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Update: Influenza Activity — United States and Worldwide, 2003–04 Season, and Composition of the 2004–05 Influenza Vaccine

During the 2003–04 influenza season, influenza A (H1), A (H3N2), and B viruses co-circulated worldwide, and influenza A (H3N2) viruses predominated. Several Asian countries reported widespread outbreaks of avian influenza A (H5N1) among poultry. In Vietnam and Thailand, these outbreaks were associated with severe illnesses and deaths among humans. In the United States, the 2003–04 influenza season began earlier than most seasons, peaked in December, was moderately severe in terms of its impact on mortality, and was associated predominantly with influenza A (H3N2) viruses. This report 1) summarizes information collected by World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, state and local health departments, health-care providers, vital statistics registries, and CDC and 2) describes influenza activity in the United States and worldwide during the 2003–04 influenza season and the composition of the 2004–05 influenza vaccine.

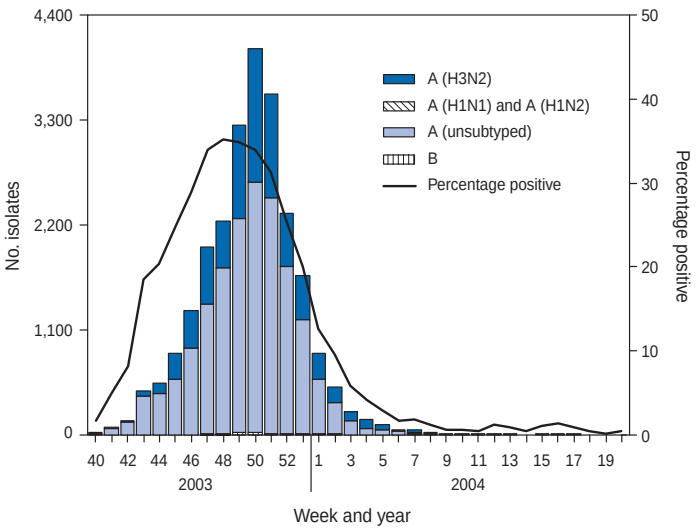
United States

Influenza viruses were first isolated in Texas during outbreaks in early- to mid-October. The national percentage of respiratory specimens testing positive for influenza and the proportion of outpatient visits to sentinel physicians for influenza-like illness (ILI)* increased substantially in November and peaked in mid-December. Influenza A (H3N2) viruses were most commonly isolated, with a small number of influenza B and influenza A (H1) viruses identified.

Viral Surveillance. During September 28, 2003–May 22, 2004, WHO and NREVSS collaborating laboratories in the United States tested 130,577 respiratory specimens for influenza viruses (Figure); 24,649 (18.9%) were positive. Of these,

*Defined as temperature of >100° F (>37.8° C) and either cough or sore throat in the absence of a known cause other than influenza.

FIGURE. Number* and percentage of respiratory specimens testing positive for influenza reported by World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories, by week and year — United States, 2003–04 influenza season†



*N = 24,649.
†As of June 29, 2004.

INSIDE

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24,393 (99.0%) were influenza A viruses, and 249 (1.0%) were influenza B viruses. Among the influenza A viruses, 7,191 (29.5%) were subtyped; 7,189 (99.9%) were influenza A (H3N2) viruses, and two (0.1%) were influenza A (H1) viruses. The proportion of specimens testing positive for influenza first increased to >10% during the week ending October 25, 2003 (week 43), peaked at 35.2% during the week ending November 29 (week 48), and declined to <10% during the week ending January 17, 2004 (week 2). The peak percentage of specimens testing positive for influenza during the previous four seasons had ranged from 23% to 31% and peaked during late December to late February (*1*; CDC, unpublished data, 2004).

As of June 15, 2004, CDC had antigenically characterized 1,024 influenza viruses collected by U.S. laboratories since October 1, 2003: 949 influenza A (H3N2) viruses, three influenza A (H1) viruses, one influenza A (H7N2) virus, and 71 influenza B viruses. Of the 949 influenza A (H3N2) isolates characterized, 106 (11.2%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 843 (88.8%) were similar to the drift variant, A/Fujian/411/2002 (H3N2). Of the three A (H1) isolates that were characterized, two were H1N1 viruses, and one was an H1N2 virus. The hemagglutinin proteins of the influenza A (H1) viruses were similar antigenically to the hemagglutinin of the vaccine strain A/New Caledonia/20/99. Of the 71 influenza B isolates that were characterized, 66 (93%) belonged to the B/Yamagata/16/88 lineage and were similar antigenically to B/Sichuan/379/99, and five (7%) belonged to the B/Victoria/2/87 lineage and were similar antigenically to the corresponding vaccine strain B/Hong Kong/330/2001.

ILI Surveillance. The weekly percentage of patient visits to U.S. sentinel physicians for ILI exceeded baseline levels[†] (0–2.5%) during the weeks ending November 15, 2003–January 10, 2004 (weeks 46–1) and peaked at 7.6% during the week ending December 27, 2003 (week 52). During the previous four influenza seasons, the peak percentage of patient visits for ILI ranged from 3.3% to 7.1% and peaked during late January and February (CDC, unpublished data, 2004).

State-Specific Activity Levels. Widespread influenza activity was first reported by Texas for the week ending October 18, 2003, and peaked during the week ending December 20 (week 51), when 45 states reported widespread

[†] The national baseline was calculated as the mean percentage of patient visits for ILI during noninfluenza weeks plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. Wide variability in regional data precludes calculating region-specific baselines and makes it inappropriate to apply the national baseline to regional data. National and regional percentages of patient visits for ILI are weighted on the basis of state population.

and four states reported regional influenza activity[§]. No states reported widespread, regional, or local influenza activity during the weeks ending March 20–April 10, 2004 (weeks 11–14). One state reported regional activity for the weeks ending April 17, April 24, and May 8 because of nursing home outbreaks in more than two counties (weeks 15, 16, and 18). The peak number of states reporting widespread or regional activity during the previous four seasons ranged from 35 to 44 states (CDC, unpublished data, 2004).

Pneumonia- and Influenza-Related Mortality. As measured by the 122 Cities Mortality Reporting System, the percentage of deaths in the United States attributed to pneumonia and influenza (P&I) exceeded the epidemic threshold[¶] during 9 consecutive weeks (weeks ending December 20–February 14). The percentage of P&I deaths reached a peak of 10.3% during the weeks ending January 10–17, 2004 (weeks 1 and 2). During the previous four influenza seasons, the peak percentage of P&I deaths ranged from 8.1% to 11.2% (*1*; CDC, unpublished data, 2004).

Pediatric Mortality. As of May 31, 2004, a total of 152 influenza-associated deaths in U.S. residents aged <18 years were reported to CDC by 40 states. All patients had influenza virus infection detected by rapid antigen testing, viral culture, or other laboratory methods. These data are provisional and subject to change as more information becomes available.

Worldwide

During October 2003–May 2004, influenza A viruses circulated widely. Influenza activity began in October, which was earlier than usual in North America and Western Europe; the reported impact was more severe than the previous three seasons. Influenza A (H3N2) viruses predominated in most countries, whereas influenza A (H1) and B viruses circulated at low levels in most parts of the world.

Influenza A (H3N2) viruses predominated and were associated with outbreaks in Asia (Hong Kong and Japan), Europe (Belgium, Croatia, Denmark, Finland, France, Germany, Israel, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland, Ukraine, and the United Kingdom), and North America (Canada). H3N2 viruses also were reported in Africa (Algeria, Egypt, Madagascar, Morocco, and Senegal), Asia (China, India, Malaysia, the Philippines, Qatar, Republic of Korea, Saudi Arabia, Singapore, Taiwan, Thailand, and Vietnam), the Caribbean (Jamaica), Europe (Austria, Belarus, Bulgaria, Czech Republic, Greece, Hungary, Iceland, Ireland, Kyrgyzstan, the Netherlands, Poland, Serbia and Montenegro, Slovakia, and Turkey), Latin America (Argentina, Brazil, Chile, Colombia, Guyana, Nicaragua, Paraguay, Peru, and Uruguay), North America (Mexico), and Oceania (Australia, Guam, New Caledonia, and New Zealand). The majority of H3N2 viruses were similar to the A/Fujian/411/2002 drift variant.

Influenza A (H1) viruses circulated at low levels in most parts of the world, and outbreaks were reported in Europe (Iceland, Ukraine, and the United Kingdom). Influenza A (H1N1) and (H1) viruses for which the neuraminidase was not characterized were isolated in Africa (Morocco and Senegal), Asia (China, Japan, Republic of Korea, Malaysia, Singapore, and Taiwan), Europe (Belarus, Denmark, France, Greece, Italy, Portugal, the Russian Federation, Sweden, and the United Kingdom), Latin America (Brazil, Chile, and Peru), and North America (Canada). Influenza A (H1N2) viruses were isolated in Africa (Senegal), Europe (France, Iceland, Norway, and Portugal), Latin America (Brazil, Chile, and Peru), and North America (Canada).

Influenza B viruses were not reported in association with outbreaks but were isolated in Africa (Madagascar), Asia (China, Hong Kong, Japan, Malaysia, Republic of Korea, Taiwan, and Thailand), the Caribbean (Jamaica), Europe (Belarus, Czech Republic, Finland, France, Hungary, Ireland, Italy, Norway, the Russian Federation, Sweden, Switzerland, and the United Kingdom), Latin America (Brazil, Chile, Colombia, Panama, Paraguay, and Peru), North America (Canada and Mexico), and Oceania (Australia and Guam).

Human Infections with Avian Influenza Viruses

In December 2003, one confirmed case of avian influenza A (H9N2) virus infection was reported in a child aged 5 years in Hong Kong. The child had fever, cough, and nasal discharge in late November, was hospitalized for 2 days, and fully recovered. The source of this child's H9N2 infection is unknown.

During January–March 2004, a total of 34 confirmed human cases of avian influenza A (H5N1) virus infection were reported in Vietnam and Thailand. The cases were associated with severe respiratory illness requiring hospitalization and a case-fatality proportion of 68% (Vietnam: 22 cases, 15 deaths; Thailand: 12 cases, eight deaths). A substantial proportion of the cases were among children and young adults (i.e., persons

[§] Levels of activity are 1*) no activity*; 2) *sporadic*—isolated laboratory-confirmed influenza cases or laboratory-confirmed outbreak in one institution, with no increase in activity; 3) *local*—increased ILI in one region, or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region; virus activity is no greater than sporadic in other regions; 4) *regional*—increased ILI activity or outbreaks (ILI or laboratory-confirmed influenza) in at least two but fewer than half of the regions in the state; and 5) *widespread*—increased ILI activity or outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state.

[¶] The expected seasonal baseline proportion of P&I deaths reported by the 122 Cities Mortality Reporting System is projected by using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I during the previous 5 years. The epidemic threshold is 1.654 standard deviations above the seasonal baseline (*1*).

aged 5–24 years). These cases were associated with widespread outbreaks of highly pathogenic** H5N1 influenza among domestic poultry.

During March 2004, health authorities in Canada reported two confirmed cases of avian influenza A (H7N3) virus infection in poultry workers who were involved in culling of poultry during outbreaks of highly pathogenic H7N3 on farms in the Fraser River Valley, British Columbia. One patient had unilateral conjunctivitis and nasal discharge, and the other had unilateral conjunctivitis and headache. Both illnesses resolved without hospitalization.

During the 2003–04 influenza season, a case of avian influenza A (H7N2) virus infection was detected in an adult male from New York, who was hospitalized for upper and lower respiratory tract illness in November 2003. Influenza A (H7N2) virus was isolated from a respiratory specimen from the patient, whose acute symptoms resolved. The source of this person's infection is unknown.

Composition of the Influenza Vaccine for the 2004–05 Season

On the basis of antigenic analyses of recently isolated influenza viruses, epidemiologic data, and postvaccination serologic studies in humans, the Food and Drug Administration's Vaccines and Related Biological Products Advisory Committee (VRBPAC) recommended that the 2004–05 trivalent influenza vaccine for the United States contain A/New Caledonia/20/99-like (H1N1), A/Fujian/411/2002-like (H3N2), and B/Shanghai/361/2002-like viruses.

Because of the growth properties of the A/Wyoming/3/2003 and B/Jiangsu/10/2003 viruses, U.S. vaccine manufacturers are using these antigenically equivalent strains in the vaccine as the H3N2 and B components, respectively. The A/New Caledonia/20/99 virus will be retained as the H1N1 component of the vaccine.

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Editorial Note: During the 2003–04 influenza season, influenza activity in the United States began and peaked earlier than usual and was more severe than the previous three seasons. Moreover, a substantial number of laboratory-confirmed, influenza-associated pediatric deaths were reported in the United States. Because no similar national data were collected previously, whether this number of pediatric deaths represents a change from previous seasons is unknown. One modeling study estimated that, during 1990–1999, approximately 92 influenza-related deaths occurred annually among children aged <5 years (*2*). In June 2004, the Council of State and Territorial Epidemiologists (CSTE) voted to make pediatric influenza-associated deaths a nationally notifiable condition. CDC is working closely with CSTE to implement reporting.

Beginning with the 2004–05 influenza season, the Advisory Committee on Immunization Practices (ACIP) recommends that all children aged 6–23 months and close contacts of children aged 0–23 months receive annual influenza vaccination (*3*). ACIP continues to recommend that all persons aged >6 months with certain chronic underlying medical conditions, their household contacts, and health-care workers receive annual influenza vaccination (*3*).

As the season progressed, A/Fujian/411/2002 (H3N2) viruses, which were antigenically distinguishable from the vaccine strain A/Panama/2007/99 (H3N2), became predominant, resulting in a less than optimal match. An initial study to assess the effectiveness of the 2003–04 influenza vaccine against ILI in health-care workers did not demonstrate effectiveness (*4*); however, preliminary analyses of three additional unpublished studies of influenza vaccine effectiveness among children and adults in the United States were presented at the ACIP meeting on June 23, 2004, and all demonstrated vaccine effectiveness.

The season also was notable because several persons were infected by avian influenza viruses. The H7N2 case associated with an illness in November 2003 is the second confirmed case of human infection with avian influenza A (H7N2) virus reported in the United States. One previous case was reported in a person involved in culling activities, when an outbreak of H7N2 occurred among turkeys and chickens at commercial farms in Virginia during 2002 (*5*). In both cases, no person-to-person transmission of H7N2 viruses was evident, and both persons made a full recovery from their acute respiratory illnesses.

The H9N2 case identified in Hong Kong in December 2003 was the first confirmed human case since 1998 and 1999, when H9N2 infections were identified in China and Hong Kong Special Administrative Region, respectively. All H9N2 infections were associated with uncomplicated ILI, and no evidence of person-to-person transmission of H9N2 viruses has been reported (*6*).

The two confirmed cases of avian influenza A (H7N3) virus infections identified in Canada are the first reported with

** Avian influenza (AI) viruses are classified into low pathogenic (LPAI) and high pathogenic (HPAI) forms on the basis of genetic sequence and the severity of illness they cause in infected birds. The majority of AI virus strains are LPAI and typically cause little or no clinical signs in infected birds; however, some LPAI virus strains can mutate under field conditions into HPAI viruses. Additional information is available at http://www.aphis.usda.gov/lpa/issues/ai_us/ai_us.html and http://www.oie.int/eng/avian_influenza/home.htm.

trust•wor•thy: *adj*

('trəst-"wər-thē) 1 : worthy of belief

2 : capable of being depended upon;

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this virus and were associated with an outbreak of highly pathogenic H7N3 among poultry. Both cases were in poultry workers with direct contact with H7N3-infected poultry; additional information about these cases is available at http://www.who.int/csr/don/2004_04_05/en. These patients had mild illness, were treated with oseltamivir, and fully recovered. No evidence of person-to-person transmission was identified.

The 34 confirmed human cases of avian influenza A (H5N1) virus infection in Vietnam and Thailand represent the largest human outbreak of H5N1. All human cases were associated with an unprecedented, widespread, ongoing epizootic of highly pathogenic H5N1 virus affecting domestic poultry at large and small farms, live bird markets, and backyard farms in Asia. Eight Asian countries have reported H5N1 poultry outbreaks, and >100 million domestic poultry have been culled; additional information is available at http://www.oie.int/downld/avian%20influenza/a_ai-asia.htm. Confirmed human H5N1 cases had severe illness and high mortality. The majority of cases occurred during January and February among children and young adults who had direct contact with live, sick, or dead poultry (*7,8*). Genetic analysis of some recent human H5N1 isolates from Vietnam and Thailand revealed that all genes were of avian origin, and the isolates were resistant to amantadine and rimantadine, but susceptible to oseltamivir. No evidence of efficient person-to-person transmission of H5N1 viruses has been identified to date. During 1997, an outbreak of H5N1 resulted in 18 cases and six deaths in Hong Kong, but human-to-human transmission was rare (*9*).

In response to the confirmed human infections with avian influenza A (H5N1) viruses, WHO activated its Pandemic Plan Phase 0, Level 2 (additional information is available at http://www.who.int/csr/resources/publications/influenza/en/whocdscsredc991.pdf); CDC issued recommendations for evaluation, reporting, laboratory testing (*10*), and enhanced influenza surveillance for state health departments. H5N1 poultry outbreaks have been controlled in South Korea and Japan. However, the degree to which H5N1 poultry outbreaks in Cambodia, China, Indonesia, Laos, Thailand, and Vietnam have been controlled is uncertain. For this reason, CDC continues to recommend enhanced surveillance for suspected H5N1 cases among travelers with severe unexplained respiratory illness returning from H5N1-affected countries (additional information is available at http://www.phppo.cdc.gov/han/archivesys/viewmsgv.asp?alertnum=00204).

Influenza vaccine manufacturers project that approximately 90–100 million total doses of influenza vaccine will be available for distribution during the 2004–05 season in the United States. These influenza vaccine projections are preliminary and could change as the season progresses. CDC has contracted to purchase up to 8 million doses of influenza vaccine for use in the public sector, including up to 3 million doses of preservative-free vaccine for children. CDC also has received $40 million through the Vaccines for Children program to purchase approximately 4–4.5 million doses of influenza vaccine for a national stockpile, which could be made available to state and local health departments and manufacturers for distribution.

Acknowledgments

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Surveillance Data from Public Spa Inspections — United States, May–September 2002

Approximately 5 million public and private hot tubs, whirlpools, and spas* are used in the United States (*1*). Extensive spa use combined with inadequate maintenance contribute to recreational water illnesses (RWIs) caused by pathogens such as *Pseudomonas* spp., *Legionella* spp., and *Mycobacterium* spp. (*2–5*). In the United States, local environmental health inspectors periodically inspect public spas to determine their compliance with local or state health regulations. During inspections for regulatory compliance, data pertaining to spa water chemistry, filtration and recirculation, and management and operations are collected. This report summarizes spa inspection data from six sites in the United States during May 1–September 1, 2002. The findings underscore the utility of these data for public health decision-making and the need for increased training and vigilance by operators to ensure high-quality spa water for use by the public.

Data from 5,209 inspections of spas were collected from the Florida Department of Health, Bureau of Water Programs (n = 4,463); the Los Angeles County Recreational Water Program, California (n = 588); the City of St. Paul Office of License, Inspections, and Environmental Protection, Minnesota (n = 53); the Wyoming Department of Agriculture (n = 49); the Allegheny County Department of Health, Pennsylvania (n = 35); and the St. Louis County Department of Public Health, Minnesota (n = 21). The sites selected were a convenience sample of spa inspection programs with computerized data available. The data were merged into an SAS database, including date of inspection, water chemistry data (e.g., disinfectant residual and pH level), mechanical system data (e.g., operating filters and water turnover rates), and policy and management data (e.g., record keeping and operator training). A violation was noted when an inspection item was not in compliance with state or local regulations. Other inspection items (e.g., support facilities and injury control) were not addressed in this analysis.

A total of 5,378 violations were documented during the 5,209 inspections; 2,736 (52.5%) inspections occurred in spas for which the location (e.g., hotel or motel) was known (Table 1). Approximately half (56.8%) of the inspections (2,958 of 5,209) had one or more violations (median: one; range: one to eight). Eleven percent (500 of 4,533) of inspections resulted in the immediate closing of spas, pending correction of the violation item(s). Water chemistry violations constituted 50.7% of all violations (2,725 of 5,378); followed by filtration and recirculation systems, 32.2% (1,732 of 5,378); and policy and management, 17.1% (921 of 5,378). Various violations for policy and management issues were documented; during inspections, 23.3% (162 of 695) of spa operators lacked required training, and 12.7% (654 of 5,153) had inadequate record keeping. For the 52.5% of inspections for which spa location could be ascertained, a range of violations occurred (Table 2). For known locations collecting disinfectant residual data, the highest percentages of violations occurred in campgrounds (21.9%) and hotel/motel spas (19.6%). The percent-

TABLE 1. Number and percentage of spa inspections* reporting specific violations of state or local health regulations, by type of violation and spa location† — United States, May–September 2002

Type of violation/Action	Known spa location§ No.	(%)	Unknown spa location¶ No.	(%)	Total** No.	(%)
Water chemistry						
Disinfectant residual	463	(17.0)	426	(17.3)	**889**	**(17.1)**
pH level	427	(15.7)	330	(13.4)	**757**	**(14.6)**
Other water chemistry††	455	(16.6)	448	(18.1)	**903**	**(17.3)**
Mechanical system						
Filtration/Recirculation system§§	739	(27.0)	680	(27.7)	**1,419**	**(27.3)**
Policy/Management						
Test kit	48	(1.8)	57	(2.3)	**105**	**(2.0)**
Operator training	85	(22.5)	77	(24.3)	**162**	**(23.3)**
Log/Record keeping	281	(10.3)	373	(15.4)	**654**	**(12.7)**
Spa closed upon inspection	269	(11.4)	231	(10.6)	**500**	**(11.0)**

* Numbers reported are for those sites collecting data on the specified violation. Although 5,209 inspections were conducted, the number of inspections collecting data for each specific violation (denominator) varied because of a lack of uniform data collection among sites. In addition, each aggregate variable might include multiple violations, and single spa inspections could have multiple violations. As a result, percentage totals do not add to 100%.
† Locations included gyms, campgrounds, schools, and hospitals.
§ Range (R) in number of inspections collecting violation data for each spa location = 378–2,736.
¶ R = 317–2,473.
** R = 695–5,209.
†† Aggregate variable: A positive could include one or more violations in any area (algae, bacterial quality, cyanurate levels, disinfectant/pH chemical feeders, total alkalinity, calcium hardness, and turbidity).
§§ Aggregate variable: A positive could include one or more violations in any area (backwash, cross connections, filter, flow meter, pressure gauges, recirculation system, and turnover).

* Any structure, basin, chamber, or tank, located either indoors, outdoors, or both, containing a body of water for recreational and therapeutic use, which usually contains a waterjet or aeration system. The spa is operated at high temperatures and usually not drained, cleaned, or refilled after each use. Jurisdictions usually exclude from regulation those units found at residences or facilities used by or under the direct supervision and control of licensed medical personnel. These structures also can be referred to as hot tubs or whirlpools but are generically referred to as spas in this report.

TABLE 2. Number and percentage of spa inspections* reporting specific violations of state or local health regulations, by type of violation and spa location — United States, May–September 2002

Type of violation/Action	Hotel/ Motel†		Condo/ Apartments§		Private club/Gym¶		Campgrounds**	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Water chemistry								
Disinfectant residual	188	(19.6)	238	(16.6)	23	(9.1)	14	(21.9)
pH level	147	(15.4)	232	(16.2)	36	(14.2)	9	(14.1)
Other water chemistry††	144	(14.9)	259	(18.1)	34	(13.4)	15	(22.4)
Mechanical system								
Filtration/Recirculation system§§	267	(27.6)	383	(26.8)	66	(26.0)	16	(23.9)
Policy/Management								
Test	17	(1.8)	26	(1.8)	1	(0.4)	3	(4.5)
Operator training	7	(12.3)	72	(25.4)	6	(17.6)	NC¶¶	
Log/Record keeping	87	(9.0)	160	(11.2)	27	(10.6)	6	(9.0)
Spa closed upon inspection	111	(12.2)	123	(10.7)	25	(11.4)	10	(15.1)

* Numbers reported are for those sites collecting data on the specified violation. Although 5,209 inspections were conducted, the number of inspections collecting data for each specific violation (denominator) varied because of a lack of uniform data collection among sites. In addition, each aggregate variable might include multiple violations, and single spa inspections could have multiple violations. As a result, percentage totals do not add to 100%.
† Range (R) in number of inspections collecting violation data for each spa location = 57–966.
§ R = 283–1,431.
¶ R = 34–254.
** R = 64–67.
†† Aggregate variable: A positive could include one or more violations in any area (algae, bacterial quality, cyanurate levels, disinfectant/pH chemical feeders, total alkalinity, calcium hardness, and turbidity).
§§ Aggregate variable: A positive could include one or more violations in any area (backwash, cross connections, filter, flow meter, pressure gauges, recirculation system, and turnover).
¶¶ Not collected.

age of inspections that documented pH level violations, which can compromise disinfectant efficiency, ranged from 14.1%–16.2% in known locations. Of those inspections that revealed violations that warranted spa closure, the highest percentages also were in campgrounds (15.1%) and hotel/motel spas (12.2%).

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Editorial Note: Environmental health inspections can identify weaknesses in the management and inspection of spas. In this report, the proportions of spa inspections in violation of local ordinances (56.8%) or requiring immediate closure (11.0%) are similar to those documented for public swimming pools (54.1% and 8.3%, respectively) (*6*). The inspections document a gap in the training of spa operators; more than 20% of spa inspections cited operators who had not received adequate training. These data emphasize that spa operators can protect the health of users by adhering to maintenance procedures and obtaining appropriate training; regular public health enforcement of these items is necessary.

The findings also demonstrate the utility of maintaining spa inspection data in a computerized format that can be analyzed routinely and used to evaluate spa inspection programs. CDC and state and local health departments are developing guidance for systematic data collection to maximize the utility of data analysis for setting spa inspection program priorities. Consistency of data collection should allow for enhanced surveillance of spas and better evidence-based public health decision-making.

The findings in this report are subject to at least two limitations. First, the results from this analysis might not be generalizable to the entire United States because of the data's limited geographic variability (>85% of the inspections were in Florida), and these data are from the 2002 swim season. Second, data collection from the various localities revealed that database structures and variables differed and that collected data were not always entered in the database.

Poor disinfectant and pH control, high temperatures that quickly dissipate disinfectant, small water volumes, poor hygiene, high bather loads, inadequate maintenance, and opportunities for environmental contamination of the water can lead to proliferation and to pathogen contamination in

the spa environment (*7,8*). RWIs spread through spa use are typically skin and respiratory infections in contrast to gastrointestinal illnesses commonly associated with full-body recreational activities found in swimming pools. During 1999–2000, a total of 13 reported outbreaks of infectious diseases, affecting 183 persons, were attributable to public and private spa use (*2*).

The high temperature of water in spas makes them particularly vulnerable to depletion of disinfectant, which facilitates pathogen amplification. Pathogens such as *Pseudomonas* spp. can multiply rapidly when the disinfectant residual falls below 0.5 mg/L or the pH rises above 8.0 (*7*). Pathogens also can reside in biofilm layers that form in spa pipes and surfaces, where they can be protected from disinfection (*9*), which necessitates routine scrubbing and maintenance to decrease biofilm formation (Box). Because domestic acquisition of *Legionella* spp. appears to be travel-related (*3*), venues (e.g., campgrounds and hotels or motels) should pay particular attention to operator training and maintenance of their spas.

Spa users also should play a role in reducing their risk for illness (Box). Improved public education about the health risks associated with spa use can reduce the risk for illness and increase advocacy for improved maintenance and monitoring by operators. However, successful prevention strategies must be multifaceted and address spa design, operator and inspector training, maintenance, hygiene, as well as public education. Additional information and health communication materials designed to reduce the spread of RWIs are available at http://www.cdc.gov/healthyswimming.

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BOX. Recommendations for operating and using public spas

Spa operation

- Obtain state or local authority–recommended operator training. Suggested national training courses are listed at http://www.cdc.gov/healthyswimming/courses.htm.
- Maintain free chlorine or bromine levels continuously between 2–5 parts per million (*10*).
- Test disinfectant levels at least daily (hourly when in heavy use).
- Maintain the pH level of the water at 7.2–7.8 (*10*).
- Scrub spa surfaces if they have a slime layer.
- Maintain the filtration and recirculation system according to manufacturer recommendations.
- Drain and replace all or portions of the water on a weekly to monthly basis, depending on usage and water quality.
- Treat the spa with a biocidal shock treatment on a daily to weekly basis, depending on water quality and frequency of water changing.
- Cover spas, if possible, to minimize loss of disinfectant and reduce the levels of environmental contamination (e.g., debris and dirt).
- Maintain accurate daily records of disinfectant and pH measurements.
- Educate spa users about appropriate use (e.g., signs and handouts).

Spa users

- Shower or bathe with soap before entering the spa.
- Observe limits, if posted, on the maximum allowable number of bathers.

Additional spa safety

- Prevent the temperature from exceeding 104°F (40°C).
- If pregnant, consult a physician before spa use, particularly in the first trimester.
- Exclude children aged <5 years from using spas*.
- Maintain a locked safety cover for the spa when possible.
- Prevent entrapment injuries with appropriate drain design and configuration.

*Additional information is available at http://www.aap.org/pubserv/backyd.htm.

Racial Disparities in Tuberculosis — Selected Southeastern States, 1991–2002

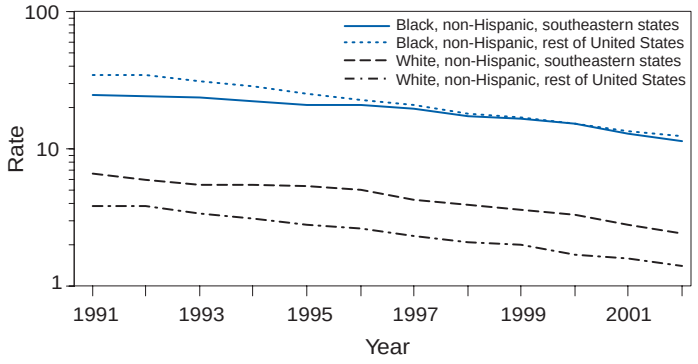
Despite substantial declines in tuberculosis (TB) in the United States, in 2002, non-Hispanic blacks continued to have TB at rates eight times greater than non-Hispanic whites (*1*). To better understand racial disparities in TB, CDC analyzed surveillance data collected during 1991–2002, comparing TB cases in seven southeastern states* where TB rates were higher than the national average with TB cases in the rest of the United States. This report summarizes the results of that analysis, which indicated that TB rates among non-Hispanic blacks in the seven southeastern states continued to exceed those among non-Hispanic whites but were similar to rates among non-Hispanic blacks in the rest of the country. In addition, non-Hispanic blacks with TB in the southeastern states were more likely than non-Hispanic whites to report certain risk factors, suggesting that differences in socioeconomic status might create barriers to diagnosis and treatment. The continued disparity in TB cases underscores the need for effective, targeted strategies to prevent TB in non-Hispanic blacks.

CDC conducts public health surveillance for TB nationwide in collaboration with health departments in all 50 states, the District of Columbia, and New York City†. Data were examined for seven southeastern states where annual TB rates were above the national average for ≥8 years during 1991–2002§. Only persons describing themselves as non-Hispanic black or non-Hispanic white were included. Definitions for additional data collected by the national TB surveillance system have been published previously (*1,2*).

During 1991–2002, the seven states reported a total of 32,414 TB cases, including 18,038 (56%) among non-Hispanic blacks and 11,506 (35%) among non-Hispanic whites. In 2002, the TB rate for non-Hispanic blacks in the region was 11.3 per 100,000 population, 4.7 times greater than the rate (2.4) for non-Hispanic whites. During 1991–2002, TB rates declined 54% for non-Hispanic blacks and 64% for non-Hispanic whites (Figure). During 1991–1996, the average yearly decline in TB rates for non-Hispanic blacks was 3.2% in the southeastern states, compared with 5.3% for non-Hispanic whites. During 1997–2002, the average yearly decline was 9.5% for non-Hispanic blacks and 11.4% for non-Hispanic whites. The ratio

* Alabama, Arkansas, Georgia, Louisiana, Mississippi, South Carolina, and Tennessee. Florida was not included because of a substantially higher proportion (24% versus 2% in 1991) of TB cases among foreign-born persons than the other seven southeastern states.
† Puerto Rico and other U.S. jurisdictions that report TB cases to CDC were not included.
§ Using information updated through March 2003.

FIGURE. Tuberculosis (TB) rate* for non-Hispanic blacks and non-Hispanic whites, by racial population — selected southeastern states† and rest of United States§, 1991–2002



* Per 100,000 population.
† Seven southeastern states (Alabama, Arkansas, Georgia, Louisiana, Mississippi, South Carolina, and Tennessee) where annual TB rates were above the national average for ≥8 years during 1991–2002.
§ Remaining 43 states and the District of Columbia.

of TB rates in non-Hispanic blacks to rates in non-Hispanic whites increased slightly, from an annual average of 4.0 during 1991–1996 to 4.6 during 1997–2002.

In 2002, non-Hispanic black TB patients in the seven states were more likely than non-Hispanic white patients to have TB risk factors that often are associated with lower socioeconomic status (Table). Non-Hispanic blacks were more likely than non-Hispanic whites to report excess alcohol use (24% versus 17%, respectively) and drug use (13% versus 6%, respectively) during the 12 months before receiving a diagnosis of TB. Non-Hispanic blacks also were more likely than non-Hispanic whites to be inmates at a correctional facility at the time of TB diagnosis (5% versus 2%, respectively) and more likely to be coinfected with human immunodeficiency virus (HIV) (13% versus 4%, respectively). The percentage of TB patients who were children aged <5 years was greater among non-Hispanic blacks (5%) than among non-Hispanic whites (1%). The percentage of non-Hispanic blacks in the seven states who had all or part of their TB therapy observed

TABLE. Number and percentage* of non-Hispanic blacks and non-Hispanic whites with tuberculosis (TB), by race, selected risk factors, and treatment characteristics — selected southeastern states† and rest of United States§, 2002

Risk factor/ Treatment characteristic	Southeastern states						Rest of United States					
	Black, non-Hispanic		White, non-Hispanic		Total		Black, non-Hispanic		White, non-Hispanic		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Risk factor	(n = 995)		(n = 533)		**(n = 1,528)**		(n = 3,444)		(n = 2,508)		**(n = 5,952)**	
Excessive alcohol use¶	230	(24)	88	(17)	**318**	**(22)**	628	(19)	428	(18)	**1,056**	**(19)**
Drug use¶	121	(13)	30	(6)	**151**	**(10)**	456	(14)	172	(7)	**628**	**(11)**
Correctional inmate at diagnosis	51	(5)	13	(2)	**64**	**(4)**	152	(4)	54	(2)	**206**	**(3)**
Human immunodeficiency virus status												
Positive	134	(13)	23	(4)	**157**	**(10)**	698	(20)	122	(5)	**820**	**(14)**
Negative	640	(64)	327	(61)	**967**	**(63)**	1,535	(45)	956	(38)	**2,491**	**(42)**
Unknown	221	(22)	183	(34)	**404**	**(26)**	1,211	(35)	1,425	(57)	**2,636**	**(44)**
Treatment characteristic												
Directly observed therapy**	(n = 1,239)		(n = 687)		**(n = 1,926)**		(n = 3,671)		(n = 2,739)		**(n = 6,410)**	
All	823	(70)	396	(60)	**1,219**	**(66)**	1,964	(54)	1,332	(49)	**3,296**	**(51)**
Part	284	(24)	166	(25)	**450**	**(24)**	1,072	(29)	623	(23)	**1,695**	**(26)**
None (all self-administered)	77	(7)	94	(14)	**171**	**(9)**	635	(17)	784	(29)	**1,419**	**(22)**
Completed therapy within 1 year**	(n = 1,125)		(n = 605)		**(n = 1,730)**		(n = 3,334)		(n = 2,426)		**(n = 5,760)**	
	908	(81)	484	(80)	**1,392**	**(80)**	2,689	(81)	1,978	(82)	**4,667**	**(81)**
Anti TB-drug resistance††	(n = 709)		(n = 397)		**(n = 1,106)**		(n = 2,602)		(n = 1,845)		**(n = 4,447)**	
Isoniazid	26	(4)	15	(4)	**41**	**(4)**	140	(5)	80	(4)	**220**	**(5)**
Isoniazid and rifampin	3	(<1)	1	(<1)	**4**	**(<1)**	23	(1)	15	(1)	**38**	**(1)**

* Except for unknown human immunodeficiency virus status, persons with unknown risk factors or treatment characteristics were excluded from percentage calculations.
† Seven southeastern states (Alabama, Arkansas, Georgia, Louisiana, Mississippi, South Carolina, and Tennessee) where annual TB rates were above the national average for ≥8 years during 1991–2002.
§ The remaining 43 states and the District of Columbia.
¶ During 12 months before having TB diagnosed.
** Data from 2000, the latest year with outcomes. Completed therapy data exclude persons who died during therapy, persons with initial isolate resistant to rifampin, and pediatric (aged <15 years) patients with meningeal, bone or joint, or miliary disease.
†† Resistance to at least the drugs listed.

directly by a health-care worker (94%) was greater than the percentage for non-Hispanic whites (85%).

During 1991–2002, TB among foreign-born persons in the seven southeastern states increased from 0.2% to 7% for non-Hispanic blacks and from 0.1% to 3% for non-Hispanic whites. In 2002, in the rest of the United States, foreign-born persons accounted for 28% of TB among non-Hispanic blacks and 19% among non-Hispanic whites.

Non-Hispanic blacks with TB in the rest of the United States shared characteristics with non-Hispanic blacks with TB in the seven states. In 2002, the TB rate for non-Hispanic blacks in the rest of the United States (12.4 per 100,000 population) was similar to that for non-Hispanic blacks in the southeastern states (11.3). However, the TB rate for non-Hispanic whites in the rest of the United States (1.4) was 42% lower than the rate for non-Hispanic whites in the seven states (2.4), resulting in a black-to-white rate ratio of 8.9 in the rest of the United States, almost two times greater than the rate ratio in the seven states (4.7). During 1997–2002, non-Hispanic blacks and non-Hispanic whites in the rest of the United States experienced average yearly declines in TB rates (9.5% and 9.7%, respectively) similar to those observed in the seven southeastern states. Risk factors reported by non-Hispanic black TB patients in the seven states were similar to those reported by black patients in the rest of the United States, with the exception of excessive alcohol use, which was reported by 24% in the seven states and by 19% in the rest of the United States (Table).

Reported by: *Div of Tuberculosis Elimination, National Center for HIV, STD, and TB Prevention, CDC.*

Editorial Note: The rate of TB among both non-Hispanic blacks and non-Hispanic whites has declined substantially in recent years; however, racial disparities in TB continue. Effective, targeted programs are needed to achieve the 2010 national objective to reduce new TB cases to 1.0 per 100,000 population across all racial/ethnic populations (objective 14-11) (*3*).

The reasons for racial disparities in TB rates are multifactorial and require further study. The findings in this report indicate that TB rates and risk factors are similar for non-Hispanic blacks in the seven southeastern states and in the rest of the country. Approximately 56% of TB cases in the seven states occurred among non-Hispanic blacks because a higher proportion of the population in the region is non-Hispanic black (27% versus 11% in the rest of the United States, respectively).

The finding that the percentage of TB cases in children aged <5 years is higher in non-Hispanic blacks than in non-Hispanic whites suggests that a greater proportion of TB disease in blacks than whites might be the result of the recent transmission of *Mycobacterium tuberculosis*[¶]. A previous study determined that 44% of non-Hispanic blacks with TB had *M. tuberculosis* isolates with DNA genotypes that matched an isolate from one or more other patients, compared with 20% of non-Hispanic whites with TB (*4*). Patients with genetically clustered isolates represent recent transmission more commonly than TB patients with genetically unique isolates.

Among persons with TB in the seven states studied, non-Hispanic blacks were more likely than non-Hispanic whites to report certain risk factors (e.g., drug use, excessive alcohol use, incarceration, infection with HIV) often associated with being socioeconomically disadvantaged or immunocompromised. Differences in socioeconomic status have been identified as key predictors of TB rates (*5*). As of 2002, the South[**] had the highest percentage of households with incomes below the federal poverty level[††] (13.8%) of any region in the United States (*6*); this might account for the higher TB rate among non-Hispanic whites in the seven southeastern states, compared with the rest of the United States. General racial/ethnic disparities in health care also have been explained as a potential consequence of differential access to care, structural impediments in the health-care system, and unequal treatment (*7*).

Whatever roles poor access to health care and poverty have in the elevated TB rate in non-Hispanic blacks, once blacks enter a TB treatment program, a high percentage receive directly observed therapy (DOT). This patient management technique is recognized in the United States as a critical component of successful TB treatment. The percentage of non-Hispanic blacks receiving DOT, which ensures that every treatment dose is administered, is consistent with their low rate of infection with multidrug-resistant TB. These performance measures indicate successful management of DOT programs in the non-Hispanic black population.

The findings in this report are subject to at least two limitations. First, CDC's TB surveillance does not include data directly related to socioeconomic status, and previous findings that socioeconomic status was a key predictor of TB rates were not independently verified. Second, HIV status was un-

[¶] TB disease in adults results from either progression of recently transmitted *M. tuberculosis* or from reactivation of remote infections. In contrast, by definition, TB disease in children aged <5 years reflects recent transmission.

[**] Defined by the U.S. Census Bureau as the following: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

[††] Based on the 2002 federal poverty level (FPL), which takes into account both income and household size. For example, in 2002, the FPL was an annual household income of $18,244 for a family of two adults with two children aged <18 years.

known for 22% of non-Hispanic blacks and 34% of non-Hispanic whites, making these comparisons less reliable.

In 2003, the federal Advisory Council for the Elimination of Tuberculosis and CDC developed a strategy for nongovernment organizations to help reduce TB disparities in the United States by studying local TB epidemiology, increasing awareness about TB disparities (especially among non-Hispanic blacks), and educating legislators. In addition, in 2002, CDC began funding three ongoing demonstration projects (in Georgia, Illinois, and South Carolina) to identify innovative strategies to accelerate the decline of TB among non-Hispanic blacks. In January 2004, CDC began the Tuberculosis Genotyping Program to identify instances of recent TB transmission, enabling earlier outbreak detection and more thorough contact investigations, which might help reduce racial disparities in TB in the United States (*8*).

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Progress Toward Sustainable Measles Mortality Reduction — South-East Asia Region, 1999–2002

Substantial progress has been made toward meeting the 2003 World Health Assembly goal to reduce measles deaths 50% by the end of 2005, compared with deaths in 1999. Although measles remains the leading cause of vaccine-preventable deaths among children, the World Health Organization (WHO) estimates that, during 1999–2002, global measles mortality decreased 29%, including a 19% decline among South-East Asia Region (SEAR) member countries (*1*). In June 2003, the SEAR Regional Technical Advisory Group on Immunization endorsed a Regional Strategic Plan for Measles Mortality Reduction (2003–2005) (*2*). This report summarizes progress in measles control in SEAR during 1999–2002 and outlines plans for future activities in the region, which include strengthening measles surveillance, improving access to routine vaccination, and providing a second opportunity for measles immunization.

Measles Surveillance

All countries in the region include measles as a reportable disease in their routine communicable disease surveillance systems. Before 2001, Sri Lanka and Thailand collected case-based data nationwide. Health authorities in other countries relied on passive surveillance of clinically confirmed cases and maintained aggregated data at the national level. Beginning in 2001, the WHO-supported surveillance medical officers (SMOs) in Bangladesh, Indonesia, Myanmar, and Nepal have added measles to their original focus on acute flaccid paralysis (AFP) surveillance. In these countries, SMOs conduct outbreak investigations and routinely collect case-based data, including information on age, outcome, and vaccination status. In 2002, WHO established a regional network of national measles laboratories with standardized testing procedures for IgM antibody to measles in all SEAR member countries. Five to 10 samples are tested during each outbreak to confirm the diagnosis of measles.

Reported Incidence

During 1989–1999, the number of measles cases decreased steadily, from approximately 440,000 reported cases to 45,000. However, the number of cases gradually increased to 88,000 in 2002, primarily because of increases in India, Indonesia, and Thailand (Table 1) and nationwide outbreaks in several other countries of the region. During September 1999–May 2000, a total of 15,337 measles cases and 23 deaths were reported in Sri Lanka. Of 6,352 cases with information available, 3,481 (54.8%) were in persons aged >15 years. A similar outbreak occurred in Maldives in 2002, in which 444 (54.2%) of 819 reported cases were in persons aged >15 years. In contrast, both routine and outbreak reporting from other countries have documented a broad age distribution, with the majority of cases in persons aged <10 years (Table 2).

Mortality reported from both routine surveillance and outbreak investigations remains low. Nevertheless, on the basis of vaccination coverage and available case-fatality data, WHO estimated 243,000 measles deaths in the region in 1999 and 196,000 deaths in 2002 (*1*).

TABLE 1. Number of reported cases and incidence of measles among all age groups and estimated routine measles vaccination coverage among children aged ≤1 year, by country — South-East Asia Region, 1999 and 2002

Country	Morbidity: No. reported cases 1999	Morbidity: No. reported cases 2002	Morbidity: Reported incidence* 1999	Morbidity: Reported incidence* 2002	Morbidity: Reported incidence* Change	Vaccination coverage (%): Best official estimate† 1999	Vaccination coverage (%): Best official estimate† 2002	Vaccination coverage (%): WHO/UNICEF§ estimate 1999	Vaccination coverage (%): WHO/UNICEF§ estimate 2002
Bangladesh	5,666	3,484	4.2	2.4	-1.8	61	65	76	77
Bhutan	84	27	4.2	1.2	-3.0	77	78	76	78
Democratic People's Republic of Korea	0	—	0	0	0	98	98	—	—
India	21,013	51,780	2.1	4.9	2.8	87	67	50	67
Indonesia	4,767	14,492	2.3	6.7	4.4	88	72	71	76
Maldives	—	926	—	299.7	—	97	99	97	99
Myanmar	794	736	1.7	1.5	-0.2	85	75	85	75
Nepal	6,878	6,749	29.9	27.4	-2.5	81	71	72	71
Sri Lanka	2,417	139	13.1	0.7	-12.4	95¶	99¶	95¶	99¶
Thailand	3,167	10,241	5.3	16.5	11.2	96¶	94¶	96¶	94¶
Total	**44,786**	**88,574**	**3.0**	**5.6**	**2.6**	**85**	**70**	**58**	**70**

* Per 100,000 population, on the basis of population data from United Nations World Population Prospects, 2002.
† Countries have decided best estimate from either administrative or survey data.
§ World Health Organization United Nations Children's Fund.
¶ On the basis of measles-containing vaccine coverage.

TABLE 2. Age distribution of measles patients reported, by country, year, and data source — South-East Asia Region, 2000–2002

Country	Year	Data source	No. patients with age data available	Age (yrs) distribution of measles patients (%): ≤1	1–4	5–9	10–14	≥15
Bangladesh	2002	Routine	166	27.1	28.3	37.3	2.4	4.8
Bhutan	2002	Routine	27	3.7	11.1	63.0	11.1	11.1
Indonesia	2002	Routine	23,167	12.1	34.3	37.4*		16.2
Maldives	2002	Outbreak	819	2.3	5.4	15.7	22.2	54.2
Myanmar	2001	Outbreak	1,639	7.1	45.8	39.0	7.1	1.0
Sri Lanka	2000	Outbreak	6,392	7.7	5.3	16.3	16.0	54.8
	2001	Routine	127	7.1	10.2	6.3	7.1	70.3
Thailand	2002	Routine	10,236	8.5	16.6	23.8	23.0	28.1

* Accounts for children aged 5–14 years in one category.

Routine Vaccination

All countries in SEAR include a dose of measles-containing vaccine (MCV1) in their routine immunization schedule at age 9 months. Sri Lanka adds a second dose as measles-rubella vaccine at age 3 years. Thailand provides a dose of measles-mumps-rubella vaccine at age 9–12 months and at age 6 years. Administrative reporting indicated that the SEAR average measles vaccination coverage for MCV1 remained >85% during the 1990s (*3*). WHO/United Nations Children's Fund (UNICEF) estimates (Table 1), which rely on expert review of national reports and surveys, indicate the regional average in recent years is substantially lower than previous administrative reporting indicated. On the basis of WHO/UNICEF estimates, regional coverage for MCV1 has increased, from 58% in 1999 to 70% in 2002, primarily because of increases in India.

Supplemental Immunization Activities (SIAs)

Nationwide supplemental measles vaccination campaigns were conducted in the Democratic People's Republic of Korea (DPRK) in 1999, targeting children aged 9–23 months, and in Bhutan during 2000, targeting children aged 9 months–15 years. Myanmar began conducting a national campaign for children aged 9–59 months in three annual phases beginning in 2002. Subnational supplemental mass measles campaigns conducted include border areas in Bangladesh (1999 and 2001), urban areas in India (2000 and 2001), and underserved areas and school-aged children in Indonesia (2000 and 2002). Indonesia and Bhutan combined measles with polio campaigns. Coverage in SIAs ranged from 69% in India to >100% of the target in Bangladesh (Table 3).

TABLE 3. Supplemental immunization activities (SIAs) for measles control, by country, year, and selected characteristics — South-East Asia Region, 1999–2002

Country	Year	Campaign scope	Target age group	Target population	Reported coverage (%)
Bangladesh	1999	Subnational areas at high risk	9–35 mos	852,310	96
	2001	Subnational areas at high risk	9–35 mos	909,354	124
Bhutan	2000	National	9 mos–15 yrs	214,128	100
Democratic People's Republic of Korea	1999	National	9–23 mos	427,280	100
India	2000	Urban areas in four states	9–59 mos	974,034	76
	2001	Urban areas in four states	9–59 mos	1,384,891	69
Indonesia	2000	School catch-up campaign in three provinces	Grades 1–6	6,665,950	95
	2000	Five provinces at high risk	6–59 mos	1,142,183	90
	2002	Areas at high risk	6–59 mos	2,667,343	76
Myanmar	2002	Five of 17 states/divisions	9–59 mos	1,792,980	88

Reported by: *Regional Office for South-East Asia, New Delhi, India. Dept of Immunization and Vaccine Development, World Health Organization, Geneva, Switzerland.*

Editorial Note: Before 1999, the majority of countries in SEAR used routine administrative reports to estimate official measles vaccination coverage rates (*3*). In 1999, countries began to use survey data as the source of official estimates. By 2002, both national official estimates and WHO/UNICEF estimates relied on survey results as a primary data source, resulting in greater agreement between national and WHO/UNICEF estimates. However, obtaining timely, reliable data on both coverage and incidence remains difficult.

Despite encouraging trends in routine measles coverage for the region, as reflected in the WHO/UNICEF estimates, reported cases of measles actually increased during 1999–2002, and measles remains a substantial cause of morbidity and mortality among children in SEAR. The majority of this increase occurred in India and Indonesia, probably because of improved reporting and multiple outbreaks. Although coverage improved in these countries, the number of susceptible children in these highly populous areas remains the primary cause of sustained high morbidity. The increase in cases in Thailand and recent outbreaks among older children and adolescents in Sri Lanka and Maldives indicate that measles also is a substantial health risk even in countries with relatively high vaccination coverage levels. Similar to other regions (*4*), in SEAR countries where reported measles vaccine coverage is >80%, the majority of affected children are aged ≥10 years. Conversely, in countries with coverage <80% (e.g., Bangladesh, Indonesia, and Myanmar), the majority of cases occur in children aged <10 years.

Although polio eradication remains a priority for SEAR, countries in the region have increased the priority of measles control. Integrating measles surveillance with AFP surveillance and establishing a measles laboratory network to confirm outbreaks increases the reliability of surveillance data. These data have been essential in determining appropriate control strategies, particularly in setting target age groups for catch-up campaigns. Case-fatality studies planned for 2004 in Nepal and Bangladesh will further help to characterize the mortality burden of measles in the region.

SEAR countries have adopted a plan to reduce measles mortality 50% by 2005 (relative to 1999) in polio-free countries. Other objectives are to 1) achieve monthly reporting of the number of measles cases and deaths by 2004, 2) investigate 80% of outbreaks by 2005 to better direct vaccination strategies, 3) achieve and maintain 80% coverage with routine measles vaccination in >80% of districts in all countries by 2005, and 4) provide a second opportunity for MCV1 vaccination to all eligible children in the region by 2005 (*5*).

In 2002 and 2003, Myanmar, Timor-Leste, and Indonesia began SIAs as a stopgap measure while improvements in routine vaccination services are made. In 2004, Indonesia plans to phase in a dose for school-aged children, and other countries will need to consider adding a second measles dose to their Expanded Program on Immunization (EPI) schedule once their routine coverage improves. Nepal also plans a phased national measles campaign starting in 2004. Large-scale campaigns in populous countries (e.g., Bangladesh, India, and Indonesia) present substantial resource and logistical challenges. These countries should evaluate their administrative areas separately and adapt specific strategies appropriately.

Other countries, including Bhutan, DPRK, Maldives, Sri Lanka, and Thailand, have achieved low measles mortality levels, but experience periodic measles outbreaks. Sri Lanka and Thailand already provide a second MCV1 dose, and Bhutan and Maldives have indicated their intention to do so by 2005. These countries, which have already achieved the standards set for mortality reduction but have not yet officially adopted a national measles elimination policy, could strengthen their immunization strategies and surveillance standards by adopting recommendations of the recent global meeting on measles control (*6*).

The ultimate goal for every member country is to achieve sustainable measles mortality reduction. Achieving this goal requires addressing issues related to access to measles immunization and mobilization of internal and external resources. Therefore, countries should prepare comprehensive national action plans for measles control that are linked to their national EPI plans.

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Brief Report

Injuries Associated with Homemade Fireworks — Selected States, 1993–2004

Around the July 4 Independence Day holiday each year in the United States, injuries associated with homemade fireworks are increasingly common. During June–July 2002, approximately 5,700 persons were treated for fireworks-related injuries at U.S. emergency departments (*1*); approximately 300 (5.3%) were injured in incidents involving illegal and homemade fireworks. CDC and the Consumer Product Safety Commission (CPSC) recommend that fireworks be handled only by professionals (*2*). To describe injuries and emergency responses resulting from homemade fireworks explosions, the Agency for Toxic Substances and Disease Registry (ATSDR) researched data from its Hazardous Substances Emergency Events Surveillance (HSEES) system. This report summarizes four incidents involving homemade fireworks explosions that were identified by the surveillance system. To prevent injuries and deaths, no one should attempt to make their own fireworks.

HSEES is an active, multistate surveillance system that tracks the release of hazardous substances during emergency events* reported by participating state health departments†. ATSDR searched the HSEES database for reports of incidents involving homemade fireworks for all years for which data were available (1993–2004)§ from the 17 participating states. Because HSEES has no specific category for homemade fireworks incidents, certain incidents might not have been identified. Incidents involving bottle bombs, pipe bombs, smoke bombs, and other explosive devices were not included.

Case Reports

Iowa. In 2004, a man aged 52 years was making fireworks in the living room of his home when an explosion occurred. The explosion was believed to have been sparked by a metal spoon used to mix gunpowder, sulfur chlorate, and phosphorus in a metal can. The man died from his injuries. A hazardous materials (HazMat) team was called in to conduct decontamination and debris removal at the property.

New York. In 2001, a report of a loud explosion and white smoke brought the local fire department, HazMat team, and state police to a rural area south of a mobile home park. The explosion caused the release of ammonium nitrate, potassium nitrate, and other unidentified chemicals that were being used by the homeowner to manufacture fireworks on his property. No injuries were reported; however, the HazMat team conducted initial decontamination and debris removal at the property, and the owner was ordered to conduct soil sampling and remediate all areas of contaminated soil.

Utah. In 2002, a man aged 43 years was making fireworks by using ammonium nitrate and picric acid when an explosion occurred in his home. The man lost several fingers as a result of the blast. Forty-five residents of the area were evacuated for approximately 6 hours while local police and fire departments, along with the county health department and the state environmental protection agency, responded.

Washington. In 1993, a man aged 27 years and a youth aged 15 years died when chemicals being used to manufacture illegal fireworks exploded and fire destroyed their mobile home. The chemicals included barium nitrate, nitrocellulose, potassium nitrate, potassium perchlorate, strontium nitrate, and sulfur. State and federal agencies, along with a local HazMat team, decontaminated the property and removed debris.

* An HSEES event is the release or threatened release of a hazardous substance(s) into the environment in an amount that requires (or would have required) removal, clean-up, or neutralization according to federal, state, or local law (*3*). A hazardous substance is one that can reasonably be expected to cause an adverse health effect.

† During 1993–2004, a total of 17 state health departments participated in HSEES. State health departments in Alabama, Colorado, Iowa, New York, North Carolina, Oregon, Texas, Washington, and Wisconsin participated during the entire period. Eight state health departments participated during portions of this period: Louisiana (2001–2004), Minnesota (1995–2004), Mississippi (1995–2004), Missouri (1994–2004), New Hampshire (1993–1996), New Jersey (2000–2004), Rhode Island (1993–2001), and Utah (2000–2004).

§ Data for 2003 and 2004 are preliminary.

Although certain types of fireworks are legal in some states, all fireworks are potentially dangerous because of their composition and unpredictability. Homemade fireworks can pose a particular risk for injury because of the lack of knowledge and experience of persons preparing these materials. CDC and CPSC recommend that fireworks be manufactured and handled only by professionals. Additional information regarding the hazards posed by fireworks and state and federal regulations that govern their use is available at CPSC at http://www.cpsc.gov/cpscpub/pubs/012.pdf and CDC at http://www.cdc.gov/ncipc/duip/spotlite/firework_spot.htm.

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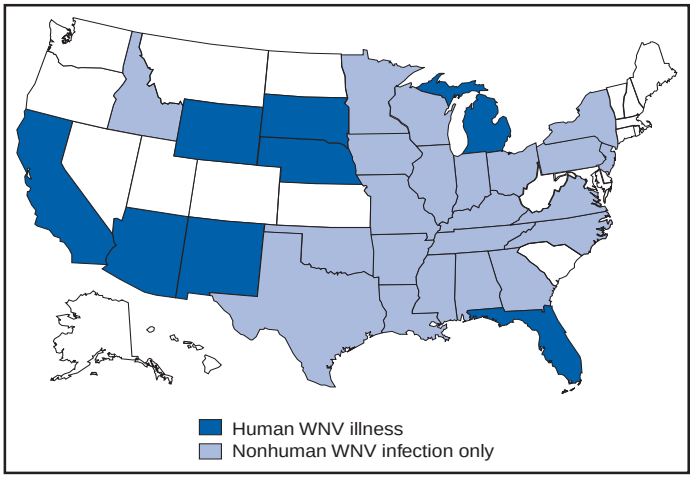
West Nile Virus Activity — United States, June 23–29, 2004

As of June 29, eight states had reported a total of 57 human cases of West Nile virus (WNV) illness to CDC through ArboNET in 2004. A total of 38 cases had been reported from Arizona, 10 from California, three from New Mexico, two from Florida, and one each from Michigan, Nebraska, South Dakota, and Wyoming (Figure). Thirty-six (64%) of the cases occurred in males; the median age of patients was 53 years (range: 9–84 years), and dates of illness onset ranged from April 23 to June 15. Of the 57 cases, one fatal case was reported from Arizona.

A total of 13 presumptive West Nile viremic blood donors (PVDs) have been reported to ArboNET. Of these, 12 were reported from Arizona, and one was reported from New Mexico. Of the 13 PVDs reported to ArboNET, one person aged 69 years subsequently had neuroinvasive illness, and three persons aged 22, 51, and 52 years subsequently had West Nile fever. In New Mexico, the first detected WNV activity in 2004 was in a PVD; in Arizona, three of the first seven reported human WNV infections in 2004 were in PVDs.

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2004*



* As of 3 a.m., Mountain Standard Time, June 29, 2004.

In addition, during 2004, a total of 760 dead corvids and 85 other dead birds with WNV infection have been reported from 23 states, and 42 WNV infections in horses have been reported from 11 states (Alabama, Arizona, California, Idaho, Missouri, North Carolina, Oklahoma, South Dakota, Tennessee, Texas, and Virginia). WNV seroconversions have been reported in 89 sentinel chicken flocks from four states (Arizona, California, Florida, and Louisiana). Three seropositive sentinel horses were reported from Puerto Rico. A total of 180 WNV-positive mosquito pools have been reported from 11 states (Arizona, California, Illinois, Indiana, Louisiana, Michigan, Missouri, New Jersey, Pennsylvania, Texas, and Virginia).

Additional information about national WNV activity is available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm and at http://westnilemaps.usgs.gov.

Notice to Readers

Availability of Influenza Pandemic Preparedness Software for Hospital Planning

Influenza pandemics have occurred three times during the 20th century: in 1918, 1957, and 1968. Another influenza pandemic is likely, if not inevitable (*1,2*). To help public health officials and hospital administrators prepare for the next influenza pandemic, CDC has developed FluSurge 1.0, a specialized spreadsheet-based software that estimates the potential surge in demand for hospital-based health care during a pandemic. For each week of a pandemic, FluSurge calculates the potential demand for hospital beds, intensive care unit

beds, and mechanical ventilators. Demand for resources is compared with actual capacity. FluSurge is a companion to the previously released FluAid 2.0, which provides estimates of the total deaths, hospitalizations, and outpatient visits that might occur during an influenza pandemic.

Both FluSurge 1.0 and FluAid 2.0, including accompanying manuals, are now available from the National Vaccine Program Office's website at http://www.dhhs.gov/nvpo/pandemics. The software programs and manuals are available free of charge.

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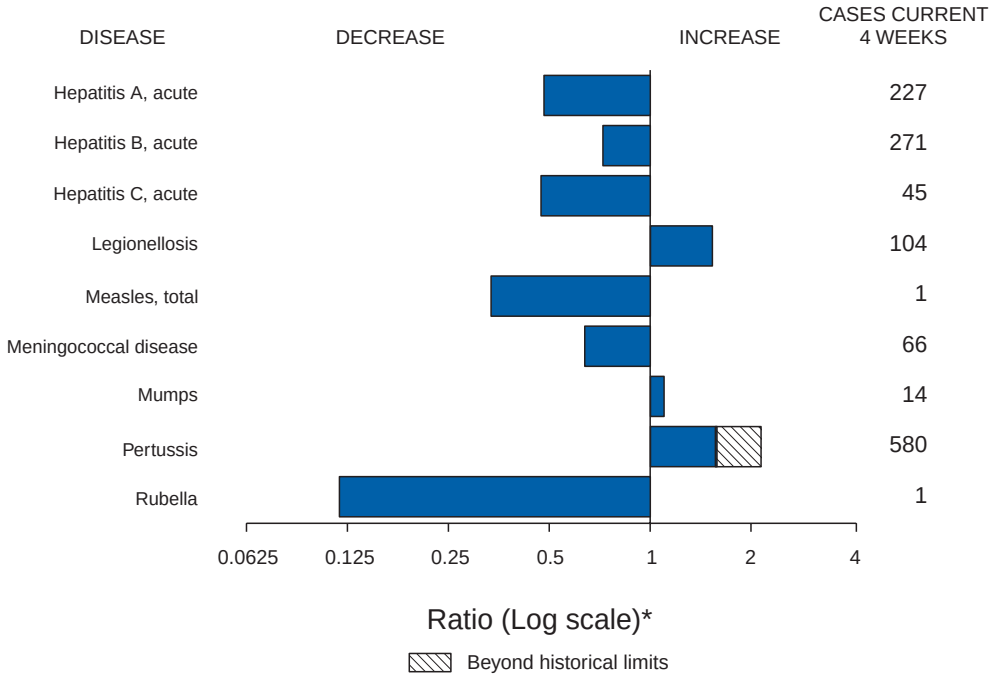
FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals June 26, 2004, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending June 26, 2004 (25th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	39	56
Botulism:	-	-	HIV infection, pediatric† ¶	78	110
foodborne	7	7	Measles, total	16**	31††
infant	30	31	Mumps	97	115
other (wound & unspecified	5	10	Plague	-	1
Brucellosis†	50	41	Poliomyelitis, paralytic	-	-
Chancroid	15	28	Psittacosis†	3	5
Cholera	2	1	Q fever†	25	38
Cyclosporiasis†	59	27	Rabies, human	-	-
Diphtheria	-	-	Rubella	13	5
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE)†	46	61	SARS-associated coronavirus disease† §§	-	7
human monocytic (HME)†	35	44	Smallpox† ¶¶	-	NA
human, other and unspecified	3	10	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† ¶¶	4	NA
California serogroup viral† §	1	2	Vancomycin-resistant (VRSA)† ¶¶	1	1
eastern equine† §	-	1	Streptococcal toxic-shock syndrome†	58	111
Powassan† §	-	-	Tetanus	6	4
St. Louis† §	-	2	Toxic-shock syndrome	49	70
western equine† §	-	-	Trichinosis	2	-
Hansen disease (leprosy)†	36	38	Tularemia†	23	15
Hantavirus pulmonary syndrome†	7	14	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update May 23, 2004.
** Of 16 cases reported, nine were indigenous, and seven were imported from another country.
†† Of 31 cases reported, 22 were indigenous, and nine were imported from another country.
§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
¶¶ Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 26, 2004, and June 21, 2003 (25th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile§	
	Cum. 2004¶	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	17,011	20,273	396,892	410,429	2,608	1,466	1,035	933	35	11
NEW ENGLAND	569	702	13,700	13,157	-	-	62	64	-	-
Maine	5	27	928	920	N	N	14	5	-	-
N.H.	23	15	764	757	-	-	14	10	-	-
Vt.	13	6	489	489	-	-	6	11	-	-
Mass.	150	324	6,559	5,002	-	-	17	26	-	-
R.I.	66	50	1,618	1,545	-	-	2	9	-	-
Conn.	312	280	3,342	4,444	N	N	9	3	-	-
MID. ATLANTIC	3,912	4,262	51,223	49,863	-	-	158	135	-	3
Upstate N.Y.	453	276	10,683	9,186	N	N	40	34	-	-
N.Y. City	2,154	2,060	14,690	16,348	-	-	36	49	-	-
N.J.	675	880	6,083	7,366	-	-	11	8	-	-
Pa.	630	1,046	19,767	16,963	N	N	71	44	-	3
E.N. CENTRAL	1,455	1,993	68,920	74,490	6	3	232	230	1	-
Ohio	237	304	17,159	20,107	-	-	65	33	-	-
Ind.	166	260	8,695	8,204	N	N	31	21	-	-
Ill.	700	960	17,789	23,258	-	-	13	36	-	-
Mich.	269	363	17,899	14,692	6	3	49	42	1	-
Wis.	83	106	7,378	8,229	-	-	74	98	-	-
W.N. CENTRAL	331	364	23,615	23,453	4	2	131	94	1	1
Minn.	81	77	4,207	5,141	N	N	49	39	-	1
Iowa	21	41	2,311	2,565	N	N	19	14	-	-
Mo.	135	180	9,134	8,452	3	1	20	9	-	-
N. Dak.	12	1	746	745	N	N	7	6	-	-
S. Dak.	5	6	1,180	1,167	-	-	16	18	1	-
Nebr.**	18	24	2,469	2,047	1	1	8	4	-	-
Kans.	59	35	3,568	3,336	N	N	12	4	-	-
S. ATLANTIC	5,282	5,870	74,496	76,858	-	2	208	125	1	1
Del.	78	105	1,396	1,493	N	N	-	3	-	-
Md.	601	716	8,943	7,872	-	2	10	8	-	-
D.C.	308	595	1,508	1,599	-	-	3	1	-	-
Va.	288	478	10,304	9,095	-	-	23	13	-	-
W. Va.	30	42	1,322	1,186	N	N	3	2	-	-
N.C.	305	567	13,124	12,725	N	N	37	15	-	-
S.C.**	329	389	7,575	6,403	-	-	9	2	-	1
Ga.	782	736	10,358	16,464	-	-	67	46	-	-
Fla.	2,561	2,242	19,966	20,021	N	N	56	35	1	-
E.S. CENTRAL	782	911	25,327	26,541	2	1	46	57	-	1
Ky.	71	79	2,649	3,950	N	N	16	11	-	-
Tenn.**	326	436	10,693	9,322	N	N	12	21	-	-
Ala.	208	185	5,151	7,167	-	-	11	22	-	1
Miss.	177	211	6,834	6,102	2	1	7	3	-	-
W.S. CENTRAL	2,047	2,313	52,497	51,598	2	-	31	20	-	5
Ark.	87	85	3,842	3,598	1	-	9	3	-	-
La.	346	365	11,986	10,015	1	-	-	1	-	2
Okla.	90	109	5,166	5,227	N	N	10	4	-	-
Tex.	1,524	1,754	31,503	32,758	-	-	12	12	-	3
MOUNTAIN	571	757	19,464	24,475	1,653	952	53	44	29	-
Mont.	-	10	971	1,094	N	N	11	10	-	-
Idaho	3	13	1,408	1,182	N	N	5	7	-	-
Wyo.	6	5	512	467	-	-	2	1	-	-
Colo.	98	157	3,751	6,193	N	N	24	9	-	-
N. Mex.	91	51	2,586	3,623	9	4	2	3	-	-
Ariz.	208	337	6,729	7,264	1,602	926	7	3	29	-
Utah	34	32	1,537	1,771	13	3	1	8	-	-
Nev.	131	152	1,970	2,881	29	19	1	3	-	-
PACIFIC	2,062	3,101	67,650	69,994	941	506	114	164	3	-
Wash.	165	211	8,455	7,559	N	N	14	14	-	-
Oreg.	111	126	2,069	3,629	-	-	13	19	-	-
Calif.	1,731	2,693	54,128	54,405	941	506	86	131	3	-
Alaska	14	12	1,746	1,842	-	-	-	-	-	-
Hawaii	41	59	1,252	2,559	-	-	1	-	-	-
Guam	1	1	-	345	-	-	-	-	-	-
P.R.	209	514	1,002	1,139	N	N	N	N	-	-
V.I.	5	15	143	153	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	32	U	-	U	-	U	-	U

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

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

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

§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update May 30, 2004.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 26, 2004, and June 21, 2003 (25th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	647	631	81	83	59	52	6,828	7,391	137,730	153,264
NEW ENGLAND	44	37	23	16	10	2	650	532	3,179	3,241
Maine	2	4	-	-	-	-	64	58	123	107
N.H.	9	7	5	2	-	-	16	20	60	54
Vt.	1	3	-	-	-	-	58	41	41	39
Mass.	21	12	3	6	10	2	282	253	1,499	1,220
R.I.	5	1	1	-	-	-	54	55	418	456
Conn.	6	10	14	8	-	-	176	105	1,038	1,365
MID. ATLANTIC	79	73	7	7	11	11	1,550	1,554	16,189	19,415
Upstate N.Y.	37	27	4	3	3	5	528	378	3,495	3,515
N.Y. City	8	3	-	-	-	-	459	557	4,683	6,321
N.J.	13	8	1	1	4	-	167	222	2,430	4,234
Pa.	21	35	2	3	4	6	396	397	5,581	5,345
E.N. CENTRAL	125	157	16	17	8	9	820	1,334	27,993	32,310
Ohio	31	35	4	10	8	9	341	376	8,211	10,393
Ind.	10	19	-	-	-	-	-	-	3,008	3,055
Ill.	27	29	-	1	-	-	84	411	7,569	10,023
Mich.	24	29	2	-	-	-	261	306	7,260	6,036
Wis.	33	45	10	6	-	-	134	241	1,945	2,803
W.N. CENTRAL	118	90	11	12	14	8	800	731	7,556	7,833
Minn.	30	33	5	8	2	-	276	266	1,546	1,274
Iowa	31	12	-	-	-	-	112	100	412	583
Mo.	22	24	6	2	5	1	209	212	3,712	4,004
N. Dak.	4	4	-	1	5	1	12	18	58	33
S. Dak.	5	5	-	-	-	-	28	21	128	93
Nebr.	14	5	-	1	-	-	59	54	493	661
Kans.	12	7	-	-	2	6	104	60	1,207	1,185
S. ATLANTIC	62	50	15	19	8	12	1,106	1,109	32,876	37,520
Del.	1	-	N	N	N	N	24	17	442	555
Md.	13	3	1	-	1	1	44	51	3,852	3,646
D.C.	1	1	-	-	-	-	30	17	1,034	1,168
Va.	8	17	6	4	-	-	173	147	4,133	4,202
W. Va.	1	2	-	-	-	-	12	14	399	402
N.C.	-	-	4	-	2	11	N	N	7,004	7,122
S.C.	3	-	-	-	-	-	27	60	3,514	3,698
Ga.	15	11	2	2	-	-	310	360	4,303	7,956
Fla.	20	16	2	13	5	-	486	443	8,195	8,771
E.S. CENTRAL	36	29	1	-	7	4	149	151	10,825	12,844
Ky.	14	9	1	-	4	4	N	N	1,148	1,659
Tenn.	7	12	-	-	3	-	70	67	3,835	3,775
Ala.	8	5	-	-	-	-	79	84	3,069	4,341
Miss.	7	3	-	-	-	-	-	-	2,773	3,069
W.S. CENTRAL	35	28	1	2	1	2	120	125	19,559	20,885
Ark.	7	4	-	-	-	-	52	68	1,889	1,961
La.	2	1	-	-	-	-	16	8	5,368	5,652
Okla.	7	4	-	-	-	-	52	49	2,163	2,008
Tex.	19	19	1	2	1	2	-	-	10,139	11,264
MOUNTAIN	59	70	6	8	-	4	548	585	4,560	5,154
Mont.	3	2	-	-	-	-	19	34	35	56
Idaho	18	18	3	5	-	-	77	72	38	37
Wyo.	-	2	1	-	-	-	7	8	27	24
Colo.	11	20	1	1	-	4	175	166	1,239	1,417
N. Mex.	4	2	-	2	-	-	29	22	313	600
Ariz.	7	13	N	N	N	N	80	103	1,807	1,895
Utah	9	8	-	-	-	-	120	123	228	166
Nev.	7	5	1	-	-	-	41	57	873	959
PACIFIC	89	97	1	2	-	-	1,085	1,270	14,993	14,062
Wash.	30	24	-	1	-	-	128	122	1,244	1,370
Oreg.	13	17	1	1	-	-	181	158	265	480
Calif.	39	55	-	-	-	-	709	908	12,907	11,438
Alaska	1	1	-	-	-	-	26	40	282	256
Hawaii	6	-	-	-	-	-	41	42	295	518
Guam	N	N	-	-	-	-	-	-	-	38
P.R.	-	1	-	-	-	-	11	92	91	130
V.I.	-	-	-	-	-	-	-	-	49	41
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	3	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 26, 2004, and June 21, 2003 (25th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	973	940	9	14	53	67	98	114	2,511	3,010
NEW ENGLAND	90	64	1	1	5	5	3	3	407	135
Maine	7	2	-	-	-	-	-	1	9	5
N.H.	13	6	-	-	2	-	-	-	10	9
Vt.	5	6	-	-	-	-	1	-	7	4
Mass.	37	35	1	1	-	5	2	1	339	67
R.I.	3	4	-	-	-	-	-	1	10	11
Conn.	25	11	-	-	3	-	-	-	32	39
MID. ATLANTIC	212	186	-	1	3	2	28	28	289	649
Upstate N.Y.	73	64	-	1	3	2	4	7	39	53
N.Y. City	42	30	-	-	-	-	9	6	98	240
N.J.	39	41	-	-	-	-	3	7	59	105
Pa.	58	51	-	-	-	-	12	8	93	251
E.N. CENTRAL	143	156	-	2	10	3	19	31	225	286
Ohio	66	41	-	-	2	-	10	7	26	56
Ind.	29	23	-	-	4	-	1	2	15	22
Ill.	20	61	-	-	-	-	6	17	86	83
Mich.	12	12	-	2	4	3	1	-	78	95
Wis.	16	19	-	-	-	-	1	5	20	30
W.N. CENTRAL	57	65	2	-	3	6	4	6	92	78
Minn.	24	23	1	-	3	6	-	1	23	20
Iowa	1	-	1	-	-	-	-	-	26	15
Mo.	17	27	-	-	-	-	2	5	27	24
N. Dak.	3	2	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	2	-
Nebr.	5	1	-	-	-	-	-	-	7	5
Kans.	7	11	-	-	-	-	2	-	6	14
S. ATLANTIC	239	177	-	-	15	7	18	11	487	655
Del.	8	-	-	-	-	-	2	-	5	4
Md.	38	41	-	-	3	4	-	-	69	62
D.C.	-	-	-	-	-	-	-	-	4	22
Va.	21	16	-	-	-	-	1	4	48	36
W. Va.	10	7	-	-	-	-	3	-	2	10
N.C.	35	14	-	-	5	-	-	-	33	33
S.C.	2	2	-	-	-	-	-	-	20	23
Ga.	64	37	-	-	-	-	12	4	176	264
Fla.	61	60	-	-	7	3	-	3	130	201
E.S. CENTRAL	37	43	-	1	-	2	7	4	81	83
Ky.	3	3	-	-	-	1	-	-	11	15
Tenn.	23	24	-	-	-	1	5	3	46	45
Ala.	11	16	-	1	-	-	2	1	6	11
Miss.	-	-	-	-	-	-	-	-	18	12
W.S. CENTRAL	38	47	1	1	4	6	1	3	200	306
Ark.	1	5	-	-	-	1	-	-	38	19
La.	7	15	-	-	-	2	1	3	12	27
Okla.	29	25	-	-	4	3	-	-	18	6
Tex.	1	2	1	1	-	-	-	-	132	254
MOUNTAIN	120	108	3	5	13	17	13	12	226	210
Mont.	-	-	-	-	-	-	-	-	4	2
Idaho	5	2	-	-	-	-	2	1	10	9
Wyo.	-	1	-	-	-	-	-	-	2	1
Colo.	27	18	-	-	-	-	3	4	21	29
N. Mex.	24	14	-	-	4	3	3	1	7	8
Ariz.	46	59	-	5	7	8	1	4	146	115
Utah	10	8	2	-	1	3	2	2	30	14
Nev.	8	6	1	-	1	3	2	-	6	32
PACIFIC	37	94	2	3	-	19	5	16	504	608
Wash.	3	5	2	-	-	4	1	1	31	34
Oreg.	24	23	-	-	-	-	1	2	40	32
Calif.	3	42	-	3	-	15	2	8	418	533
Alaska	2	18	-	-	-	-	1	5	4	5
Hawaii	5	6	-	-	-	-	-	-	11	4
Guam	-	-	-	-	-	-	-	-	-	1
P.R.	-	-	-	-	-	-	-	-	10	40
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 26, 2004, and June 21, 2003 (25th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	2,822	3,223	568	518	535	595	216	251	4,200	5,047
NEW ENGLAND	156	160	4	2	12	24	10	12	480	687
Maine	1	1	-	-	-	1	2	2	53	-
N.H.	22	9	-	-	-	3	1	2	39	13
Vt.	1	2	1	2	1	1	-	-	12	7
Mass.	84	110	3	-	4	9	2	6	135	424
R.I.	3	4	-	-	2	2	1	-	56	119
Conn.	45	34	U	U	5	8	4	2	185	124
MID. ATLANTIC	494	401	57	59	133	133	45	44	3,116	3,587
Upstate N.Y.	44	35	6	7	31	35	17	8	1,104	1,033
N.Y. City	45	128	-	-	7	14	4	11	-	56
N.J.	270	103	-	-	31	14	10	9	839	1,080
Pa.	135	135	51	52	64	70	14	16	1,173	1,418
E.N. CENTRAL	233	245	33	81	127	137	32	32	87	253
Ohio	68	70	3	5	72	67	15	6	38	18
Ind.	8	13	2	3	10	9	6	1	2	6
Ill.	33	30	5	13	2	17	-	10	-	17
Mich.	124	107	23	57	41	33	10	11	5	-
Wis.	-	25	-	3	2	11	1	4	42	212
W.N. CENTRAL	197	143	195	116	13	27	5	8	74	62
Minn.	20	18	4	3	1	2	2	2	25	35
Iowa	9	4	-	-	3	5	1	-	9	9
Mo.	139	97	191	112	7	11	2	3	34	14
N. Dak.	2	-	-	-	1	1	-	-	-	-
S. Dak.	-	1	-	-	1	1	-	-	-	-
Nebr.	14	14	-	1	-	2	-	3	3	2
Kans.	13	9	-	-	-	5	-	-	3	2
S. ATLANTIC	896	828	95	77	133	149	34	54	362	339
Del.	18	5	-	-	4	2	N	N	35	67
Md.	78	52	10	5	23	30	4	6	224	212
D.C.	13	1	1	-	5	1	-	-	2	3
Va.	102	58	11	1	9	8	4	7	24	14
W. Va.	2	7	15	1	2	3	1	2	2	1
N.C.	91	76	6	5	15	12	8	9	45	20
S.C.	53	76	7	17	1	4	-	2	2	1
Ga.	281	266	7	6	14	16	7	16	2	9
Fla.	258	287	38	42	60	73	10	12	26	12
E.S. CENTRAL	200	203	57	42	23	37	15	9	24	25
Ky.	25	39	16	7	8	11	4	1	9	5
Tenn.	90	81	25	9	10	12	8	1	9	7
Ala.	32	38	1	5	5	11	2	5	1	1
Miss.	53	45	15	21	-	3	1	2	5	12
W.S. CENTRAL	85	537	70	92	32	28	16	28	12	53
Ark.	26	46	1	3	-	1	1	-	2	-
La.	30	74	40	54	3	1	2	1	1	6
Okla.	17	30	2	-	2	2	-	1	-	-
Tex.	12	387	27	35	27	24	13	26	9	47
MOUNTAIN	232	288	25	17	32	30	11	16	8	5
Mont.	1	8	2	1	1	1	-	1	-	-
Idaho	6	4	-	1	4	3	1	-	2	2
Wyo.	6	17	1	-	4	2	-	-	1	-
Colo.	21	43	4	4	4	6	3	6	-	-
N. Mex.	10	21	6	-	-	2	-	2	-	1
Ariz.	130	138	2	4	5	6	-	5	1	-
Utah	23	19	2	-	12	7	1	1	4	1
Nev.	35	38	8	7	2	3	6	1	-	1
PACIFIC	329	418	32	32	30	30	48	48	37	36
Wash.	26	35	10	11	5	3	6	3	3	-
Oreg.	48	65	9	5	N	N	4	2	17	8
Calif.	241	307	10	15	25	27	38	42	17	27
Alaska	12	3	-	-	-	-	-	-	-	1
Hawaii	2	8	3	1	-	-	-	1	N	N
Guam	-	3	-	1	-	-	-	-	-	-
P.R.	18	69	-	-	1	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 26, 2004, and June 21, 2003 (25th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	487	471	750	958	4,078	3,289	2,286	3,357	333	209
NEW ENGLAND	42	13	36	44	616	325	243	218	10	2
Maine	5	1	8	5	2	4	28	22	-	-
N.H.	-	2	3	3	23	18	10	10	-	-
Vt.	3	-	1	-	38	29	10	15	-	-
Mass.	19	10	20	27	525	252	98	86	9	2
R.I.	2	-	1	2	16	6	14	28	1	-
Conn.	13	-	3	7	12	16	83	57	-	-
MID. ATLANTIC	107	114	91	117	1,111	334	197	404	25	15
Upstate N.Y.	18	22	21	23	797	126	164	153	1	-
N.Y. City	44	58	14	29	68	50	4	4	4	4
N.J.	22	18	21	16	92	65	-	62	7	8
Pa.	23	16	35	49	154	93	29	185	13	3
E.N. CENTRAL	33	50	107	153	541	252	22	38	14	6
Ohio	12	9	44	39	201	109	8	15	7	3
Ind.	2	1	15	26	42	28	4	2	4	-
Ill.	2	24	9	44	67	20	8	6	-	2
Mich.	11	13	32	25	51	23	2	15	3	1
Wis.	6	3	7	19	180	72	-	-	-	-
W.N. CENTRAL	34	19	52	74	300	143	227	341	34	14
Minn.	16	11	13	17	71	47	24	13	-	-
Iowa	1	2	11	14	32	37	34	41	-	2
Mo.	7	1	15	30	155	29	12	3	28	10
N. Dak.	2	-	1	-	10	2	29	31	-	-
S. Dak.	1	1	1	1	9	2	10	73	-	-
Nebr.	2	-	2	5	3	2	53	65	5	2
Kans.	5	4	9	7	20	24	65	115	1	-
S. ATLANTIC	137	112	139	165	255	218	846	1,351	136	130
Del.	3	-	2	8	5	2	9	23	-	-
Md.	29	30	7	16	46	30	50	197	14	34
D.C.	7	6	4	3	2	-	-	-	-	-
Va.	11	7	9	11	71	49	220	262	2	1
W. Va.	-	4	4	1	4	5	32	40	1	-
N.C.	9	8	21	19	46	70	322	379	103	60
S.C.	7	3	12	14	26	9	67	84	8	8
Ga.	23	22	9	19	8	18	142	178	2	23
Fla.	48	32	71	74	47	35	4	188	6	4
E.S. CENTRAL	18	9	32	45	55	68	59	108	49	31
Ky.	1	1	3	8	11	15	11	18	-	-
Tenn.	3	4	10	11	29	35	20	77	25	20
Ala.	11	2	9	12	9	11	25	12	11	3
Miss.	3	2	10	14	6	7	3	1	13	8
W.S. CENTRAL	42	57	71	113	218	216	558	733	53	7
Ark.	6	3	12	10	9	11	27	25	22	-
La.	2	2	18	31	4	6	-	-	4	-
Okla.	2	2	4	8	17	17	66	125	27	2
Tex.	32	50	37	64	188	182	465	583	-	5
MOUNTAIN	17	15	35	51	484	511	50	63	8	4
Mont.	-	-	3	2	13	-	6	8	2	1
Idaho	1	1	4	6	18	25	-	2	1	1
Wyo.	-	-	2	2	3	119	-	1	1	2
Colo.	6	10	9	12	248	185	6	10	-	-
N. Mex.	1	-	5	5	59	27	2	3	1	-
Ariz.	4	2	6	20	101	92	36	36	1	-
Utah	3	1	3	-	32	45	-	2	2	-
Nev.	2	1	3	4	10	18	-	1	-	-
PACIFIC	57	82	187	196	498	1,222	84	101	4	-
Wash.	4	11	18	17	235	245	-	-	-	-
Oreg.	9	7	38	32	213	221	2	3	2	-
Calif.	43	62	126	136	35	749	74	93	2	-
Alaska	-	-	1	4	8	1	8	5	-	-
Hawaii	1	2	4	7	7	6	-	-	-	-
Guam	-	-	-	-	-	1	-	-	-	-
P.R.	-	-	4	6	2	1	25	28	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.
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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 26, 2004, and June 21, 2003 (25th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	12,723	14,233	4,761	10,749	2,628	3,502	1,329	1,198	307	409
NEW ENGLAND	640	738	110	129	127	325	15	64	7	2
Maine	34	47	2	5	5	19	2	-	1	-
N.H.	42	48	5	4	13	20	-	-	N	N
Vt.	21	26	2	5	7	16	7	6	1	2
Mass.	352	429	68	80	85	142	N	N	N	N
R.I.	48	40	8	4	17	5	6	8	5	-
Conn.	143	148	25	31	-	123	-	50	U	U
MID. ATLANTIC	1,663	1,762	561	1,108	426	611	91	79	65	60
Upstate N.Y.	425	366	279	149	144	219	43	38	45	43
N.Y. City	437	481	151	180	55	89	U	U	U	U
N.J.	294	320	81	191	87	125	-	-	2	2
Pa.	507	595	50	588	140	178	48	41	18	15
E.N. CENTRAL	1,606	1,983	351	895	543	872	299	267	93	180
Ohio	481	563	77	136	153	201	220	181	55	61
Ind.	167	206	87	56	65	77	79	86	21	16
Ill.	321	644	87	505	121	226	-	-	-	69
Mich.	335	297	50	131	177	255	N	N	N	N
Wis.	302	273	50	67	27	113	N	N	17	34
W.N. CENTRAL	942	860	173	338	186	212	123	9	36	45
Minn.	213	205	22	44	90	103	-	-	25	29
Iowa	194	146	34	22	N	N	N	N	N	N
Mo.	273	283	76	168	40	45	7	6	4	2
N. Dak.	16	18	1	4	9	8	-	3	1	4
S. Dak.	35	31	6	8	8	17	3	-	-	-
Nebr.	61	65	8	60	10	20	-	-	4	5
Kans.	150	112	26	32	29	19	113	-	N	N
S. ATLANTIC	2,914	3,254	1,269	3,360	532	570	607	635	10	8
Del.	16	39	3	135	2	6	4	1	N	N
Md.	263	331	52	254	112	147	-	4	-	-
D.C.	16	14	20	30	5	4	3	-	3	-
Va.	325	346	50	177	42	62	N	N	N	N
W. Va.	58	37	-	-	16	25	64	39	7	8
N.C.	365	426	137	439	80	66	N	N	U	U
S.C.	181	170	185	211	35	29	54	94	N	N
Ga.	458	530	285	715	111	119	137	149	N	N
Fla.	1,232	1,361	537	1,399	129	112	345	348	N	N
E.S. CENTRAL	803	905	266	474	130	117	75	88	-	-
Ky.	135	143	36	53	44	32	19	11	N	N
Tenn.	205	297	101	167	86	85	56	77	N	N
Ala.	234	231	100	154	-	-	-	-	N	N
Miss.	229	234	29	100	-	-	-	-	-	-
W.S. CENTRAL	1,119	1,668	1,087	2,979	144	161	34	50	65	65
Ark.	190	208	29	44	7	4	6	17	7	4
La.	165	288	106	239	1	1	28	33	8	14
Okla.	137	127	245	429	38	50	N	N	28	28
Tex.	627	1,045	707	2,267	98	106	N	N	22	19
MOUNTAIN	939	908	336	433	291	301	18	4	31	49
Mont.	64	48	4	2	-	1	-	-	-	-
Idaho	70	88	6	11	5	11	N	N	N	N
Wyo.	22	48	1	1	6	1	5	3	-	-
Colo.	215	224	57	66	79	83	-	-	28	38
N. Mex.	94	87	52	93	54	78	5	-	-	7
Ariz.	305	259	179	215	118	107	N	N	N	N
Utah	94	80	17	22	28	19	6	1	3	4
Nev.	75	74	20	23	1	1	2	-	-	-
PACIFIC	2,097	2,155	608	1,033	249	333	67	2	-	-
Wash.	205	251	55	85	34	29	-	-	N	N
Oreg.	172	191	33	49	N	N	N	N	N	N
Calif.	1,513	1,583	493	878	170	244	N	N	N	N
Alaska	35	43	4	4	-	-	-	-	N	N
Hawaii	172	87	23	17	45	60	67	2	-	-
Guam	-	24	-	22	-	-	-	-	-	-
P.R.	66	286	1	5	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 26, 2004, and June 21, 2003 (25th Week)*

Reporting area	Syphilis: Primary & secondary		Syphilis: Congenital		Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	3,331	3,385	154	222	4,162	5,869	112	144	8,841	9,438
NEW ENGLAND	78	101	1	-	164	184	12	15	573	2,081
Maine	2	4	-	-	-	11	-	-	176	630
N.H.	3	12	-	-	7	9	-	1	-	-
Vt.	-	-	-	-	-	5	-	-	397	477
Mass.	51	64	-	-	112	82	10	7	-	101
R.I.	9	11	-	-	11	25	1	2	-	3
Conn.	13	10	1	-	34	52	1	5	-	870
MID. ATLANTIC	485	381	27	34	899	1,026	28	23	34	10
Upstate N.Y.	43	15	1	3	103	108	2	3	-	-
N.Y. City	253	215	9	20	470	558	7	12	-	-
N.J.	81	74	17	11	192	186	9	7	-	-
Pa.	108	77	-	-	134	174	10	1	34	10
E.N. CENTRAL	363	475	33	39	527	527	5	18	4,058	3,631
Ohio	113	101	1	2	97	91	1	-	959	889
Ind.	26	22	8	7	68	62	-	4	-	-
Ill.	118	198	2	14	238	246	-	7	-	-
Mich.	92	143	22	16	91	99	3	7	2,752	2,194
Wis.	14	11	-	-	33	29	1	-	347	548
W.N. CENTRAL	63	91	-	4	176	219	2	3	115	37
Minn.	11	30	-	-	74	78	1	1	-	-
Iowa	4	7	-	-	15	11	-	1	N	N
Mo.	30	30	-	4	49	63	1	1	2	-
N. Dak.	-	-	-	-	3	-	-	-	70	37
S. Dak.	-	1	-	-	5	13	-	-	43	-
Nebr.	4	3	-	-	6	9	-	-	-	-
Kans.	14	20	-	-	24	45	-	-	-	-
S. ATLANTIC	895	893	19	46	821	1,108	20	26	1,363	1,286
Del.	3	4	1	-	-	-	-	-	4	13
Md.	175	139	2	8	116	103	4	7	-	-
D.C.	33	26	1	-	-	-	-	-	16	17
Va.	50	40	1	1	92	103	3	11	344	310
W. Va.	2	1	-	-	11	10	-	-	782	792
N.C.	76	79	4	9	110	125	3	4	N	N
S.C.	49	53	1	4	90	64	-	-	217	154
Ga.	139	238	-	12	11	243	8	2	-	-
Fla.	368	313	9	12	391	460	2	2	-	-
E.S. CENTRAL	183	161	7	8	278	309	4	2	2	-
Ky.	23	21	1	1	47	55	2	-	-	-
Tenn.	68	68	1	2	98	94	2	1	-	-
Ala.	75	60	3	4	100	113	-	1	-	-
Miss.	17	12	2	1	33	47	-	-	2	-
W.S. CENTRAL	541	393	27	35	301	908	7	8	1,167	2,085
Ark.	20	23	-	1	61	46	-	-	-	-
La.	107	53	-	-	-	-	-	-	41	9
Okla.	13	23	2	1	64	66	-	-	-	-
Tex.	401	294	25	33	176	796	7	8	1,126	2,076
MOUNTAIN	165	150	30	19	185	174	5	4	1,529	308
Mont.	-	-	-	-	4	-	-	-	-	-
Idaho	13	4	2	-	-	1	-	-	-	-
Wyo.	1	-	-	-	1	2	-	-	20	26
Colo.	10	21	-	3	42	40	1	3	1,145	-
N. Mex.	26	30	1	4	13	26	-	-	67	-
Ariz.	103	87	27	12	105	70	2	1	-	-
Utah	2	2	-	-	20	14	1	-	297	282
Nev.	10	6	-	-	-	21	1	-	-	-
PACIFIC	558	740	10	37	811	1,414	29	45	-	-
Wash.	43	34	-	-	115	106	2	2	-	-
Oreg.	9	20	-	-	34	52	1	2	-	-
Calif.	503	679	10	37	596	1,179	20	41	-	-
Alaska	-	1	-	-	14	28	-	-	-	-
Hawaii	3	6	-	-	52	49	6	-	-	-
Guam	-	1	-	-	-	30	-	-	-	84
P.R.	54	100	2	8	14	38	-	-	148	276
V.I.	4	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

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

TABLE III. Deaths in 122 U.S. cities,* week ending June 26, 2004 (25th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	438	297	98	28	10	5	43
Boston, Mass.	132	77	34	14	4	3	15
Bridgeport, Conn.	24	16	7	1	-	-	2
Cambridge, Mass.	17	15	1	1	-	-	1
Fall River, Mass.	18	13	4	1	-	-	4
Hartford, Conn.	46	29	12	2	2	1	8
Lowell, Mass.	21	17	1	3	-	-	2
Lynn, Mass.	7	6	1	-	-	-	-
New Bedford, Mass.	21	13	6	1	1	-	2
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	33	24	5	1	2	1	-
Somerville, Mass.	3	1	2	-	-	-	-
Springfield, Mass.	31	21	8	2	-	-	5
Waterbury, Conn.	33	26	6	1	-	-	-
Worcester, Mass.	52	39	11	1	1	-	4
MID. ATLANTIC	2,051	1,381	442	125	55	45	117
Albany, N.Y.	53	40	8	2	-	3	6
Allentown, Pa.	17	14	3	-	-	-	-
Buffalo, N.Y.	75	55	13	4	2	1	5
Camden, N.J.	31	18	6	3	-	4	3
Elizabeth, N.J.	14	12	2	-	-	-	-
Erie, Pa.	42	37	4	1	-	-	6
Jersey City, N.J.	34	21	9	1	-	3	-
New York City, N.Y.	993	692	211	53	24	11	46
Newark, N.J.	59	28	21	7	1	2	3
Paterson, N.J.	U	U	U	U	U	U	U
Philadelphia, Pa.	369	197	98	37	24	12	17
Pittsburgh, Pa.§	19	9	6	3	1	-	3
Reading, Pa.	16	14	2	-	-	-	-
Rochester, N.Y.	120	91	24	4	1	-	14
Schenectady, N.Y.	22	13	6	2	-	1	3
Scranton, Pa.	30	24	4	1	1	-	-
Syracuse, N.Y.	77	60	9	3	-	5	8
Trenton, N.J.	38	23	9	4	-	2	1
Utica, N.Y.	23	17	5	-	1	-	1
Yonkers, N.Y.	19	16	2	-	-	1	1
E.N. CENTRAL	1,949	1,323	425	124	41	36	108
Akron, Ohio	39	23	11	3	2	-	5
Canton, Ohio	41	30	8	2	-	1	-
Chicago, Ill.	308	178	84	29	10	7	21
Cincinnati, Ohio	85	61	16	3	3	2	4
Cleveland, Ohio	235	174	42	12	3	4	10
Columbus, Ohio	183	123	45	11	3	1	12
Dayton, Ohio	131	93	26	9	3	-	4
Detroit, Mich.	133	68	40	13	5	7	11
Evansville, Ind.	35	22	12	1	-	-	-
Fort Wayne, Ind.	79	57	16	5	-	1	4
Gary, Ind.	U	U	U	U	U	U	U
Grand Rapids, Mich.	62	43	14	3	-	2	6
Indianapolis, Ind.	184	127	35	11	7	4	9
Lansing, Mich.	37	27	7	2	1	-	-
Milwaukee, Wis.	110	79	19	7	1	4	7
Peoria, Ill.	48	37	5	2	1	3	3
Rockford, Ill.	52	39	10	1	2	-	4
South Bend, Ind.	57	43	11	3	-	-	1
Toledo, Ohio	93	64	22	7	-	-	1
Youngstown, Ohio	37	35	2	-	-	-	6
W.N. CENTRAL	653	413	141	57	17	25	44
Des Moines, Iowa	64	48	10	3	-	3	10
Duluth, Minn.	38	25	8	3	2	-	1
Kansas City, Kans.	26	14	7	4	1	-	2
Kansas City, Mo.	84	57	11	9	2	5	4
Lincoln, Nebr.	58	39	11	4	3	1	1
Minneapolis, Minn.	62	34	19	7	1	1	8
Omaha, Nebr.	102	65	23	4	2	8	7
St. Louis, Mo.	78	43	20	8	3	4	3
St. Paul, Minn.	58	45	9	3	1	-	5
Wichita, Kans.	83	43	23	12	2	3	3
S. ATLANTIC	1,240	766	292	107	42	33	67
Atlanta, Ga.	191	102	51	17	5	16	13
Baltimore, Md.	179	99	49	23	6	2	20
Charlotte, N.C.	82	55	17	7	3	-	5
Jacksonville, Fla.	162	110	37	10	4	1	5
Miami, Fla.	116	79	26	8	2	1	3
Norfolk, Va.	49	31	15	1	1	1	-
Richmond, Va.	64	35	18	5	6	-	7
Savannah, Ga.	64	44	9	2	3	6	6
St. Petersburg, Fla.	54	43	5	4	1	1	5
Tampa, Fla.	171	112	37	14	4	4	2
Washington, D.C.	98	51	26	13	7	1	1
Wilmington, Del.	10	5	2	3	-	-	-
E.S. CENTRAL	832	570	175	57	19	11	56
Birmingham, Ala.	152	106	28	15	2	1	11
Chattanooga, Tenn.	107	72	24	7	3	1	5
Knoxville, Tenn.	83	63	17	2	1	-	-
Lexington, Ky.	62	40	13	2	5	2	1
Memphis, Tenn.	166	115	33	12	3	3	14
Mobile, Ala.	81	49	23	7	1	1	11
Montgomery, Ala.	39	28	6	3	1	1	5
Nashville, Tenn.	142	97	31	9	3	2	9
W.S. CENTRAL	1,323	837	296	108	36	46	73
Austin, Tex.	U	U	U	U	U	U	U
Baton Rouge, La.	31	17	7	4	2	1	-
Corpus Christi, Tex.	59	37	9	9	3	1	3
Dallas, Tex.	183	98	48	22	6	9	15
El Paso, Tex.	80	51	17	6	1	5	5
Ft. Worth, Tex.	128	79	26	9	7	7	12
Houston, Tex.	392	236	104	33	6	13	18
Little Rock, Ark.	59	37	13	4	1	4	-
New Orleans, La.	42	34	8	-	-	-	-
San Antonio, Tex.	278	190	56	16	10	6	16
Shreveport, La.	71	58	8	5	-	-	4
Tulsa, Okla.	U	U	U	U	U	U	U
MOUNTAIN	854	548	193	66	29	18	51
Albuquerque, N.M.	127	81	22	14	4	6	8
Boise, Idaho	35	25	6	2	1	1	3
Colo. Springs, Colo.	66	41	16	4	5	-	3
Denver, Colo.	98	51	31	9	4	3	7
Las Vegas, Nev.	205	139	44	18	4	-	11
Ogden, Utah	26	15	7	2	1	1	2
Phoenix, Ariz.	57	28	20	5	3	1	3
Pueblo, Colo.	27	19	6	1	1	-	2
Salt Lake City, Utah	96	68	17	6	1	4	8
Tucson, Ariz.	117	81	24	5	5	2	4
PACIFIC	2,212	1,544	444	151	39	33	197
Berkeley, Calif.	19	15	2	1	-	1	2
Fresno, Calif.	164	120	27	12	4	1	-
Glendale, Calif.	53	47	4	2	-	-	6
Honolulu, Hawaii	56	43	7	4	-	2	6
Long Beach, Calif.	54	31	14	4	2	3	5
Los Angeles, Calif.	945	677	183	52	22	11	111
Pasadena, Calif.	22	16	6	-	-	-	3
Portland, Oreg.	137	96	31	7	1	2	3
Sacramento, Calif.	163	105	39	15	-	4	13
San Diego, Calif.	158	100	36	19	1	1	13
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	178	123	35	13	4	3	17
Santa Cruz, Calif.	23	14	7	1	1	-	3
Seattle, Wash.	87	62	15	7	3	-	7
Spokane, Wash.	61	42	13	4	-	2	3
Tacoma, Wash.	92	53	25	10	1	3	5
TOTAL	11,552¶	7,679	2,506	823	288	252	756

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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