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Cluster of Severe Acute Respiratory Syndrome Cases Among Protected Health-Care Workers — Toronto, Canada, April 2003

Infections among health-care workers (HCWs) have been a common feature of severe acute respiratory syndrome (SARS) since its emergence. The majority of these infections have occurred in locations where infection-control precautions either had not been instituted or had been instituted but were not followed. Recommended infection-control precautions include the use of negative-pressure isolation rooms where available; N95 or higher level of respiratory protection; gloves, gowns, and eye protection; and careful hand hygiene. This report summarizes a cluster of SARS cases among HCWs in a hospital that occurred despite apparent compliance with recommended infection-control precautions (1).

The index patient was a Canadian family physician aged 54 years with a history of hyperlipidemia, hypertension, and noninsulin-dependent diabetes controlled on oral medications. During April 1–2, 2003, he examined three patients who were family members involved in a community cluster of SARS in Toronto, Ontario (2). No infection-control precautions were used. On April 4, he had fever, myalgia, headache, mild diarrhea, and a dry cough; on medical evaluation, he had a clear chest radiograph, but he continued to feel ill during home isolation. On April 8, he was reevaluated and found to have a left upper-lobe infiltrate on a repeat chest radiograph; he was admitted to the SARS ward of hospital A. During the next several days, he remained febrile with increasing cough, although his diarrhea resolved. On April 12, the patient's temperature was 104.7° F (40.4° C), his chest radiograph showed worsening pneumonia, and he required supplemental oxygen for hypoxia. He was treated with ipratropium bromide and albuterol sulfate by metered dose inhaler, intravenous (IV) ribavirin, and steroids. On April 12, he had a nearly constant cough and was assessed for transfer to the intensive care unit (ICU). On April 13, the patient was transported to the ICU in a wheelchair on 100% oxygen through nonrebreather face

mask. Soon after his arrival in the ICU, his measured oxygen saturation decreased to 60%, and he was placed on positive pressure ventilation through face mask (BiPAP). Because of severe cough and agitation, he removed the mask repeatedly despite administration of IV sedation. After an approximately 2-hour attempt to provide oxygen through BiPAP, the patient was intubated. During intubation, he had copious frothy secretions that later obstructed the ventilator tubing, requiring disconnection and drainage. Once supported with mechanical ventilation, the patient was sedated further by using IV midazolam/morphine sulfate.

Later that evening, the patient was switched from assist-control ventilation to high-frequency oscillatory ventilation (HFOV) because of continued inadequate oxygenation. At this point, the patient's condition stabilized, and he was maintained on HFOV for 7 days, after which he was switched back to assist-control mode. As of May 14, the patient remained in critical condition. Both a sputum sample collected from the patient on April 13 and a stool sample collected on May 5 were positive for the SARS-associated coronavirus (SARS-CoV) by polymerase chain reaction.

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Notifiable Disease Morbidity and 122 Cities Mortality Data

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During April 15–21, nine HCWs who had cared for this patient around the time he was intubated had illnesses consistent with the World Health Organization case definition for suspect or probable SARS (3); another two HCWs had symptoms that were not consistent with the case definition (Table). Six of these 11 HCWs had been present during the intubation procedure. Interviews with affected HCWs indicated that they all had worn the recommended personal protective equipment each time they entered the patient's room, including gown, gloves, PCM2000TM duckbill masks (Kimberly Clark Health Care, Roswell, Georgia), and goggles with or without an overlying face shield.

The room in which the intubation took place was at negative pressure to the hallway, and all air was vented to the outside after high-efficiency particulate air filtration; however, no anteroom was available, and removal of personal protective equipment took place in a staged manner both inside and outside the room, with the door kept closed between each entry and exit. Understanding of the correct order to remove personal protective equipment (PPE) (i.e., gloves first followed by mask and goggles) varied among HCWs.

Masks worn by HCWs inside ICU rooms and halls were changed on leaving each patient's room; however, no formal respiratory protection program existed at the hospital, and individual workers had not been fit tested. In addition, the primary nurse for the patient had a small beard and reported that his mask did not fit well. Although he wore both a PCM2000TM duckbill mask and a surgical mask with face shield, he sometimes could feel air entering around the sides of his mask.

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Editorial Note: Transmission of SARS appears to result primarily from direct patient contact or contact with large respiratory droplets in the close vicinity of an infected person. Despite apparent limited modes of transmission, SARS has been known to spread extensively among HCWs in various settings. For example, among 138 cases of secondary and tertiary spread in Hong Kong, 85 (62%) occurred among HCWs (4); among 144 cases in Toronto, 73 (51%) were HCWs (5). SARS infection of HCWs might be related to increased contact with respiratory secretions, contact with patients during a more contagious phase of critical illness, contact with particular patients at increased likelihood of spreading SARS (i.e., super spreaders), or exposure to aerosol-generating patient-care procedures (6).

TABLE. Characteristics of 11 health-care workers who had symptoms of severe acute respiratory syndrome (SARS) following exposure to the index patient during the time of his intubation — Toronto, Canada, April 15–21, 2003

Health-care worker	Symptom onset date	Suspect or probable SARS case	Occupation	Exposure
1	April 15	Suspect	Respiratory therapist	Provided care before, during, and after intubation in ICU*
2	April 16	Suspect	ICU nurse assigned primarily to another patient	Provided care before, during, and after intubation in ICU
3	April 16	Suspect	ICU primary nurse	Provided care before, during, and after intubation in ICU
4	April 16	Suspect	Respiratory therapist	Provided care before, during, and after intubation in ICU
5	April 16	Probable	Ward physician	Examined patient on ward during morning of April 13
6	April 17	Probable	ICU physician	Provided care before, during, and after intubation in ICU
7	April 17	Suspect	ICU charge nurse	Provided care before, during, and after intubation in ICU
8	April 18	Suspect	ICU physician	Examined patient on ward during early morning of April 13
9	April 18	Suspect	Radiology technician	Performed chest radiograph of patient on ward during early morning of April 13
10	April 18	Not a case†	ICU nurse assigned primarily to another patient	Provided care after intubation in ICU
11	April 21	Not a case§	ICU physician	Provided care before intubation in ICU

* Intensive care unit.

† Illness marked by headache, cough, and diarrhea but without fever.

§ Illness marked by cough and infiltrate on chest radiograph but without fever.

Health Canada and CDC are aware of several unpublished reports of SARS clusters among unprotected HCWs involved with intubation, both in Canada and outside North America. The cluster described in this report might be unique, as HCWs appear to have followed infection-control precautions recommended by Health Canada. The Health Canada recommendations, although similar to those of CDC, differ from CDC guidelines with respect to respiratory protection. CDC guidelines specify use of respirators approved by the National Institute for Occupational Safety and Health (NIOSH) rated at an N95 level of protection or greater (7). Health Canada recommends use of “N95 equivalent” respirators (8). The respirators used in hospital A, although compliant with Canadian public health recommendations, were not NIOSH-approved. In addition, at the time these exposures occurred, fit testing was not recommended by Canadian public health authorities; such testing has been mandated in the United States since 1972.

Endotracheal intubation might cause an awake or a semiconscious patient to cough and often necessitates open suctioning of respiratory secretions. In addition, other potentially aerosol-generating procedures were performed on this patient, including BiPAP, during which air might be forced out around the face mask and thereby aerosolize secretions, and HFOV, during which exhaust from the ventilator tubing is more likely to escape without passing through an antibacterial/antiviral filter. The patient also was in his second week of illness with clinical deterioration and severe cough, possibly explaining why HCWs who were exposed to the patient only before his transfer to the ICU became infected, as the viral loads of patients at this stage of illness appear high (9).

Direct contact with the patient or contact with an environment contaminated by large respiratory droplets might have led to HCWs infecting themselves as they removed their PPE. For example, HCWs have been known to spread other nosocomial pathogens from patient to patient despite the use of barrier precautions; even in the best of circumstances, correct use of PPE might be suboptimal. If contact or droplet spread alone were responsible for this cluster, a lapse in technique would be required on the part of each infected HCW. Many HCWs apparently lacked a clear understanding of how best to remove PPE without contaminating themselves. Alternatively, aerosolizing procedures or the patient's own cough might have led to airborne spread, and either the level of respiratory protection used or the manner in which it was used did not prevent transmission.

This cluster is part of a larger number of cases in HCWs in hospitals in the greater Toronto area who have become infected while caring for SARS patients since directives for contact, droplet, and airborne precautions were instituted at the provincial level on March 28 (1). Further investigation is necessary to determine factors associated with transmission despite the apparent use of recommended infection-control precautions.

HCWs caring for SARS patients should be properly trained in the correct use and removal of PPE and reminded of the importance of hand hygiene. Patients who are experiencing rapid clinical progression with severe cough during their second week of illness should be considered particularly infectious. Procedures that might generate aerosols (e.g., nebulized medications, BiPAP, or HFOV) should be avoided if possible.

When intubation is necessary, measures should be taken to reduce unnecessary exposure to HCWs, including reducing the number of HCWs present and adequately sedating or paralyzing the patient to reduce cough. Updated interim infection control precautions for aerosol-generating procedures on patients who have SARS are under development and will be available from CDC at <http://www.cdc.gov/ncidod/sars/ic.htm>.

References

1. Health Canada. SARS among Ontario health care workers—SARS epidemiologic summaries: April 26, 2003. Available at http://www.hc-sc.gc.ca/pphb-dgsp/sars-sras/pef-dep/sars-es20030426_e.html.
2. Health Canada. Epi-Update: Interim report on the SARS outbreak in the Greater Toronto Area, Ontario, Canada, April 24, 2003. Available at http://www.hc-sc.gc.ca/pphb-dgsp/sars-sras/pef-dep/gta-20030424_e.html.
3. World Health Organization. Case definitions for surveillance of Severe Acute Respiratory Syndrome (SARS). Available at <http://www.who.int/csr/sars/casedefinition/en>.
4. Lee N, Hui D, Wu A, et al. A major outbreak of severe acute respiratory syndrome in Hong Kong. *N Engl J Med* 2003. Available at <http://content.nejm.org/cgi/reprint/NEJMoa030685v2.pdf>.
5. Booth CM, Matukas LM, Tomlinson GA, et al. Clinical features and short-term outcomes of 144 patients with SARS in the Greater Toronto Area. *JAMA* 2003. Available at <http://jama.ama-assn.org/cgi/reprint/289.21.JOC30885v1.pdf>.
6. Seto WH, Tsang D, Yung RW, et al., and Advisors of Expert SARS Group of Hospital Authority. Effectiveness of precautions against droplets and contact in prevention of nosocomial transmission of severe acute respiratory syndrome (SARS). *Lancet* 2003;361:1519–20.
7. CDC. Interim domestic guidance on the use of respirators to prevent transmission of SARS, May 6, 2003. Available at <http://www.cdc.gov/ncidod/sars/respirators.htm>.
8. Health Canada. Infection control guidance for respirators (masks) worn by health care workers—frequently asked questions, revised April 17, 2003. Available at http://www.hc-sc.gc.ca/pphb-dgsp/sars-sras/ic-ci/sars-respmasks_e.html.
9. Peiris JS, Chu CM, Cheng VC, et al., and members of the HKU/UCH SARS Study Group. Clinical progression and viral load in a community outbreak of coronavirus-associated SARS pneumonia: a prospective study. *Lancet* 2003. Available at <http://image.thelancet.com/extras/03art4432web.pdf>.

Update: Severe Acute Respiratory Syndrome — United States, May 14, 2003

CDC continues to work with state and local health departments, the World Health Organization (WHO), and other partners to investigate cases of severe acute respiratory syndrome (SARS). This report provides an update on reported SARS cases worldwide and in the United States.

During November 1, 2002–May 14, 2003, a total of 7,628 SARS cases were reported to WHO from 29 countries, including the United States; 587 deaths (case-fatality proportion: 7.7%) have been reported (1). The 345 SARS cases iden-

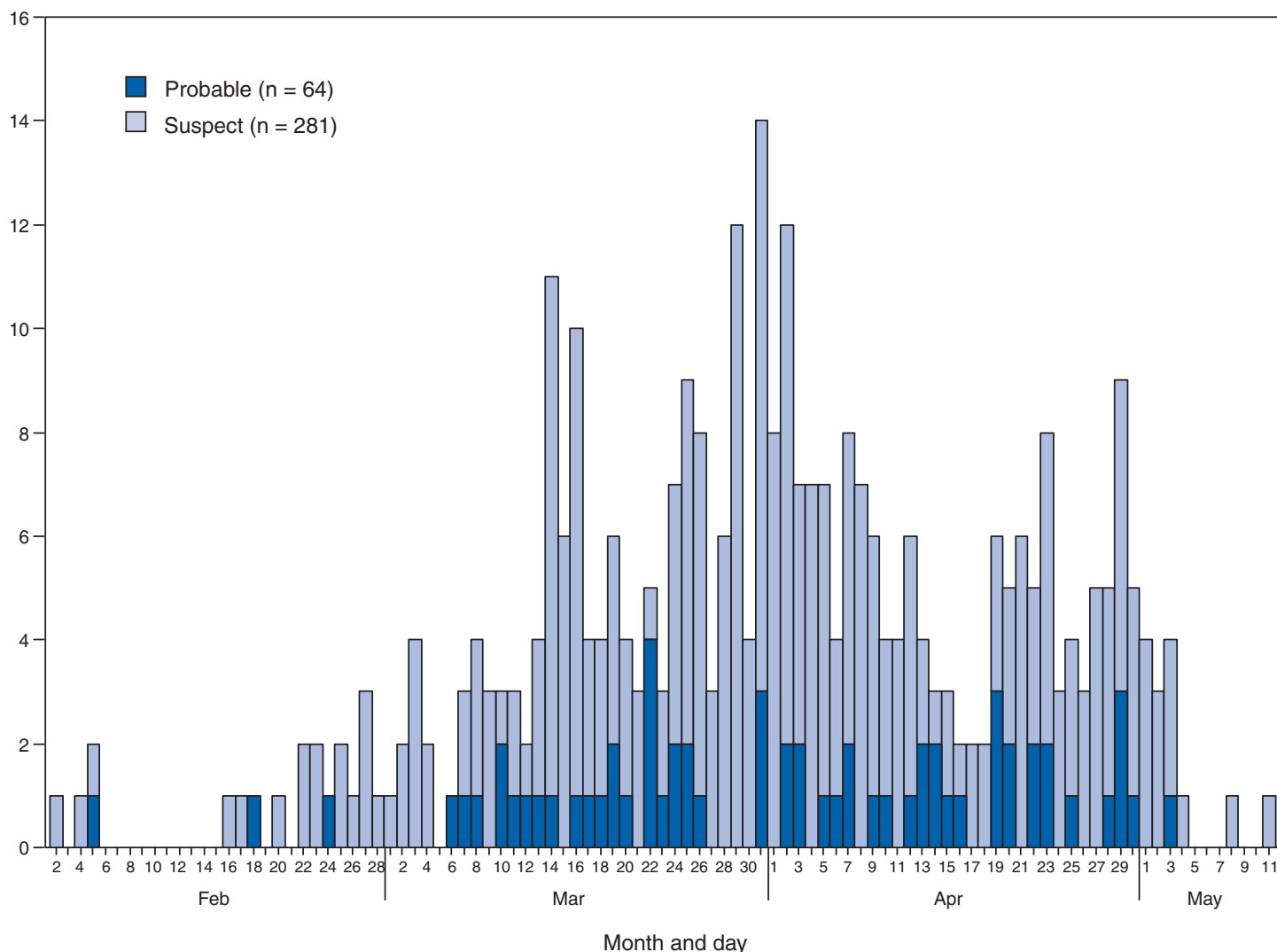
tified in the United States have been reported from 38 states, with 281 (81%) cases classified as suspect SARS and 64 (19%) classified as probable SARS (more severe illnesses characterized by the presence of pneumonia or acute respiratory distress syndrome) (Figure, Table) (2).

Of the 64 probable SARS patients, 44 (69%) were hospitalized, and three (5%) required mechanical ventilation. No SARS-related deaths have been reported in the United States. Of the 64 cases, 62 (97%) were attributed to international travel to areas with documented or suspected community transmission of SARS during the 10 days before illness onset; the remaining two (3%) probable cases occurred in a health-care worker who provided care to a SARS patient and a household contact of a SARS patient. Among the 62 probable SARS cases attributed to travel, 35 (56%) patients reported travel to mainland China; 18 (29%) to Hong Kong Special Administrative Region, China; six (10%) to Singapore; three (5%) to Hanoi, Vietnam; and eight (13%) to Toronto, Canada. Seven (11%) of these 62 probable patients had visited more than one area with SARS during the 10 days before illness onset.

Laboratory testing to evaluate infection with the SARS-associated coronavirus (SARS-CoV) has been completed for 96 cases (23 probable and 73 suspect). Of 20 probable SARS patients with complete test results, six with laboratory-confirmed infection with SARS-CoV have been identified (3,4); this number remains unchanged since the last update (5). None of the 73 suspect SARS patients evaluated has had laboratory-confirmed infection with SARS-CoV. Negative findings (i.e., the absence of antibody to SARS-CoV in convalescent serum obtained >21 days after symptom onset) have been documented for 90 cases (73 suspect and 17 probable).

Since the previous update (5), the epidemiology of SARS in the United States has not changed markedly; secondary spread to contacts such as family members and health-care workers is limited, and most cases continue to be associated with international travel to areas where SARS is being transmitted in the community. CDC has developed interim recommendations for businesses and other organizations with employees returning from areas with community transmission of SARS and for other organizations and institutions (e.g., schools) hosting persons arriving in the United States from such areas (6,7). CDC does not recommend quarantine of persons traveling to the United States from areas with SARS nor the cancellation or postponement of classes, meetings, or other gatherings that would include travelers from areas with SARS. Activities to prevent importation and spread of SARS from inbound travelers (6) include 1) pre-embarkation screening of persons traveling from areas with SARS, 2) assessment by health authorities of ill persons aboard flights arriving from areas with SARS to ensure that ill passengers are isolated and

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



*N = 345.

evaluated promptly and that appropriate follow-up of other passengers occurs, 3) distribution of health alert notices to travelers arriving in the United States to notify them of the importance of monitoring their health for 10 days after departure and promptly seeking medical evaluation if they have fever or respiratory symptoms, and 4) the rapid detection and isolation of persons in the United States who have traveled from an area with SARS who have symptoms compatible with early suspect SARS within 10 days of arrival.

Reported by: State and local health departments. SARS Investigative Team, CDC.

References

1. World Health Organization. Cumulative number of reported cases of severe acute respiratory syndrome (SARS). Available at http://www.who.int/csr/sarscountry/2003_05_14/en.

2. CDC. Updated interim U.S. case definition of severe acute respiratory syndrome (SARS). Available at <http://www.cdc.gov/ncidod/sars/casedefinition.htm>.
3. CDC. Severe acute respiratory syndrome (SARS) and coronavirus testing—United States, 2003. MMWR 2003;52:297–302.
4. CDC. Update: Severe acute respiratory syndrome—United States, 2003. MMWR 2003;52:357–60.
5. CDC. Update: Severe acute respiratory syndrome—United States, 2003. MMWR 2003;52:411–3.
6. CDC. Interim guidance for institutions or organizations hosting persons arriving in the United States from areas with SARS. Available at <http://www.cdc.gov/ncidod/sars/hostingarrivals.htm>.
7. CDC. Interim guidance for businesses and other organizations with employees returning from areas with SARS. Available at http://www.cdc.gov/ncidod/sars/business_guidelines.htm.

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

Characteristic	Probable cases† (n = 64)		Suspect cases† (n = 281)	
	No.	(%)§	No.	(%)§
Age (yrs)				
0–4	9	(14)	41	(15)
5–9	0	(0)	12	(4)
10–17	4	(6)	9	(3)
18–64	37	(58)	193	(69)
≥65	13	(20)	22	(8)
Unknown	1	(2)	4	(1)
Sex				
Female	27	(42)	136	(48)
Male	36	(56)	142	(51)
Unknown	1	(2)	3	(1)
Race				
White	28	(44)	153	(55)
Black	1	(2)	5	(2)
Asian	28	(44)	99	(35)
Other	2	(3)	2	(1)
Unknown	5	(8)	22	(8)
Exposure				
Travel¶	62	(97)	254	(90)
Close contact	1	(2)	23	(8)
Health-care worker	1	(2)	4	(1)
Hospitalized >24 hrs**				
Yes	44	(69)	66	(24)
No	20	(31)	210	(75)
Unknown	0	(0)	5	(2)
Required mechanical ventilation				
Yes	3	(5)	1	(0)
No	58	(91)	275	(98)
Unknown	3	(5)	5	(2)
SARS-associated coronavirus laboratory findings				
Confirmed	6	(9)	0	(0)
Negative	14	(22)	73	(26)
Undetermined††	44	(69)	208	(74)

* N = 345.

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

§ Percentages might not total 100% because of rounding.

¶ To mainland China; Hong Kong Special Administrative Region, China; Hanoi, Vietnam; Singapore; Toronto, Canada; or Taiwan.

** As of May 14, no deaths of SARS patients have been reported in the United States.

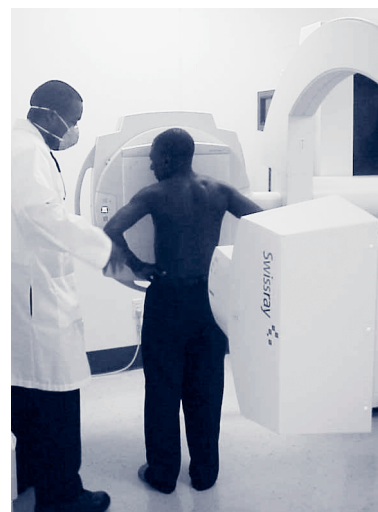
†† Collection and/or laboratory testing of specimens has not been completed.

Post-Detention Completion of Tuberculosis Treatment for Persons Deported or Released from the Custody of the Immigration and Naturalization Service — United States, 2003

The Advisory Council for the Elimination of Tuberculosis (ACET) recommends the post-detention completion of tuberculosis (TB) treatment for persons deported or released from the custody of the Immigration and Naturalization Service (INS)* (ACET, personal communication, 2002). The completion of TB therapy prevents disease relapse, subsequent transmission, and the emergence of drug resistance (1). Integral to treatment completion are issues of security and law enforcement involving persons who under immigration law are ineligible for legal admission into the United States. The Health Resources and Services Administration's Division of Immigration Health Services (DIHS) estimates that approximately 150 TB cases are identified annually among INS detainees in the INS service processing centers (SPCs) and contract detention facilities (Figure). Before transfer or deportation, INS policies require that detainees with TB disease receive treatment until they become noncontagious, even if treatment is not completed. INS policies are consistent with federal law, which does not bar deportation of persons with

*The functions of INS are now subsumed by the Department of Homeland Security, Directorate of Border and Transportation Security, Bureau of Immigration and Customs Enforcement.

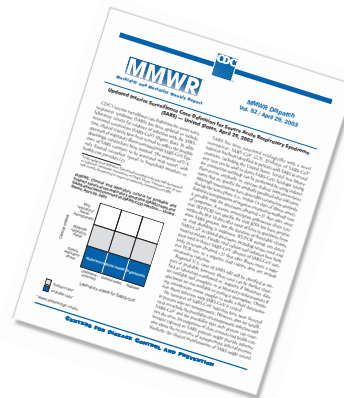
FIGURE. Staff at a medical referral center performing tuberculosis screening of a detainee — United States, 2002



Photo/Division of Immigration Health Services, U.S. Bureau of Immigration and Customs Enforcement

up-to-the-minute: *adj*

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



know what matters.



TB disease before the completion of treatment. This report describes three cases that illustrate several issues associated with the deportation of patients with incomplete treatment of TB disease after detention. These cases highlight the need for interagency coordination to ensure completion of treatment for persons being evaluated or treated for TB.

Case Reports

Case 1. A man aged 28 years had drug-susceptible pulmonary TB diagnosed in Seattle, Washington, and was deported before completing TB treatment. One year later, he was apprehended in the United States and, after transfer to four correctional facilities, was found while in the San Francisco, California, county jail to have isoniazid (INH)-resistant TB. After 2 months of treatment for TB, he was again scheduled for deportation. Despite concerns raised by local public health officials and personnel from DIHS, the patient was deported without medications or a referral for treatment in his country. The patient told local TB-program staff that if deported, he would return to the United States. The patient's location is unknown.

Case 2. A man aged 36 years was found to have multidrug-resistant TB while in INS custody in a local Texas jail. One month after starting treatment, he was released from a hospital prison ward without a plan for completing treatment. He was transferred through several INS contract detention facilities. The treatment course was complicated by the patient's refusal to take medicine. When the contract facility staff later expressed concern about the length of the 18–24 month treatment course and their inability to continue to provide it, the patient was transferred to a federal prison, and a federal judge ordered charges dropped against the patient. He was then deported after having completed only 4 months of treatment. The patient's location is unknown.

Case 3. A man aged 31 years with human immunodeficiency virus (HIV) infection had sputum smear-positive TB diagnosed in California. He adhered fully to treatment for 2 months in the community before he was apprehended and placed in INS custody. Because of the patient's increased risk for TB relapse and for acquiring drug resistance, the local TB controller asked INS to recommend a "medical hold" to complete the patient's TB treatment. The state TB-control program cited state law to justify continuing treatment. Both efforts failed, and the final order of deportation was upheld. The local TB-control program was given 1 hour's notice in which to provide the detainee with a supply of medication and to refer the patient to CURE-TB, a binational referral agency to facilitate referral of medical information for TB patients who move across the U.S. border (2). He returned to

his family in the United States within 2 weeks of deportation and resumed treatment for TB.

DIHS Data

Data collected by DIHS for fiscal years 2001–2002 indicate that the prevalence of culture-confirmed TB reported from eight SPCs was approximately 67 cases per 100,000 INS detainees, and the average length of TB treatment in an SPC was 22 days before release or deportation. This rate was 12 times the overall U.S. incidence of 5.6 cases in 2001 and 2.5 times the rate for the U.S. foreign-born population (3). After deportation, undocumented persons might return to the United States. During January 2000–March 2001, CURE-TB reported that 25% of TB patients deported to Latin America with known follow-up returned to the United States (K. Moser, San Diego Health and Human Services Agency, personal communication, 2001).

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Editorial Note: The findings in this report demonstrate some of the barriers to post-detention completion of treatment of TB for INS detainees being deported, including the limited coordination among TB-control programs, federal agencies, and facilities that house INS detainees (4). No uniform system exists to inform state and local TB programs when a person under detention by INS who has TB or suspected TB is released or deported. Federal immigration laws sometimes conflict with state health laws for TB control. Medical treatment often is not readily available to the deported person, and some of these persons might return to the United States while still infectious with TB. Effective treatment of persons with drug-susceptible TB requires a minimum duration of 6 months (5). One of the most challenging tasks in managing TB among detainees is the coordination of care during the post-detention period in the United States or in the patients' countries of origin.

As indicated in the three case reports, social and legal issues complicate the post-detention treatment period. No policies allow for completion of TB therapy in the United States after an immigration judge issues a final order of deportation, and INS is not authorized to hold a patient once a legal disposition has been made.

Deportation before treatment completion allows for the export and re-import of TB into the United States, thus plac-

ing other detainees, law enforcement officials, and communities in the country of origin and in the United States at increased risk for exposure to persons with infectious TB. To reduce the risk for exporting and re-importing persons with TB diseases identified while in INS custody, in November 2002, ACET recommended that the U.S. Department of Health and Human Services and the U.S. Department of Justice form a working group to resolve issues concerning the post-detention completion of TB treatment of persons released or deported from INS custody. ACET further recommended that the working group explore the feasibility of treating INS detainees in the United States until their TB is cured in the least restrictive setting.

ACET proposed revising or amending current policies or federal laws for detainees who are being evaluated or receiving treatment for TB disease to allow deportation only after the responsible state TB controller or their designate reviews and approves the treatment plan. For cases of multidrug-resistant TB, the availability of drugs needed to complete treatment in the country of origin should be ensured before deportation. Progress on these recommendations will involve working with professional correctional associations to improve adherence to local public health laws and CDC guidelines for TB screening and case notification and to enhance collaboration among INS SPCs, contract facilities, and TB programs.

Protocols should be developed to require the sharing of medical information and safeguarding its confidentiality and to describe mechanisms for the transfer of care when a patient is deported or released to the community. ACET recommended that appropriate agencies require the reporting of TB and suspected TB patients in INS custody before the transfer or deportation of INS detainees with TB to DIHS and state and local TB-control programs of jurisdictions in which sending and receiving facilities are located. In addition, ACET recommends the expansion of the medical hold authority of DIHS to permit notification of receiving health-care providers or a national referral program (e.g., CURE-TB or TBN[†]), transfer of medical records, and provision of sufficient TB medications to ensure treatment until the patient's care is resumed (ACET, unpublished data, 2002).

References

1. Weis SE, Slocum PC, Blais FX, et al. The effect of directly observed therapy on the rate of drug resistance and relapse in tuberculosis. *N Engl J Med* 1994;330:1179–84.
2. CURE-TB Program. CURE-TB: Binational Tuberculosis Referral Program. Available at <http://www.curetb.org>.
3. CDC. Reported tuberculosis in the United States, 2001. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, September 2002.
4. Geiter L. Institute of Medicine, Committee on the Elimination of Tuberculosis in the United States. Ending neglect: the elimination of tuberculosis in the United States. Washington, DC: National Academy Press, 2000.
5. American Thoracic Society, CDC, Infectious Diseases Society of America. Treatment of tuberculosis. *Am J Respir Crit Care Med* 2003;167:603–62.

Motivational Intervention to Reduce Alcohol-Exposed Pregnancies — Florida, Texas, and Virginia, 1997–2001

Prenatal alcohol use is a threat to healthy pregnancy outcomes for many U.S. women. During 1999, approximately 500,000 pregnant women reported having one or more drinks during the preceding month, and approximately 130,000 reported having seven or more alcohol drinks per week or engaging in binge drinking (i.e., five or more drinks in a day) (1). These heavier drinking patterns have been associated with fetal alcohol syndrome (FAS) and alcohol-related neurodevelopmental disorders (ARND) (2). Lower levels of alcohol consumption (i.e., fewer than seven drinks per week) also have been associated with measurable effects on children's development and behavior (3,4). Although the majority of women reduce their alcohol use substantially when they realize they are pregnant, a large proportion do not realize they are pregnant until well into the first trimester and, therefore, might continue to drink alcohol during this critical period of fetal development. To reduce alcohol-exposed pregnancies, CDC initiated a multisite pilot study (phase I clinical trial) in 1997 to investigate the use of a dual intervention focused on both alcohol-use reduction and effective contraception among childbearing-aged women at high risk for an alcohol-exposed pregnancy (Project CHOICES) (5). This report describes the association between baseline drinking measures and the success women have achieved in reducing their risk for an alcohol-exposed pregnancy. The analysis compares the impact of the motivational intervention at 6-month follow-up on women drinking at high-, medium-, and low-risk drinking levels. The findings indicate that although 69% of the women in the study reduced their risk for an alcohol-exposed pregnancy, women with the lowest baseline drinking measures achieved the highest rates of outcome success, primarily by choosing effective contraception and, secondarily, by reducing alcohol use. Women with higher baseline drinking measures chose

[†]CURE-TB and TBN[†] are U.S.-based referral programs that assist mobile patients to access and complete TB treatment. CURE-TB, operated by the San Diego County Health and Human Services Agency's TB-Control Program, focuses on patients crossing the U.S.-Mexico border. TBN[†], operated by the nonprofit Migrant Clinicians Network in Austin, Texas, specializes in migrant populations in the United States. The programs are working together and with INS to assist detainees in continuing TB treatment on release from custody.

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both approaches equally but achieved lower success rates for reducing their risk for an alcohol-exposed pregnancy. A randomized controlled trial of the motivational intervention is under way to further investigate outcomes of the phase I study.

Reproductive-aged (18–44 years), sexually active, fertile women were included in the study if they reported risk drinking (i.e., more than seven drinks per week on average or having one or more binge-drinking episodes during the preceding 3 months) and using ineffective contraception. Ineffective contraception was defined according to the type of contraceptive method reported by the participant, and the failure to use that method in accordance with the published recommendations (6) without using an appropriate back-up method (7). Study participants were recruited from community-based settings with higher documented rates of women at risk for an alcohol-exposed pregnancy, including a large urban jail (Texas); residential alcohol and drug treatment facilities (Texas); a gynecology clinic serving low-income women (Virginia); two primary care clinics serving low-income populations (Virginia and Florida); and media solicitation (Florida). Each participant provided written informed consent on forms approved by site-specific Institutional Review Boards and CDC's Institutional Review Board. Recruitment took place from spring 1999 to summer 2000.

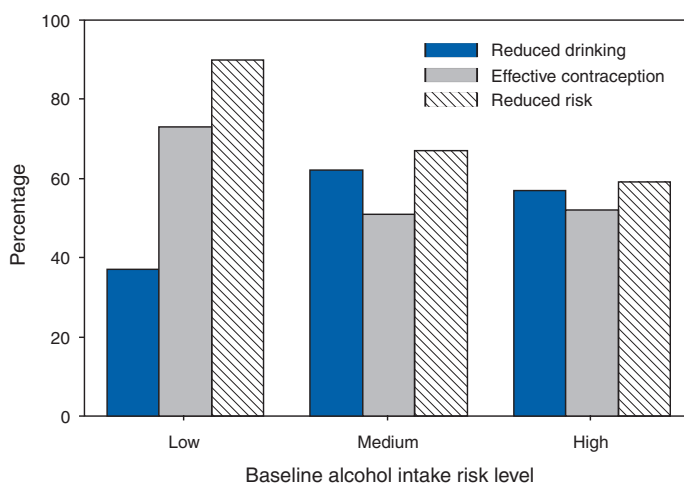
Of 2,384 women screened in Florida, Texas, and Virginia, 230 were eligible for the study; 190 (83%) consented to participate and were enrolled. Participants received a maximum of four motivational counseling sessions and one visit to a family planning provider. As part of the study, participants also completed an interview at enrollment and at 6-month follow-up to assess the impact of the brief intervention. At both times, methods of contraception were assessed along with the effectiveness of use. In addition, information was collected about drinking history, recent drinking, emotional distress, awareness of FAS and anti-drinking messages targeted to pregnant women, and sociodemographic characteristics. AUDIT (8), a screening instrument developed by the World Health Organization that incorporates questions about drinking (i.e., quantity, frequency, and binge drinking) and the consequences of drinking, was administered at baseline. The AUDIT instrument has been reported to be valid and reliable across different cultures, settings, and age groups (9). This test provided a range of scores from which categorical levels of risk drinking were developed. Scores were grouped into three drinking categories according to level of severity: low (1–7), medium (8–18), and high (19–40). The goals of the motivational interviewing sessions were to provide personalized feedback on the risk for an alcohol-exposed pregnancy, to motivate participants to change one or both of the target alcohol-use behaviors (i.e., decreasing alcohol intake to fewer than eight

drinks per week and no binge drinking), to decrease the temptation to engage in risk drinking and increase confidence to avoid it, and to encourage the use of effective contraception through contraceptive counseling visits. Descriptive statistics were calculated for baseline demographic and risk characteristics of women included in the analysis. In addition, bivariate analysis and logistic regression were conducted to assess differences between the baseline and the post-intervention status of the target outcome behaviors.

Of the 190 women enrolled in the study, approximately one third were from each site in Florida, Texas, and Virginia. Data about contraception use and drinking information were available both at enrollment and at 6-month follow-up interviews for 143 (75%) women. The majority (119) of study participants were members of racial/ethnic minorities (45% non-Hispanic black, 37% non-Hispanic white, 9% Hispanic, and 9% other), and the median age of participants was 31 years (range: 18–44 years); 147 (77%) reported having at least a high school education, and 121 (64%) reported annual incomes of <\$20,000. Of the 190 women at baseline, 188 (99%) reported binge drinking on one or more occasions during the preceding 6 months, and 123 (65%) women reported frequent drinking. A total of 122 (64%) reported both drinking behaviors (binge and frequent drinking).

The average baseline AUDIT score was 17 (range: 1–40). Scores of >8 indicate a strong likelihood of excessive alcohol use. A woman was considered not at risk for an alcohol-exposed pregnancy at the 6-month follow-up if she had reduced drinking (i.e., fewer than eight drinks per week and fewer than five drinks on a day during the preceding 6 months), used effective contraception, or both. The association among baseline AUDIT scores and reduced drinking, effective contraception, and reduced risk for an alcohol-exposed pregnancy at 6-month follow-up documented different patterns (Figure). Women's success in reducing their alcohol consumption below the level defined as high risk varied by their AUDIT scores at baseline. Women with the lowest AUDIT scores at baseline were statistically less likely to reduce their risk drinking (11 [37%]) than women with medium and high scores (34 [62%] and 33 [57%], respectively, $p < 0.03$). The proportion of women instituting effective contraception use was higher among women with the lowest AUDIT scores (22 [73%]), compared with women with medium (28 [51%]; $p < 0.05$) and high (30 [52%]) scores. An inverse association was observed between AUDIT scores at baseline and reduced risk for an alcohol-exposed pregnancy at 6 months ($p = 0.01$) (Figure). Women with the lowest AUDIT scores were the most likely to reduce their risk for an alcohol-exposed pregnancy (27 [90%]), compared with those with medium and high scores (37 [67%], $p < 0.03$ and 34

FIGURE. Baseline alcohol intake among women and their choices for reducing risk for an alcohol-exposed pregnancy — Florida, Texas, and Virginia, 1997–2001



[59%], $p < 0.005$, respectively). Logistic regression analysis was used to assess the association between baseline AUDIT scores and reduced risk for an alcohol-exposed pregnancy in the presence of potential confounders (e.g., income, marital status, education, and age). The baseline AUDIT score was the strongest predictor for reduced risk for an alcohol-exposed pregnancy. Therefore, women's baseline drinking levels influenced their choices of how to reduce their risk for an alcohol-exposed pregnancy by either instituting effective contraception use, reducing risk drinking, or both.

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Editorial Note: Fertile women who are sexually active, consume more than seven drinks per week or binge drink, and do not use effective contraception are at risk for an alcohol-exposed pregnancy and having a child with lifelong impairments in intellectual, cognitive, and psychosocial functioning (4). Preventing FAS or ARND requires intervening not only with pregnant women but also with childbearing-aged women before conception. Brief interventions using motivational interviewing techniques are effective among childbearing-aged women in reducing harmful drinking patterns (10). Women in this study reduced their risk for alcohol-exposed pregnancy by reducing their alcohol consumption risk, increasing their use of effective contraception, or both.

Among high-risk women overall, 69% were able to reduce their risk for an alcohol-exposed pregnancy.

Project CHOICES differs from other intervention studies because it offers effective contraception use in addition to reduced drinking as a strategy for decreasing the risk for an alcohol-exposed pregnancy. Although successful among all AUDIT score categories, this dual intervention had a differential impact on behavior change dependent on the participants' baseline alcohol use and experienced consequences of alcohol use (AUDIT score). Women with low AUDIT scores were more successful in reducing their risk for an alcohol-exposed pregnancy at the 6-month follow-up visit (90%), mostly by increasing their use of effective contraception. In comparison, women with higher AUDIT scores were more successful in reducing their alcohol use than women with lower AUDIT scores but were less likely to adopt effective contraceptive use. Women with lower alcohol use patterns at baseline might not have perceived their alcohol use patterns as problematic but did respond to the message of effective contraception use to avoid an unintended prenatal alcohol exposure. Women with higher alcohol-use patterns might have been more sensitized to the potential problematic nature of their alcohol use and might have chosen to reduce drinking because of their desire to improve their overall health.

The findings in this report are subject to at least three limitations. First, sample sizes were not sufficient to assess the impact of rates of change of reduced risk for an alcohol-exposed pregnancy between and within the community-based settings. Although some sociodemographic differences were noted among the settings, rates of change for an alcohol-exposed pregnancy across sites were similar (65%–72%), as indicated in previous findings (5), suggesting that the impact of these site differences did not affect the study outcomes. Second, no control group was used, thus limiting the evaluation of the effectiveness of the intervention. Third, the study was based on self-reported alcohol drinking and contraception-use data. Therefore, some participants' reports of change might have been attributable to social desirability or wanting to please the study personnel. However, the accuracy of self-reports in alcohol treatment studies is comparable to that of biochemical validation or collateral reports (10).

Providing an effective option for reducing the risk for an alcohol-exposed pregnancy to high-risk women who do not respond to strategies focusing on alcohol-use reduction is an important step for FAS prevention. To address the limitations of this study, a randomized controlled trial is under way to test the efficacy of this intervention and will include sufficient sample sizes to assess the impact of different settings on the intervention outcome. Until more definitive findings are available, this information might interest counselors, clinicians,

and other public health providers concerned with the prevention of FAS and other prenatal alcohol-related conditions.

References

1. CDC. Alcohol use among women of childbearing age—United States, 1991–1999. *MMWR* 2002;15:273–6.
2. Jacobs EA, Copperman SM, Jeffe A, Kulig J. Fetal alcohol syndrome and alcohol-related neurodevelopmental disorders. *Pediatrics* 2000;106:358–61.
3. Sood B, Delaney-Black V, Corington C, et al. Prenatal alcohol exposure and childhood behaviors at 6 to 7 years: I. Dose-response. *Pediatrics* 2001;108:1–9.
4. Day NL, Leech SL, Richardson GA, Cornelius MD, Robles N, Larkby C. Prenatal alcohol exposure predicts continued deficits in offspring size at 14 years of age. *Alcohol Clin Exp Res* 2002;26:1584–91.
5. Project CHOICES Intervention Research Group. Reducing the risk of alcohol-exposed pregnancies: a study of a motivational intervention in community settings. *Pediatrics* 2003;111:1131–5.
6. Hatcher RA, Trussell J, Stewart F, et al. *Contraceptive technology*. 17th ed. New York, New York: Ardent Media Inc., 1998.
7. Project CHOICES Research Group. Alcohol-exposed pregnancy: characteristics associated with risk. *Am J Prev Med* 2002;23:166–73.
8. Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M. Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption—II. *Addiction* 1993;88:791–804.
9. Wutzke SE, Shiell A, Gomel MK, Conigrave KM. Cost effectiveness of brief interventions for reducing alcohol consumption. *Soc Sci Med* 2001;52:863–70.
10. Babor TF, Steinberg K, Anton R, Del Boca F. Talk is cheap: measuring drinking outcomes in clinical trials. *J Stud Alcohol* 2000;61:55–63.

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

During January 24–May 2, 2003, smallpox vaccine was administered to 35,903 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 May 2.

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). 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 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 are accepted (i.e., events associated temporally); 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 May 2 that either are under investigation or have a reported final diagnosis. Because of ongoing discussions of final case definitions, numbers and classifications of adverse events might change and will be updated regularly in *MMWR*.

As of May 2, a total of 15 cases of myopericarditis have been reported (Table 1); no new or reclassified cases were recorded during April 26–May 2. During the vaccination program, no cases of eczema vaccinatum, erythema multiforme major, fetal vaccinia, postvaccinial encephalitis or encephalomyelitis, or progressive vaccinia have been reported (Table 1). The decreased total for inadvertent inoculations (nonocular) from 28 to 15 cases during the program is based on receipt of additional information on those removed (2).

During April 26–May 2, five other serious adverse events were reported: one case of chest tightness with electrocardiogram changes, one case of polyneuropathy, and three cases of atypical chest pain (Table 2). Also during this period, 42 other nonserious events were reported (Table 2). Among the 455 vaccinees with reported other nonserious adverse events during January 24–May 2, the most common signs and symptoms were fever ($n = 88$), rash ($n = 85$), headache ($n = 76$), pain ($n = 75$), and fatigue ($n = 69$) (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 nine cases of transmission from military personnel to civilian contacts have been reported. This figure is five less than that in a previous report because of viral cultures being negative in the cases removed from the list (2). 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

1. CDC. Update: adverse events following smallpox vaccination—United States, 2003. *MMWR* 2003;52:278–82.
2. CDC. Update: adverse events following smallpox vaccination—United States, 2003. *MMWR* 2003;52:419–20.

TABLE 1. Number of cases* of selected adverse events associated with smallpox vaccination among civilians, by type — United States, January 24–May 2, 2003

Adverse events	No. new cases (April 26–May 2)			Total (January 24–May 2)		
	Suspected [†]	Probable [§]	Confirmed [¶]	Suspected	Probable	Confirmed
Eczema vaccinatum	—**	—	—	—	—	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—	NA ^{††}	—	—	NA
Fetal vaccinia	—	—	—	—	—	—
Generalized vaccinia	—	—	—	2	—	1
Inadvertent inoculation (nonocular)	—	—	—	12	—	3
Myocarditis/Pericarditis	—	—	—	14	1	—
Ocular vaccinia	—	—	—	—	—	2
Postvaccinial encephalitis or encephalomyelitis	—	—	NA	—	—	NA
Progressive vaccinia	—	—	—	—	—	—
Pyogenic infection of vaccination site	—	—	—	—	—	—

* Under investigation or completed as of May 2, 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 excluded and supportive information for the diagnosis is found.

[¶] Events are classified as confirmed if virologic tests are positive.

** No cases reported.

^{††} Not applicable.

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

Adverse events	No. new cases (April 26–May 2)	Total (January 24–May 2)
Other serious adverse events†	5§	65
Other nonserious adverse events¶	42	455

* Under investigation or completed as of May 2, 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 tightness with electrocardiogram changes, one case of polyneuropathy, and three cases of atypical chest pain.

¶ 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–May 2, 2003

Events	No. new cases (April 26–May 2)	Total (January 24–May 2)
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. Nine cases of transmission from military personnel to civilian contacts have been reported.

Notice to Readers

Pneumococcal Conjugate Vaccine Shortage Resolved

In February 2000, Prevnar™, a 7-valent pneumococcal conjugate vaccine manufactured by Wyeth Lederle Vaccines (Pearl River, New York), was licensed for use among infants and young children. Beginning in August 2001, the supply of Prevnar™ failed to meet demand, resulting in shortages for health-care providers and health departments. To conserve the limited supply and ensure protection of children at highest risk, CDC published interim recommendations for vaccination that called for withholding vaccine from healthy children aged ≥ 2 years and deferring some doses for healthy children aged < 2 years (1,2). Despite the shortage, introduction of the vaccine has been associated with a 69% decline in invasive disease among children aged < 2 years through 2001 (78% for vaccine serotypes and 50% for vaccine-related serotypes) (3).

Vaccine production and deliveries are now adequate to permit a return to the routine vaccination schedule (4).

According to data from CDC tracking systems and the manufacturer, the average number of vaccine doses delivered monthly for each of the preceding 3 months exceeded the monthly estimated average national need, and all back orders have been filled in both the public and private sectors.

According to the original Advisory Committee on Immunization Practices recommendations (4) and more recent guidance from CDC (5), all children aged < 24 months and 24–59 months who are at increased risk for pneumococcal disease (e.g., children with sickle cell disease or anatomic asplenia, chronic illness, a cerebrospinal fluid leak, a cochlear implant, or an immunocompromising condition) should be administered the pneumococcal conjugate vaccine. In addition, providers should consider vaccine for all other children aged 24–59 months, with priority given to children aged 24–35 months, American Indian/Alaska Native and black children, and those who attend group child care.

A catch-up schedule is provided for children who are incompletely vaccinated (Table). The highest priority for catch-up vaccination is to ensure that children aged < 5 years at high risk for invasive pneumococcal disease because of medical conditions have received a complete series. Second priorities include vaccination of healthy children aged < 24 months who have not received any doses of pneumococcal conjugate vaccine and healthy children aged < 12 months who have not yet received 3 doses.

Because of the frequency of health-care provider visits for children during their first 18 months, catch-up vaccination might occur at regularly scheduled visits for most children who receive vaccines from their primary-care provider; special notification should be considered for children who have completed their 15-month visit and are not scheduled to be seen again before the visit at age 2 years. Programs that provide vaccinations but do not see children routinely for other reasons also should consider a notification process to contact undervaccinated or unvaccinated children.

Reporting Invasive Pneumococcal Disease Among Vaccinees

CDC is investigating situations in which invasive pneumococcal disease occurs despite vaccination. Health-care providers are encouraged to report invasive pneumococcal disease occurring in children aged < 5 years who have received ≥ 1 doses of pneumococcal conjugate vaccine to CDC through state health departments. If pneumococcal isolates are available from vaccinated children, CDC will perform serotyping to determine whether the strain is a type included in the vaccine. Additional information is available at <http://www.cdc.gov/nip/diseases/pneumo/PCV-survrpts/default.htm>.

TABLE. Recommended regimens for pneumococcal conjugate vaccine among children with a late start or lapse in vaccine administration

Age at examination (mos)	Previous pneumococcal conjugate vaccination history	Recommended regimen*
2–6	0 doses	3 doses 2 months apart, 4th dose at age 12–15 months
	1 dose	2 doses 2 months apart, 4th dose at 12–15 months
	2 doses	1 dose, 4th dose at 12–15 months
7–11	0 doses	2 doses 2 months apart, 3rd dose at 12–15 months
	1 or 2 doses before age 7 months	1 dose at 7–11 months, with another dose at 12–15 months (≥ 2 months later)
12–23	0 doses	2 doses ≥ 2 months apart
	1 dose before age 12 months	2 doses ≥ 2 months apart
	1 dose at ≥ 12 months	1 dose ≥ 2 months after the most recent dose
	2 or 3 doses before age 12 months	1 dose ≥ 2 months after the most recent dose
24–59		
Healthy children†	Any incomplete schedule	Consider 1 dose ≥ 2 months after the most recent dose
High risk§	<3 doses	1 dose ≥ 2 months after the most recent dose and another dose ≥ 2 months later
	3 doses	1 dose ≥ 2 months after the most recent dose

* For children vaccinated at age <1 year, the minimum interval between doses is 4 weeks. Doses administered at ≥ 12 months should be at least 8 weeks apart.

† Providers should consider 1 dose for healthy children aged 24–59 months, with priority to children aged 24–35 months, American Indian/Alaska Native and black children, and those who attend group child care centers.

§ Children with sickle cell disease, asplenia, human immunodeficiency virus infection, chronic illness, cochlear implant, or immunocompromising condition.

References

1. CDC. Updated recommendations on the use of pneumococcal conjugate vaccine in a setting of vaccine shortage—Advisory Committee on Immunization Practices. *MMWR* 2001;50:1140–2.
2. CDC. Decreased availability of pneumococcal conjugate vaccine. *MMWR* 2001;50:783–4.
3. CG Whitney, MM Farley, J Hadler, et al. Decline in invasive pneumococcal disease after the introduction of protein–polysaccharide conjugate vaccine. *N Engl J Med* 2003;348:1737–46.
4. CDC. Prevention of pneumococcal disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices. *MMWR* 2000;49(No. RR-9).
5. CDC. Pneumococcal vaccination for cochlear implant recipients. *MMWR* 2002;51:931.

Notice to Readers

Alcohol and Other Drug-Related Birth Defects Awareness Week, May 11–18, 2003

The National Council on Alcoholism and Drug Dependence has designated May 11–18, 2003, as Alcohol and Other Drug-Related Birth Defects Awareness Week. This year's theme, "Preserving Families," encourages persons to recognize the detrimental effects alcohol can have on persons and families and urges women of childbearing age to assess their drinking habits. Early identification of women at risk for an alcohol-exposed pregnancy is critical to preventing fetal alcohol syndrome (FAS) and other prenatal alcohol-related conditions.

Prenatal alcohol exposure can result in facial abnormalities, growth deficits, and central nervous system problems, the most severe of which is FAS. This year marks the 30th anniversary of the recognition of FAS (1). Despite efforts to prevent

alcohol-exposed pregnancies, binge and frequent drinking among both pregnant and nonpregnant women continues (2).

FAS is preventable when a woman does not drink alcohol when she is pregnant or could become pregnant. One prevention strategy to reduce alcohol use that has demonstrated promising results involves brief, behavioral counseling interventions (3). Another related but more in-depth counseling approach incorporates motivational interviewing techniques. In this issue of *MMWR*, findings from Project CHOICES, a CDC-funded motivational intervention designed to reduce alcohol-exposed pregnancies among high-risk women of childbearing age, are presented. Providing effective alternatives for reducing the risk of an alcohol-exposed pregnancy to women who might not respond to alcohol reduction strategies is an important step toward FAS prevention.

Additional information about Alcohol and Other Drug-Related Birth Defects Awareness Week is available at <http://www.ncadd.org>. Additional information about FAS and other prenatal alcohol-related conditions is available from CDC at <http://www.cdc.gov/ncbddd/fas>, from the National Institute on Alcohol Abuse and Alcoholism at <http://www.niaaa.nih.gov>, and through the Substance Abuse and Mental Health Services Administration at <http://www.samhsa.gov>.

References

1. Jones KL, Smith DW, Ulleland CN, Streissguth AP. Pattern of malformation in offspring of chronic alcoholic mothers. *Lancet* 1973;1:1267–71.
2. CDC. Alcohol consumption among childbearing-age women—United States, 1991–1999. *MMWR* 2002;51:273–6.
3. Fleming MF, Mundt MP, French MT, Manwell LB, Stauffacher EA, Barry KL. Brief physician advice for problem drinkers: Long-term efficacy and benefit-cost analysis. *Alcohol Clin Exp Res* 2002;26:36–43.

Notice to Readers

Department of Health and Human Services and Public Health Training Network Satellite Broadcast and Webcast

The U.S. Department of Health and Human Services (DHHS) and the Public Health Training Network (PHTN) will present "Steps to a HealthierUS: RFA Guidance," a live, interactive satellite broadcast and webcast on May 22, 2003, from 1 p.m. to 3 p.m., EST. The broadcast will describe DHHS Secretary Tommy G. Thompson's "Steps to a HealthierUS (Steps)," a new prevention initiative that focuses on reducing the burden of chronic diseases and addressing the lifestyle choices that are responsible for some of the leading causes of death and disability.

The broadcast will help applicants in preparing their responses to the Request for Applications (RFA) for the Steps Program and will focus on the application process, eligibility criteria, program requirements, desired content of the applications, and how the applications will be judged. A question-and-answer session will enable participants to ask questions to panelists through toll free telephone, fax, or TTY lines. The program is designed for all potential applicants for the Steps program announcement (i.e., official state and local

health departments, and federally recognized tribal governments and U.S. Territories).

Additional information about site availability, broadcast coordinates, program content, resource materials, and accessing the live broadcast/webcast is available at <http://www.phppo.cdc.gov/phtn/RFA>.

Notice to Readers

Buckle Up America Week: Focus on Teens and Young Adults, May 19–26, 2003

Motor-vehicle crashes are the leading cause of death for teenagers and young adults. In 2000, a total of 6,041 persons aged 16–20 years died from motor-vehicle crashes (1). Safety-belt use is the most effective means of reducing fatal and non-fatal injuries in motor-vehicle crashes. Teenagers and young adults are among those with the lowest safety-belt use rates. In 2002, safety belt use among those aged 16–24 years was 69%, the lowest safety-belt use among all age groups, compared with a national estimate of 75% among all ages (2). Greater safety-belt use in teens and young adults would substantially decrease unintentional death and injuries in the United States.

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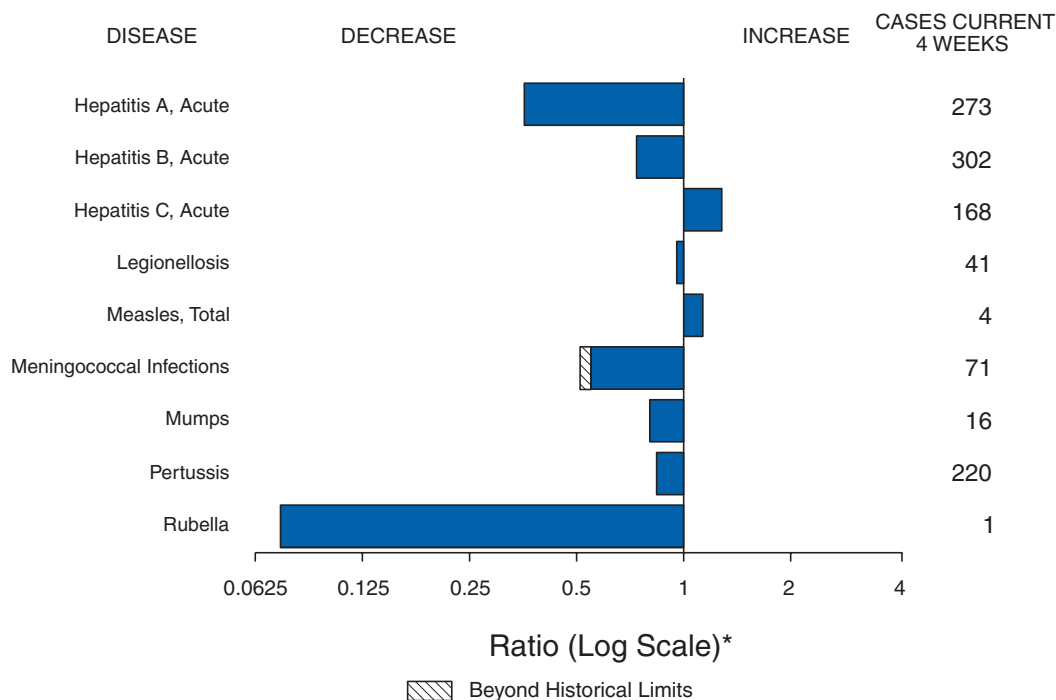
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Buckle Up America Week involves a wide range of efforts to promote safety-belt use among all persons in the United States to achieve the National Highway Traffic Safety Administration's goal of 90% safety-belt use by 2005 (3) and the national health objective for 2010 of 92% safety-belt use (4). Safety-belt laws and enhanced law enforcement are among the most effective means for increasing widespread safety-belt use (5). The combination of education and public awareness targeted to those most at risk and high-visibility law enforcement provides the greatest opportunity to make immediate gains in safety-belt use that can be sustained over time. These strategies were endorsed and recommended by the Task Force on Community Preventive Services to reduce injuries to motor-vehicle occupants. Recommendations are available at <http://www.thecommunityguide.org> (6). Additional information on Buckle Up America activities is available at <http://www.buckleupamerica.org>.

References

1. CDC. Web-based Injury Statistics Query and Reporting System (WISQARS). Atlanta, Georgia: National Center for Injury Prevention and Control, CDC, 2001. Available at <http://www.cdc.gov/ncipc/wisquars>.
2. U.S. Department of Transportation, National Highway Traffic Safety Administration. National Center for Statistics and Analysis. March 2003; publication no. DOT-HS 809-557.
3. U.S. Department of Transportation, National Highway Traffic Safety Administration. Presidential initiative for increasing seat belt use nationwide: recommendations from the Secretary of Transportation. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration, 1997; publication no. DOT-HS 808-576.
4. U.S. Department of Health and Human Services. Healthy People 2010 (conference ed., 2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
5. Dinh-Zarr TB, Sleet DA, Shults RA, et al., and the Task Force on Community Preventive Services. Reviews of evidence regarding interventions to increase the use of safety belts. *Am J Prev Med* 2001;21:48-65.
6. CDC. Motor vehicle occupant injury: strategies for increasing use of child seats, increasing use of safety belts, and reducing alcohol-impaired driving: a report on recommendations of the Task Force on Community Preventive Services. *MMWR* 2001;50(No. RR-7).

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals May 10, 2003, with historical data

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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending May 10, 2003 (19th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	1	Hansen disease (leprosy) [†]	20	27
Botulism:	-	-	Hantavirus pulmonary syndrome [†]	6	4
foodborne	5	5	Hemolytic uremic syndrome, postdiarrheal [†]	41	38
infant	18	27	HIV infection, pediatric ^{†§}	91	56
other (wound & unspecified)	8	5	Measles, total	9 [¶]	6 ^{**}
Brucellosis [†]	19	32	Mumps	74	101
Chancroid	13	34	Plague	-	-
Cholera	-	3	Poliomyelitis, paralytic	-	-
Cyclosporiasis [†]	12	33	Psittacosis [†]	4	10
Diphtheria	-	-	Q fever [†]	26	15
Ehrlichiosis:	-	-	Rabies, human	-	1
human granulocytic (HGE) [†]	12	23	Rubella	3	3
human monocytic (HME) [†]	19	9	Rubella, congenital	-	2
other and unspecified	-	2	Streptococcal toxic-shock syndrome [†]	58	61
Encephalitis/Meningitis:	-	-	Tetanus	1	7
California serogroup viral [†]	-	-	Toxic-shock syndrome	43	41
eastern equine [†]	-	-	Trichinosis	2	9
Powassan [†]	-	-	Tularemia [†]	5	8
St. Louis [†]	-	-	Yellow fever	-	1
western equine [†]	-	-			

-: 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 (NCHSTP). Last update April 27, 2003.

[¶] Of nine cases reported, eight were indigenous and one was imported from another country.

^{**} Of six cases reported, four were indigenous and two were imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 10, 2003, and May 11, 2002 (19th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003§	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	15,551	12,786	281,321	295,101	1,265	1,478	606	747	-	-
NEW ENGLAND	501	448	9,779	9,664	-	-	35	37	-	-
Maine	23	8	718	501	N	N	2	1	-	-
N.H.	12	12	520	587	-	-	2	9	-	-
Vt.	6	5	375	271	-	-	7	8	-	-
Mass.	227	236	3,822	3,856	-	-	17	10	-	-
R.I.	39	40	1,185	953	-	-	5	5	-	-
Conn.	194	147	3,159	3,496	N	N	2	4	-	-
MID. ATLANTIC	3,357	2,473	30,020	31,953	-	-	76	106	-	-
Upstate N.Y.	180	187	6,754	5,410	N	N	26	21	-	-
N.Y. City	1,625	1,477	11,072	11,064	-	-	22	40	-	-
N.J.	602	542	3,561	4,642	-	-	3	8	-	-
Pa.	950	267	8,633	10,837	N	N	25	37	-	-
E.N. CENTRAL	1,394	1,325	47,364	54,925	2	9	116	220	-	-
Ohio	230	262	10,994	14,123	-	-	21	50	-	-
Ind.	227	155	5,782	6,097	N	N	14	18	-	-
Ill.	595	558	14,389	17,311	-	2	14	43	-	-
Mich.	275	282	11,107	11,335	2	7	24	42	-	-
Wis.	67	68	5,092	6,059	-	-	43	67	-	-
W.N. CENTRAL	288	193	16,010	16,383	-	-	62	69	-	-
Minn.	57	44	3,114	3,852	N	N	32	25	-	-
Iowa	34	39	1,243	1,788	N	N	10	5	-	-
Mo.	137	64	6,147	5,148	-	-	6	10	-	-
N. Dak.	-	-	483	473	N	N	3	5	-	-
S. Dak.	7	2	863	801	-	-	9	4	-	-
Nebr.	22	21	1,608	1,671	-	-	2	14	-	-
Kans.	31	23	2,552	2,650	N	N	-	6	-	-
S. ATLANTIC	4,565	4,278	54,264	55,204	1	1	102	112	-	-
Del.	81	81	1,139	1,002	N	N	1	1	-	-
Md.	415	638	6,027	5,587	1	1	9	5	-	-
D.C.	478	202	883	1,221	-	-	-	3	-	-
Va.	427	276	6,705	5,954	-	-	11	1	-	-
W. Va.	33	23	928	887	N	N	-	1	-	-
N.C.	519	338	8,167	8,596	N	N	10	17	-	-
S.C.	316	321	5,069	5,478	-	-	2	2	-	-
Ga.	613	786	10,994	11,262	-	-	45	41	-	-
Fla.	1,683	1,613	14,352	15,217	N	N	24	41	-	-
E.S. CENTRAL	623	600	19,071	19,476	N	N	37	50	-	-
Ky.	67	109	3,049	3,241	N	N	9	1	-	-
Tenn.	270	252	6,707	6,140	N	N	8	26	-	-
Ala.	143	117	4,943	6,119	-	-	17	19	-	-
Miss.	143	122	4,372	3,976	N	N	3	4	-	-
W.S. CENTRAL	1,661	1,452	37,089	39,210	-	-	25	14	-	-
Ark.	48	97	2,507	2,485	-	-	1	4	-	-
La.	195	363	5,529	6,643	N	N	1	3	-	-
Okla.	75	77	3,662	3,802	N	N	3	3	-	-
Tex.	1,343	915	25,391	26,280	-	-	20	4	-	-
MOUNTAIN	586	434	16,434	18,543	914	1,001	33	45	-	-
Mont.	8	6	410	677	N	N	6	3	-	-
Idaho	10	8	940	832	N	N	6	15	-	-
Wyo.	3	3	376	323	-	-	1	5	-	-
Colo.	128	95	3,250	5,190	N	N	7	8	-	-
N. Mex.	44	28	2,428	2,862	-	4	-	5	-	-
Ariz.	272	176	5,638	5,598	897	979	3	5	-	-
Utah	27	22	1,438	787	3	4	8	1	-	-
Nev.	94	96	1,954	2,274	14	14	2	3	-	-
PACIFIC	2,576	1,583	51,290	49,743	348	467	120	94	-	-
Wash.	180	171	5,685	5,298	N	N	12	-	-	-
Oreg.	108	152	2,832	2,428	-	-	12	11	-	-
Calif.	2,246	1,235	41,141	39,114	348	467	96	82	-	-
Alaska	9	2	1,325	1,362	-	-	-	-	-	-
Hawaii	33	23	307	1,541	-	-	-	1	-	-
Guam	2	1	-	-	-	-	-	-	-	-
P.R.	437	377	447	17	N	N	N	N	-	-
V.I.	13	50	-	64	-	-	-	-	-	-
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 April 27, 2003.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending May 10, 2003, and May 11, 2002 (19th Week)*

Reporting area	Escherichia coli, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	352	481	52	21	38	5	4,851	6,276	105,035	125,917
NEW ENGLAND	20	35	6	2	3	1	362	575	2,443	2,879
Maine	3	2	1	-	-	-	41	60	69	28
N.H.	5	3	-	-	-	-	14	18	39	47
Vt.	-	1	-	-	-	-	28	41	31	38
Mass.	6	19	-	2	3	1	169	305	972	1,243
R.I.	1	3	-	-	-	-	42	40	351	343
Conn.	5	7	5	-	-	-	68	111	981	1,180
MID. ATLANTIC	20	37	2	-	9	2	886	1,366	11,587	14,952
Upstate N.Y.	13	26	1	-	5	-	287	360	2,522	2,941
N.Y. City	3	2	-	-	-	-	361	533	4,175	4,541
N.J.	4	9	-	-	-	-	56	158	1,894	2,837
Pa.	N	N	1	-	4	2	182	315	2,996	4,633
E.N. CENTRAL	79	147	8	4	7	-	773	1,094	21,458	26,320
Ohio	18	20	8	2	7	-	286	285	6,387	7,652
Ind.	11	9	-	-	-	-	-	-	2,264	2,669
Ill.	17	55	-	2	-	-	163	342	6,386	8,794
Mich.	18	27	-	-	-	-	221	300	4,700	5,155
Wis.	15	36	-	-	-	-	103	167	1,721	2,050
W.N. CENTRAL	46	64	4	4	6	-	491	578	5,408	6,399
Minn.	15	21	3	3	-	-	178	202	787	1,122
Iowa	5	14	-	-	-	-	75	86	246	423
Mo.	16	15	N	N	N	N	124	164	2,885	3,064
N. Dak.	1	-	-	-	1	-	11	6	23	25
S. Dak.	2	1	-	-	-	-	16	21	59	91
Nebr.	5	7	1	1	-	-	47	49	505	587
Kans.	2	6	-	-	5	-	40	50	903	1,087
S. ATLANTIC	40	40	15	7	-	-	875	935	26,425	32,283
Del.	-	2	N	N	N	N	14	18	444	612
Md.	1	2	-	-	-	-	41	36	2,836	3,175
D.C.	1	-	-	-	-	-	13	16	637	1,008
Va.	8	6	1	-	-	-	94	58	3,092	3,787
W. Va.	1	1	-	-	-	-	9	9	305	364
N.C.	5	9	4	-	-	-	N	N	4,517	6,026
S.C.	-	-	-	-	-	-	34	14	2,767	3,348
Ga.	11	12	2	4	-	-	361	280	5,465	5,940
Fla.	13	8	8	3	-	-	309	504	6,362	8,023
E.S. CENTRAL	20	19	-	-	3	-	108	113	9,165	10,982
Ky.	8	3	-	-	3	-	N	N	1,277	1,269
Tenn.	8	12	-	-	-	-	45	51	2,771	3,407
Ala.	3	1	-	-	-	-	63	62	2,901	3,858
Miss.	1	3	-	-	-	-	-	-	2,216	2,448
W.S. CENTRAL	27	13	9	-	6	1	78	44	14,927	17,429
Ark.	2	1	-	-	-	-	42	44	1,273	1,555
La.	-	-	-	-	-	-	3	-	3,509	4,109
Okla.	2	3	-	-	-	-	33	-	1,376	1,685
Tex.	23	9	9	-	6	1	-	-	8,769	10,080
MOUNTAIN	45	41	6	2	4	1	432	440	3,538	4,018
Mont.	1	8	-	-	-	-	20	29	29	38
Idaho	11	1	4	-	-	-	57	21	32	33
Wyo.	1	1	-	1	-	-	5	7	19	22
Colo.	16	10	1	-	4	1	122	153	821	1,319
N. Mex.	1	4	1	1	-	-	16	55	404	533
Ariz.	9	5	N	N	N	N	78	60	1,475	1,324
Utah	5	6	-	-	-	-	91	68	148	72
Nev.	1	6	-	-	-	-	43	47	610	677
PACIFIC	55	85	2	2	-	-	846	1,131	10,084	10,655
Wash.	16	7	1	-	-	-	57	127	1,047	1,077
Oreg.	8	22	1	2	-	-	92	132	345	308
Calif.	30	41	-	-	-	-	658	802	8,423	8,846
Alaska	1	3	-	-	-	-	29	29	196	225
Hawaii	-	12	-	-	-	-	10	41	73	199
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	-	-	10	3	35	5
V.I.	-	-	-	-	-	-	-	-	-	18
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending May 10, 2003, and May 11, 2002 (19th Week)*

Reporting area	<i>Haemophilus influenzae</i> , invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years						A	
	All serotypes		Serotype B		Non-serotype B		Unknown serotype			
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	562	777	5	12	85	137	14	10	1,934	3,610
NEW ENGLAND	46	53	-	-	2	4	3	2	75	143
Maine	2	1	-	-	-	-	1	-	2	4
N.H.	6	4	-	-	-	-	-	-	4	8
Vt.	6	3	-	-	-	-	-	-	3	-
Mass.	20	27	-	-	2	2	1	2	42	68
R.I.	2	8	-	-	-	-	1	-	9	18
Conn.	10	10	-	-	-	2	-	-	15	45
MID. ATLANTIC	88	142	-	1	11	23	4	-	283	474
Upstate N.Y.	34	54	-	1	5	7	-	-	38	69
N.Y. City	15	32	-	-	4	7	-	-	117	171
N.J.	16	34	-	-	2	5	-	-	36	72
Pa.	23	22	-	-	-	4	4	-	92	162
E.N. CENTRAL	69	147	1	1	12	26	-	-	196	448
Ohio	29	42	-	-	6	5	-	-	36	115
Ind.	19	16	-	-	2	5	-	-	11	22
Ill.	14	59	-	-	3	11	-	-	64	153
Mich.	7	6	1	1	1	-	-	-	72	92
Wis.	-	24	-	-	-	5	-	-	13	66
W.N. CENTRAL	42	22	-	-	5	2	4	3	62	135
Minn.	18	15	-	-	5	2	-	1	14	22
Iowa	-	1	-	-	-	-	-	-	15	26
Mo.	15	4	-	-	-	-	4	2	17	30
N. Dak.	-	-	-	-	-	-	-	-	-	1
S. Dak.	1	1	-	-	-	-	-	-	-	3
Nebr.	-	-	-	-	-	-	-	-	3	6
Kans.	8	1	-	-	-	-	-	-	13	47
S. ATLANTIC	131	201	-	3	13	30	-	1	495	1,042
Del.	-	-	-	-	-	-	-	-	4	7
Md.	30	42	-	-	4	1	-	-	55	117
D.C.	-	-	-	-	-	-	-	-	14	36
Va.	15	9	-	-	3	2	-	-	34	29
W. Va.	3	2	-	-	-	-	-	-	6	9
N.C.	10	16	-	-	-	3	-	-	26	110
S.C.	3	4	-	-	-	1	-	-	18	29
Ga.	25	37	-	-	3	8	-	-	190	214
Fla.	45	91	-	3	3	15	-	1	148	491
E.S. CENTRAL	44	27	1	1	6	8	-	-	51	117
Ky.	2	3	-	-	-	-	-	-	11	26
Tenn.	24	14	-	-	4	5	-	-	26	47
Ala.	16	5	1	1	1	2	-	-	9	16
Miss.	2	5	-	-	1	1	-	-	5	28
W.S. CENTRAL	27	28	-	2	4	6	-	-	167	238
Ark.	4	1	-	-	1	-	-	-	2	19
La.	6	3	-	-	1	1	-	-	20	19
Okla.	17	22	-	-	2	5	-	-	6	13
Tex.	-	2	-	2	-	-	-	-	139	187
MOUNTAIN	90	85	3	3	25	18	2	2	148	222
Mont.	-	-	-	-	-	-	-	-	2	7
Idaho	1	1	-	-	1	-	-	-	-	18
Wyo.	-	1	-	-	-	-	-	-	1	2
Colo.	15	16	-	-	4	2	-	-	20	32
N. Mex.	13	15	-	-	4	4	1	-	7	6
Ariz.	50	35	3	1	11	8	-	1	87	118
Utah	7	11	-	1	4	3	-	-	14	14
Nev.	4	6	-	1	1	1	1	1	17	25
PACIFIC	25	72	-	1	7	20	1	2	457	791
Wash.	3	2	-	1	2	1	1	-	21	56
Oreg.	18	25	-	-	3	3	-	-	27	34
Calif.	2	26	-	-	2	13	-	2	405	680
Alaska	-	1	-	-	-	1	-	-	4	7
Hawaii	2	18	-	-	-	2	-	-	-	14
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	9	72
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 May 10, 2003, and May 11, 2002 (19th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	2,195	2,558	1,021	758	307	244	148	165	1,727	2,314
NEW ENGLAND	86	94	-	12	10	8	7	15	143	209
Maine	-	2	-	-	-	1	-	2	-	-
N.H.	6	6	-	-	1	1	2	2	4	18
Vt.	1	2	-	7	1	-	-	-	3	2
Mass.	68	58	-	5	3	4	3	8	11	175
R.I.	3	10	-	-	1	-	-	1	66	7
Conn.	8	16	-	-	4	2	2	2	59	7
MID. ATLANTIC	378	619	51	42	46	69	24	30	1,260	1,747
Upstate N.Y.	34	43	24	18	22	16	7	9	672	843
N.Y. City	147	314	-	-	6	13	6	7	-	27
N.J.	151	136	-	5	2	13	3	5	147	292
Pa.	46	126	27	19	16	27	8	9	441	585
E.N. CENTRAL	160	206	197	46	61	74	14	22	42	83
Ohio	53	32	5	-	30	30	3	9	12	8
Ind.	10	9	1	-	2	3	1	1	4	2
Ill.	1	30	6	10	3	11	3	3	-	9
Mich.	79	116	185	36	26	20	7	6	-	-
Wis.	17	19	-	-	-	10	-	3	26	64
W.N. CENTRAL	104	82	93	327	12	18	4	5	26	24
Minn.	13	2	1	-	2	2	2	-	17	15
Iowa	4	11	-	1	4	5	-	1	4	3
Mo.	64	47	92	325	3	6	-	2	3	4
N. Dak.	-	1	-	-	1	-	-	1	-	-
S. Dak.	1	-	-	-	-	1	-	-	-	-
Nebr.	12	11	-	1	1	4	2	-	-	-
Kans.	10	10	-	-	1	-	-	1	2	2
S. ATLANTIC	654	604	76	107	94	26	37	33	178	186
Del.	3	5	-	-	-	3	N	N	29	33
Md.	40	60	6	6	18	5	5	3	108	110
D.C.	1	6	-	-	1	-	-	-	3	6
Va.	41	67	1	-	6	2	4	1	10	6
W. Va.	7	11	1	1	N	N	1	-	-	-
N.C.	51	77	3	9	9	3	7	2	17	21
S.C.	51	34	23	3	4	4	1	3	1	1
Ga.	240	148	3	32	8	5	10	4	2	1
Fla.	220	196	39	56	48	4	9	20	8	8
E.S. CENTRAL	118	121	29	82	9	8	5	8	11	13
Ky.	28	16	7	2	-	5	-	2	2	5
Tenn.	45	52	4	12	7	-	1	3	6	1
Ala.	28	26	4	2	1	3	3	3	-	4
Miss.	17	27	14	66	1	-	1	-	3	3
W.S. CENTRAL	130	362	525	93	28	11	17	9	21	23
Ark.	2	48	-	7	-	-	-	-	-	-
La.	26	27	18	18	-	4	-	-	3	1
Okla.	16	2	-	-	2	2	1	3	-	-
Tex.	86	285	507	68	26	5	16	6	18	22
MOUNTAIN	220	156	24	12	20	11	12	11	5	4
Mont.	8	3	1	-	-	1	1	-	-	-
Idaho	-	3	-	-	2	-	-	-	1	1
Wyo.	2	8	-	3	1	-	-	-	-	-
Colo.	32	29	17	1	4	3	5	2	1	-
N. Mex.	12	26	-	1	2	1	2	-	-	1
Ariz.	125	52	3	-	6	3	4	7	-	1
Utah	16	13	-	-	3	3	-	2	2	-
Nev.	25	22	3	7	2	-	-	-	1	1
PACIFIC	345	314	26	37	27	19	28	32	41	25
Wash.	24	22	4	6	2	1	1	3	-	-
Oreg.	43	56	4	4	N	N	1	2	9	1
Calif.	270	228	18	27	25	18	26	25	31	24
Alaska	6	5	-	-	-	-	-	-	1	-
Hawaii	2	3	-	-	-	-	-	2	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	13	52	-	-	-	-	-	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 May 10, 2003, and May 11, 2002 (19th 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	284	365	740	889	1,628	2,256	1,404	2,423	90	111
NEW ENGLAND	7	23	35	53	176	252	154	286	-	1
Maine	1	1	5	4	2	3	14	17	-	-
N.H.	1	5	3	5	12	3	3	9	-	-
Vt.	-	1	-	3	25	40	10	52	-	-
Mass.	5	11	21	29	136	197	61	92	-	1
R.I.	-	1	2	4	1	1	18	20	-	-
Conn.	-	4	4	8	-	8	48	96	-	-
MID. ATLANTIC	58	94	61	106	137	106	122	340	7	13
Upstate N.Y.	18	14	14	24	78	74	93	191	-	-
N.Y. City	28	54	15	18	-	-	1	10	3	3
N.J.	3	15	8	14	7	-	28	46	3	1
Pa.	9	11	24	50	52	32	-	93	1	9
E.N. CENTRAL	28	62	90	121	132	268	13	19	1	3
Ohio	6	9	31	40	80	145	5	3	1	2
Ind.	-	2	19	17	22	15	2	3	-	-
Ill.	11	26	13	25	-	41	1	4	-	1
Mich.	10	18	20	19	16	29	5	5	-	-
Wis.	1	7	7	20	14	38	-	4	-	-
W.N. CENTRAL	11	28	59	68	95	214	211	165	2	12
Minn.	8	10	13	16	33	70	12	7	-	-
Iowa	2	2	10	9	23	69	24	17	1	-
Mo.	-	6	27	27	22	43	4	12	1	12
N. Dak.	-	1	-	-	1	5	21	14	-	-
S. Dak.	-	-	1	2	2	5	20	34	-	-
Nebr.	-	4	4	9	1	3	51	-	-	-
Kans.	1	5	4	5	13	19	79	81	-	-
S. ATLANTIC	78	71	130	190	148	155	685	847	72	69
Del.	-	1	7	5	1	2	16	9	-	-
Md.	24	27	12	3	18	20	2	150	12	10
D.C.	5	5	-	-	-	1	-	-	-	-
Va.	7	7	8	15	33	69	184	208	1	1
W. Va.	2	1	1	-	1	3	28	61	-	-
N.C.	6	7	16	14	54	14	247	224	47	40
S.C.	1	3	7	12	5	24	48	28	9	11
Ga.	8	10	13	13	17	11	116	133	-	6
Fla.	25	10	66	128	19	11	44	34	3	1
E.S. CENTRAL	7	5	29	35	36	62	17	128	6	9
Ky.	1	1	-	5	9	15	11	9	-	-
Tenn.	4	1	8	12	15	30	-	108	5	7
Ala.	2	1	9	9	9	10	6	11	-	1
Miss.	-	2	12	9	3	7	-	-	1	1
W.S. CENTRAL	28	2	161	90	93	524	115	464	-	3
Ark.	3	-	8	13	-	311	25	-	-	-
La.	1	2	22	11	4	3	-	-	-	-
Okla.	2	-	8	9	2	22	90	33	-	-
Tex.	22	-	123	57	87	188	-	431	-	3
MOUNTAIN	10	14	27	53	346	295	32	73	2	1
Mont.	-	-	2	2	-	2	7	4	-	-
Idaho	1	-	2	3	9	28	1	-	-	-
Wyo.	-	-	1	-	57	5	-	6	1	-
Colo.	7	7	5	17	145	138	1	-	-	-
N. Mex.	-	-	3	1	18	32	2	4	-	-
Ariz.	1	2	10	16	82	70	21	58	1	-
Utah	1	2	-	1	28	12	-	-	-	-
Nev.	-	3	4	13	7	8	-	1	-	1
PACIFIC	57	66	148	173	465	380	55	101	-	-
Wash.	8	5	12	31	100	120	-	-	-	-
Oreg.	5	2	28	23	96	22	-	-	-	-
Calif.	44	54	105	113	268	230	52	76	-	-
Alaska	-	1	1	1	-	2	3	25	-	-
Hawaii	-	4	2	5	1	6	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	1	2	2	-	1	20	26	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 May 10, 2003, and May 11, 2002 (19th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		Streptococcus pneumoniae, invasive			
							Drug resistant, all ages		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	8,683	10,374	7,016	4,803	2,275	1,986	996	955	155	105
NEW ENGLAND	437	553	101	89	132	111	5	4	1	1
Maine	27	53	4	3	13	16	-	-	-	-
N.H.	25	31	2	4	11	21	-	-	N	N
Vt.	11	21	3	-	11	7	5	3	1	1
Mass.	248	313	65	61	96	60	N	N	N	N
R.I.	27	23	3	4	1	7	-	1	-	-
Conn.	99	112	24	17	-	-	-	-	-	-
MID. ATLANTIC	849	1,446	388	366	308	351	49	54	43	34
Upstate N.Y.	233	339	110	52	172	142	24	50	33	29
N.Y. City	290	412	125	158	39	85	U	U	U	U
N.J.	65	313	72	76	15	75	N	N	N	N
Pa.	261	382	81	80	82	49	25	4	10	5
E.N. CENTRAL	1,195	1,789	436	593	511	483	221	85	70	46
Ohio	390	410	92	275	154	102	146	-	51	-
Ind.	118	117	41	23	52	21	75	83	14	19
Ill.	356	680	192	193	94	154	-	2	-	-
Mich.	189	300	79	57	194	142	N	N	N	N
Wis.	142	282	32	45	17	64	N	N	5	27
W.N. CENTRAL	542	685	261	428	169	123	103	244	15	19
Minn.	158	162	32	59	83	63	-	177	15	17
Iowa	108	105	21	36	N	N	N	N	N	N
Mo.	145	250	90	48	34	26	7	4	-	1
N. Dak.	13	9	-	7	6	-	3	-	-	1
S. Dak.	21	28	8	130	13	5	-	1	-	-
Nebr.	42	40	82	97	18	13	-	-	N	N
Kans.	55	91	28	51	15	16	93	62	N	N
S. ATLANTIC	2,309	2,329	2,514	1,651	402	297	509	442	4	2
Del.	20	15	109	5	4	1	-	3	N	N
Md.	232	195	200	249	140	44	-	-	-	-
D.C.	12	26	20	19	8	4	2	29	-	1
Va.	223	221	107	338	45	33	N	N	N	N
W. Va.	18	26	-	2	16	7	28	26	4	1
N.C.	321	305	273	109	36	67	N	N	U	U
S.C.	112	118	102	20	15	25	52	98	N	N
Ga.	510	373	849	403	46	77	157	158	N	N
Fla.	861	1,050	854	506	92	39	270	128	N	N
E.S. CENTRAL	522	534	343	380	80	51	64	73	-	-
Ky.	104	84	45	54	18	6	5	8	N	N
Tenn.	164	156	102	22	62	45	59	65	N	N
Ala.	166	157	130	153	-	-	-	-	N	N
Miss.	88	137	66	151	-	-	-	-	-	-
W.S. CENTRAL	697	911	1,861	444	161	81	29	29	21	1
Ark.	96	118	23	64	2	1	7	4	-	-
La.	67	173	75	96	1	1	22	25	8	1
Okla.	76	91	236	105	35	16	N	N	13	-
Tex.	458	529	1,527	179	123	63	N	N	-	-
MOUNTAIN	626	636	328	183	265	253	15	24	1	2
Mont.	36	29	1	1	1	-	-	-	-	-
Idaho	67	43	8	2	10	5	N	N	N	N
Wyo.	12	19	1	3	-	6	3	8	-	-
Colo.	176	172	52	40	91	54	-	-	-	-
N. Mex.	48	87	61	45	57	53	12	16	-	-
Ariz.	186	165	170	69	98	124	-	-	N	N
Utah	61	46	19	12	7	11	-	-	1	2
Nev.	40	75	16	11	1	-	-	-	-	-
PACIFIC	1,506	1,491	784	669	247	236	1	-	-	-
Wash.	137	102	63	28	23	-	-	-	N	N
Oreg.	128	115	25	33	N	N	N	N	N	N
Calif.	1,180	1,173	692	588	204	214	N	N	N	N
Alaska	36	22	4	2	-	-	-	-	N	N
Hawaii	25	79	-	18	20	22	1	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	47	113	1	8	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 May 10, 2003, and May 11, 2002 (19th Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)
	Primary & secondary		Congenital		Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002					
UNITED STATES	2,348	2,271	127	158	2,904	4,054	82	102	4,780
NEW ENGLAND	65	31	1	-	82	143	6	7	893
Maine	3	-	1	-	4	5	-	-	478
N.H.	6	-	-	-	3	6	-	-	-
Vt.	-	1	-	-	-	1	-	-	332
Mass.	47	20	-	-	47	70	1	6	81
R.I.	6	1	-	-	7	20	2	-	2
Conn.	3	9	-	-	21	41	3	1	-
MID. ATLANTIC	268	234	24	22	659	700	11	29	4
Upstate N.Y.	9	8	8	1	86	107	3	3	N
N.Y. City	154	133	9	7	396	350	5	12	-
N.J.	52	50	7	13	107	167	3	9	-
Pa.	53	43	-	1	70	76	-	5	4
E.N. CENTRAL	324	464	31	26	333	387	5	14	2,462
Ohio	79	52	2	-	44	61	-	4	509
Ind.	16	24	3	1	45	35	1	1	-
Ill.	105	171	10	20	174	189	-	4	-
Mich.	116	208	16	5	62	77	4	3	1,602
Wis.	8	9	-	-	8	25	-	2	351
W.N. CENTRAL	61	40	2	-	150	185	1	4	14
Minn.	13	18	-	-	61	76	-	2	N
Iowa	3	2	-	-	10	7	1	-	N
Mo.	25	10	2	-	16	57	-	1	-
N. Dak.	-	-	-	-	-	3	-	-	14
S. Dak.	-	-	-	-	9	8	-	-	-
Nebr.	-	3	-	-	12	6	-	1	-
Kans.	20	7	-	-	42	28	-	-	-
S. ATLANTIC	627	531	24	37	567	778	22	8	1,018
Del.	4	7	-	-	-	7	-	-	7
Md.	107	61	3	5	73	78	3	2	-
D.C.	7	15	1	-	-	-	-	-	7
Va.	31	11	1	1	66	67	10	-	261
W. Va.	-	-	-	-	7	8	-	-	672
N.C.	63	115	5	9	76	116	4	-	N
S.C.	44	46	3	4	51	43	-	-	71
Ga.	127	97	2	8	84	146	3	3	-
Fla.	244	179	9	10	210	313	2	3	N
E. S. CENTRAL	120	223	10	12	236	255	3	2	-
Ky.	18	36	1	2	39	46	-	2	N
Tenn.	51	90	4	4	77	96	1	-	N
Ala.	45	72	4	4	89	76	2	-	-
Miss.	6	25	1	2	31	37	-	-	-
W.S. CENTRAL	303	287	17	38	254	686	-	6	258
Ark.	14	17	-	1	37	43	-	-	-
La.	33	46	-	-	-	-	-	-	3
Okla.	19	24	-	1	48	53	-	-	N
Tex.	237	200	17	36	169	590	-	6	255
MOUNTAIN	103	122	13	5	84	101	3	6	131
Mont.	-	-	-	-	-	4	-	-	N
Idaho	6	1	-	-	1	2	-	-	N
Wyo.	-	-	-	-	2	2	-	-	17
Colo.	6	15	2	1	25	25	3	3	-
N. Mex.	17	14	-	-	-	11	-	-	-
Ariz.	66	84	11	4	47	44	-	-	-
Utah	3	2	-	-	9	8	-	2	114
Nev.	5	6	-	-	-	5	-	1	-
PACIFIC	477	339	5	18	539	819	31	26	-
Wash.	24	19	-	1	76	79	-	-	-
Oreg.	15	5	-	-	27	32	2	2	-
Calif.	437	311	5	17	411	634	29	24	-
Alaska	-	-	-	-	19	23	-	-	-
Hawaii	1	4	-	-	6	51	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	58	8	1	-	-	24	-	-	111
V.I.	-	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	U	U	-	U	-	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 May 10, 2003 (19th Week)

	All causes, by age (years)								All causes, by age (years)							
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total	
NEW ENGLAND	455	309	91	31	12	12	49	S. ATLANTIC	1,190	727	297	99	33	34	65	
Boston, Mass.	132	79	26	12	4	11	10	Atlanta, Ga.	160	88	44	19	6	3	2	
Bridgeport, Conn.	45	40	4	1	-	-	4	Baltimore, Md.	172	89	50	20	9	4	16	
Cambridge, Mass.	13	9	3	1	-	-	1	Charlotte, N.C.	112	69	29	4	4	6	10	
Fall River, Mass.	25	20	4	1	-	-	2	Jacksonville, Fla.	187	128	36	15	2	6	8	
Hartford, Conn.	U	U	U	U	U	U	U	Miami, Fla.	72	47	16	4	1	4	3	
Lowell, Mass.	30	19	7	2	2	-	3	Norfolk, Va.	62	40	15	3	2	2	2	
Lynn, Mass.	17	13	3	1	-	-	3	Richmond, Va.	56	32	19	1	1	3	3	
New Bedford, Mass.	28	21	4	3	-	-	5	Savannah, Ga.	58	38	12	6	2	-	3	
New Haven, Conn.	34	19	8	5	2	-	4	St. Petersburg, Fla.	23	17	4	1	-	1	2	
Providence, R.I.	U	U	U	U	U	U	U	Tampa, Fla.	168	109	44	11	3	1	12	
Somerville, Mass.	3	3	-	-	-	-	-	Washington, D.C.	99	57	24	12	3	3	2	
Springfield, Mass.	42	27	10	3	2	-	4	Wilmington, Del.	21	13	4	3	-	1	2	
Waterbury, Conn.	24	14	8	-	2	-	-	E.S. CENTRAL	812	524	207	45	17	18	52	
Worcester, Mass.	62	45	14	2	-	1	13	Birmingham, Ala.	180	121	43	11	2	2	10	
MID. ATLANTIC	2,125	1,474	441	144	29	28	104	Chattanooga, Tenn.	76	48	21	5	1	1	3	
Albany, N.Y.	48	37	10	1	-	-	3	Knoxville, Tenn.	95	74	14	6	-	1	7	
Allentown, Pa.	8	7	1	-	-	-	1	Lexington, Ky.	88	47	26	6	4	5	5	
Buffalo, N.Y.	90	63	20	2	2	3	9	Memphis, Tenn.	156	93	46	9	3	5	13	
Camden, N.J.	33	23	5	3	1	1	3	Mobile, Ala.	75	52	15	3	4	1	1	
Elizabeth, N.J.	19	10	5	4	-	-	2	Montgomery, Ala.	22	13	8	-	1	-	5	
Erie, Pa.	36	28	7	1	-	-	3	Nashville, Tenn.	120	76	34	5	2	3	8	
Jersey City, N.J.	44	32	9	3	-	-	-	W.S. CENTRAL	1,428	935	287	110	44	52	86	
New York City, N.Y.	1,118	769	229	84	13	14	37	Austin, Tex.	98	73	15	5	1	4	6	
Newark, N.J.	59	18	27	9	2	3	3	Baton Rouge, La.	26	13	7	4	1	1	-	
Paterson, N.J.	21	13	6	1	-	1	1	Corpus Christi, Tex.	65	44	19	2	-	-	2	
Philadelphia, Pa.	284	189	66	24	4	1	11	Dallas, Tex.	203	110	51	19	8	15	9	
Pittsburgh, Pa.§	25	18	6	-	1	-	3	El Paso, Tex.	90	66	15	4	3	2	2	
Reading, Pa.	17	15	2	-	-	-	2	Ft. Worth, Tex.	120	84	20	9	5	2	10	
Rochester, N.Y.	122	99	18	4	-	1	10	Houston, Tex.	290	170	58	39	16	7	14	
Schenectady, N.Y.	15	10	3	-	2	-	1	Little Rock, Ark.	77	45	14	5	3	10	4	
Scranton, Pa.	33	26	4	2	1	-	1	New Orleans, La.	U	U	U	U	U	U	U	
Syracuse, N.Y.	61	51	6	2	2	-	6	San Antonio, Tex.	235	161	52	10	3	9	14	
Trenton, N.J.	44	32	7	1	-	4	1	Shreveport, La.	84	64	11	6	2	1	11	
Utica, N.Y.	25	18	4	2	1	-	4	Tulsa, Okla.	140	105	25	7	2	1	14	
Yonkers, N.Y.	23	16	6	1	-	-	3	MOUNTAIN	879	611	171	65	17	15	63	
E.N. CENTRAL	1,876	1,260	413	117	46	40	123	Albuquerque, N.M.	111	84	17	6	2	2	9	
Akron, Ohio	4	4	-	-	-	-	4	Boise, Idaho	44	28	9	4	2	1	2	
Canton, Ohio	41	32	8	-	1	-	2	Colo. Springs, Colo.	85	53	24	5	2	1	3	
Chicago, Ill.	354	211	95	31	10	7	17	Denver, Colo.	112	72	25	6	4	5	13	
Cincinnati, Ohio	87	60	17	4	5	1	12	Las Vegas, Nev.	247	163	46	32	3	3	20	
Cleveland, Ohio	124	83	30	7	2	2	5	Ogden, Utah	24	22	1	-	-	1	1	
Columbus, Ohio	208	139	49	11	3	6	21	Phoenix, Ariz.	U	U	U	U	U	U	U	
Dayton, Ohio	113	83	16	9	4	1	7	Pueblo, Colo.	28	21	6	1	-	-	1	
Detroit, Mich.	180	98	54	16	8	4	5	Salt Lake City, Utah	92	63	20	6	2	1	10	
Evansville, Ind.	53	45	7	1	-	-	6	Tucson, Ariz.	136	105	23	5	2	1	4	
Fort Wayne, Ind.	60	41	12	5	1	1	4	PACIFIC	1,539	1,081	293	102	35	27	108	
Gary, Ind.	12	8	4	-	-	-	-	Berkeley, Calif.	18	10	5	2	-	1	1	
Grand Rapids, Mich.	60	38	17	2	-	3	5	Fresno, Calif.	124	87	22	9	4	2	10	
Indianapolis, Ind.	168	122	30	8	3	5	11	Glendale, Calif.	25	22	1	2	-	-	-	
Lansing, Mich.	U	U	U	U	U	U	U	Honolulu, Hawaii	92	62	18	6	2	4	6	
Milwaukee, Wis.	125	89	22	8	3	3	5	Long Beach, Calif.	74	47	21	4	-	2	7	
Peoria, Ill.	50	33	10	4	1	2	4	Los Angeles, Calif.	352	239	61	30	12	10	18	
Rockford, Ill.	50	35	11	2	1	1	4	Pasadena, Calif.	30	27	2	1	-	-	7	
South Bend, Ind.	28	19	6	1	2	-	3	Portland, Oreg.	141	104	31	3	1	1	8	
Toledo, Ohio	97	69	16	6	2	4	7	Sacramento, Calif.	U	U	U	U	U	U	U	
Youngstown, Ohio	62	51	9	2	-	-	1	San Diego, Calif.	143	90	34	13	3	3	8	
W.N. CENTRAL	501	326	112	33	18	12	39	San Francisco, Calif.	U	U	U	U	U	U	U	
Des Moines, Iowa	49	37	9	1	1	1	8	San Jose, Calif.	171	131	27	10	3	-	21	
Duluth, Minn.	33	29	1	3	-	-	2	Santa Cruz, Calif.	52	37	13	2	-	-	4	
Kansas City, Kans.	32	21	6	4	1	-	4	Seattle, Wash.	136	91	27	12	5	1	6	
Kansas City, Mo.	87	52	27	2	3	3	6	Spokane, Wash.	65	49	11	2	3	-	6	
Lincoln, Nebr.	43	29	10	2	2	-	5	Tacoma, Wash.	116	85	20	6	2	3	6	
Minneapolis, Minn.	43	20	11	3	4	5	2	TOTAL	10,805¶	7,247	2,312	746	251	238	689	
Omaha, Nebr.	84	54	21	5	2	2	3									
St. Louis, Mo.	U	U	U	U	U	U	U									
St. Paul, Minn.	55	36	12	4	3	-	5									
Wichita, Kans.	75	48	15	9	2	1	4									

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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