphis, Tenn.	U	U	U	U	U	U	U
Mobile, Ala.	101	60	27	11	1	2	5
Montgomery, Ala.	83	55	16	10	2	-	9
Nashville, Tenn.	136	97	33	3	1	2	18
W.S. CENTRAL	1,584	1,014	338	115	51	66	96
Austin, Tex.	81	55	16	9	1	-	5
Baton Rouge, La.	47	31	5	6	1	4	2
Corpus Christi, Tex.	62	40	11	5	4	2	4
Dallas, Tex.	228	143	49	17	8	11	13
El Paso, Tex.	110	86	13	6	2	3	5
Ft. Worth, Tex.	149	88	42	5	3	11	10
Houston, Tex.	391	226	98	31	13	23	22
Little Rock, Ark.	70	46	16	2	3	3	7
New Orleans, La.	39	17	13	7	2	-	-
San Antonio, Tex.	227	152	42	17	11	5	18
Shreveport, La.	47	37	5	3	-	2	4
Tulsa, Okla.	133	93	28	7	3	2	6
MOUNTAIN	869	583	182	61	20	23	76
Albuquerque, N.M.	138	88	33	9	3	5	12
Boise, Idaho	45	28	13	2	1	1	2
Colo. Springs, Colo.	83	58	14	5	5	1	-
Denver, Colo.	108	70	19	9	3	7	13
Las Vegas, Nev.	271	178	60	24	3	6	24
Ogden, Utah	40	35	5	-	-	-	5
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	31	25	2	2	2	-	6
Salt Lake City, Utah	153	101	36	10	3	3	14
Tucson, Ariz.	U	U	U	U	U	U	U
PACIFIC	3,253	2,297	630	201	77	48	359
Berkeley, Calif.	19	11	5	3	-	-	1
Fresno, Calif.	85	63	14	6	1	1	3
Glendale, Calif.	73	61	10	-	2	-	15
Honolulu, Hawaii	101	76	17	4	3	1	9
Long Beach, Calif.	90	67	15	2	5	1	13
Los Angeles, Calif.	1,755	1,238	328	122	42	25	208
Pasadena, Calif.	U	U	U	U	U	U	U
Portland, Oreg.	160	117	29	9	1	4	15
Sacramento, Calif.	204	137	51	8	5	3	26
San Diego, Calif.	229	157	45	15	6	6	27
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	217	147	48	13	5	4	22
Santa Cruz, Calif.	29	21	6	2	-	-	2
Seattle, Wash.	116	78	27	8	3	-	7
Spokane, Wash.	62	42	15	4	-	1	3
Tacoma, Wash.	113	82	20	5	4	2	8
TOTAL	13,769¶	9,475	2,822	883	306	280	1,194

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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