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Positive Test Results for Acute Hepatitis A Virus Infection Among Persons With No Recent History of Acute Hepatitis — United States, 2002–2004

Hepatitis A is a nationally reportable condition, and the surveillance case definition* includes both clinical criteria and serologic confirmation (*1*). State health departments and CDC have investigated persons with positive serologic tests for acute hepatitis A virus (HAV) infection (i.e., IgM anti-HAV) whose illness was not consistent with the clinical criteria of the hepatitis A case definition. Test results indicating acute HAV infection among persons who do not have clinical or epidemiologic features consistent with hepatitis A are a concern for state and local health departments because of the need to assess whether contacts need postexposure immunoprophylaxis. This report summarizes results of three such investigations, which suggested that most of the positive tests did not represent recent acute HAV infections. To improve the predictive value of a positive IgM anti-HAV test, clinicians should limit laboratory testing for acute HAV infection to persons with clinical findings typical of hepatitis A or to persons who have been exposed to settings where HAV transmission is suspected.

Connecticut

The Connecticut Department of Public Health investigated 127 IgM anti-HAV positive test results reported during January 2002–April 2003 via telephone interviews conducted with patients and health-care providers; 108 persons had illness consistent with the clinical and laboratory criteria of the CDC case definition for acute hepatitis A. The median age among these 108 persons was 41 years (range: 6–86 years); 60 (56%) were males. Among 19 persons who had illness that did not meet the case definition for hepatitis A, median age was 48 years (range: 28–88 years); 10 (53%) were females. None of the 19 persons reported recent exposure to a person with hepatitis A, and all either were asymptomatic (nine patients) or had a clinical presentation that was not consistent with hepatitis A (10). Three had elevated ALT concentrations (range: 61–300 units per liter [U/L]. Serologic testing for these persons was performed at one of eight clinical laboratories by using one of three licensed IgM anti-HAV test kits. No single brand of testing kit or lot number was used for all the tests. Three of the 19 persons had a previously reported positive IgM anti-HAV test result 4–59 months before the most recently reported test and did not have illness that met the case definition at the time of the previous report. Two patients had no record of having the test ordered, and the reason for testing was unknown for the remaining 17 patients.

Alaska

A total of 27 cases of hepatitis A that were consistent with the CDC case definition were reported to the Alaska Division of Public Health during 2002–2004. Medical records of 10 additional persons who had positive tests for IgM anti-HAV reported but did not have illness consistent with the hepatitis

* An acute illness with discrete onset of symptoms (e.g., fatigue, abdominal pain, loss of appetite, intermittent nausea, and vomiting) and jaundice or elevated serum aminotransferase levels. Confirmation requires serologic testing that demonstrates the presence of IgM antibody to hepatitis A virus (anti-HAV), or by identifying recent exposure to a confirmed hepatitis A case.

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DEPARTMENT OF HEALTH AND HUMAN SERVICES
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A case definition were reviewed to identify the reason testing was conducted. The median age of these 10 patients was 60 years (range: 9–77 years). Seven persons had abnormal serum alanine aminotransferase (ALT) concentrations, indicating likely liver injury or disease. However, six did not have an illness with acute onset and were considered unlikely to have hepatitis A. The seventh person had an illness with acute onset with elevated ALT but had acetaminophen toxicity diagnosed. The remaining three patients were asymptomatic; one had no written indication for testing, and two were tested to assess the need for, or response to, hepatitis A vaccination. Among these 10 persons, testing was conducted in one of four clinical laboratories by using one of three licensed test formats from one of two manufacturers. One person had been reported previously (in 2000) as having a positive IgM anti-HAV test result.†

Sentinel Counties Study of Viral Hepatitis — United States, 2003

The Sentinel Counties Study is a population-based surveillance system conducted by CDC in six U.S. counties (Denver, Colorado; Jefferson, Alabama; Tacoma-Pierce, Washington; Pinellas, Florida; San Francisco, California; and Multnomah, Oregon); the overall age group and racial/ethnic composition in these counties is similar to that of the U.S. population (*2*). Reports of viral hepatitis are accepted from health-care providers and clinical laboratories. Health departments requested assistance in determining whether persons who tested IgM anti-HAV positive but did not have illness that met the clinical criteria for the case definition of hepatitis A had recent acute HAV infection. In response, CDC and the participating city and county health departments obtained epidemiologic and clinical data and either 1) the same diagnostic blood specimen previously collected for testing in the commercial laboratory or 2) a specimen drawn within 6 weeks of illness onset from all consenting persons reported in the surveillance areas during 2003 who had a positive IgM anti-HAV test result, regardless of whether they had illness consistent with the case definition for hepatitis A.

Of 140 persons reported to have a positive IgM anti-HAV test result during 2003, a total of 87 (62%) did not have illness that met the case definition for hepatitis A or any other type of viral hepatitis, and 53 (38%) had illness consistent with the case definition. The 87 persons were not clustered in one county or in a single period; no more than seven were reported from any single county during a single month. Clinical laboratories, rather than health-care providers, were the

† More detailed clinical and epidemiologic information for these cases is available at http://www.epi.hss.state.ak.us/bulletins/docs/b2005_03.pdf.

sole source of the report for 50 (57%) of these persons, compared with 23 (43%) of those whose illness met the case definition (p<0.05).

The 87 persons who did not have illness meeting the hepatitis A case definition were significantly older and more likely to be female (p<0.05), compared with persons whose illness was consistent with the case definition (Table). As expected, fewer persons who did not have illness meeting the case definition had discrete onset of symptoms or laboratory evidence of liver injury; however, because these criteria are included in the case definition for hepatitis A, tests of statistical significance for differences between the two groups were not performed. Of these 87 persons, 31 (36%) had sera available for repeat serologic testing at CDC. Of these 31 persons, two (6%) tested positive for IgM anti-HAV. One of 14 with ALT above the upper limit of normal (i.e., 30–50 U/L, depending on the clinical laboratory) was IgM anti-HAV positive on repeat testing.

Of 25 specimens available from persons with no symptoms of HAV infection for HAV nucleic acid detection and sequence analysis, one (4%) specimen from a man aged 77 years had detectable HAV RNA, compared with 34 (66%) of 51 specimens from persons with both clinical and laboratory evidence of hepatitis A. On repeat testing of the same specimen, the man tested IgM anti-HAV negative. No hepatitis A cases were reported among contacts of persons whose illness did not meet the case definition.

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Editorial Note: Health departments have previously noted positive IgM anti-HAV tests among persons who do not have illness meeting the case definition for hepatitis A (CDC, unpublished data, 2001–2005); however, this report is the first to describe the clinical and epidemiologic characteristics of these persons. Findings in this report indicate that persons who are unlikely to have acute viral hepatitis should not be tested for IgM anti-HAV and that the use of IgM anti-HAV as a screening tool or as part of testing panels used in the workup of nonacute liver function abnormalities should be discouraged. Health departments should continue to apply clinical criteria in the case definition when conducting hepatitis A surveillance and determining whether postexposure immunoprophylaxis is needed for contacts. Postexposure immunoprophylaxis for contacts is unlikely to be indicated for persons whose illness does not meet the case definition, unless recent exposure to a person with acute HAV infection has occurred.

A positive IgM anti-HAV test result in a person without typical symptoms of hepatitis A might indicate asymptomatic acute HAV infection, previous HAV infection with prolonged presence of IgM anti-HAV, or a false-positive test result. HAV infection can manifest a broad clinical spectrum, ranging from asymptomatic infection to typical hepatitis with fever and jaundice. Although an estimated 70% of children aged <6 years with HAV infection are asymptomatic, older children and adults usually have symptoms, and 70% are jaundiced (*3,4*). Studies conducted during hepatitis A outbreaks or among family members exposed to HAV indicate that HAV infection can cause asymptomatic infection with or without abnormal liver tests, primarily among young children (*5*).

In Connecticut and Alaska, four persons had previously been reported with IgM anti-HAV positive test results. A prolonged presence of IgM anti-HAV after acute hepatitis A has been reported previously. In one study, IgM anti-HAV was observed in eight (14%) of 59 persons with hepatitis A for ≥200 days after onset (*6*); another study revealed that two of 15 patients with hepatitis A had detectable IgM anti-HAV ≥30 months after onset (*7*).

HAV RNA can be detected for a mean of 79 days after the peak ALT and remains detectable in 40% of persons with acute

TABLE. Clinical and laboratory characteristics of persons testing positive for IgM anti-hepatitis A virus (HAV), by selected characteristics and hepatitis A case-definition status — Sentinel Counties Study of Viral Hepatitis, United States, 2003

Characteristic	Consistent with case definition (n = 53)	Not consistent with case definition (n = 87)
Mean age (yrs)	40 (median: 38; range: 6–82)	58* (median: 65; range: 2–91)
Sex (% male)	62	45*
Discrete onset of symptoms (No. and %)	53 (100)	10† (11)
Median alanine aminotransferase (ALT) (U/L)§	1,945 (range: 23–9,565)	59 (range: 9–262)
Median aspartate aminotransferase (AST) (U/L)§	1,075 (range: 25–5,017)	33 (range: 14–3,810)
Median bilirubin (mg/dL)§	6.0 (range: 0.3–19.9)	1.0 (range: 0.1–13.6)
ALT > AST§ (No. and %)	43 (81)	28 (44)

* p<0.05.
† All 10 persons were IgM anti-HAV negative on repeat testing; none had jaundice; four had alanine aminotransferase (ALT) greater than the upper limit of normal, and none had ALT >100 U/L.
§ Excludes 24 persons for whom aminotransaminase and bilirubin test results were not available.

hepatitis A for 70–127 days after the peak ALT (*8*). One person in the Sentinel Counties Study had detectable HAV RNA without recent symptoms of hepatitis. The finding that the same specimen was retested and determined to be negative for IgM anti-HAV suggests a false-positive HAV RNA (possibly from HAV RNA contamination of the clinical specimen), rather than acute asymptomatic HAV infection. HAV RNA tests are not yet licensed and will not provide results that are timely enough to help decisions about postexposure immunoprophylaxis.

Although a prolonged positive test after a recent acute infection is a possible explanation for some persons with positive IgM anti-HAV but no recent signs or symptoms of hepatitis, most persons with positive anti-HAV test results in Connecticut, Alaska, and the Sentinel Counties Study were older adults without typical risk for infection, and most who were retested were determined to be IgM anti-HAV negative. None were reported to have transmitted infection to others. These data suggest that IgM anti-HAV positive tests in older persons without typical symptoms of hepatitis are more likely 1) false-positive test results or 2) the result of HAV infection that occurred months to years previously, rather than more recent HAV infection, which requires consideration of postexposure immunoprophylaxis for contacts.

Testing of persons with no clinical symptoms of acute viral hepatitis, and among populations with a low prevalence of acute HAV infection, lowers the predictive value of the IgM anti-HAV test. Diagnostic tests for viral hepatitis, including licensed IgM anti-HAV tests, are highly sensitive and specific when used on specimens from persons with acute hepatitis. However, their use among persons without symptoms of hepatitis A can lead to IgM anti-HAV test results that are false positive for acute HAV infection or of no clinical importance. This might be occurring with use of laboratory test panels that include routine testing for IgM anti-HAV without requiring a specific order for the test (i.e., "reflex testing") among persons who are not being evaluated for possible acute hepatitis (e.g., persons with liver function test abnormalities or persons being screened for hepatitis C).

The findings in this report are subject to at least two limitations. First, serum specimens from patients in Connecticut or Alaska who did not have illness meeting the case definition were not available for additional testing, and specimens were available from only 31 of 87 patients identified in the Sentinel Counties Study. Second, the reason for IgM anti-HAV testing for most patients whose illness did not meet the case definition was not available.

Providing immune globulin is not recommended for contacts of IgM anti-HAV positive persons when the date that these persons might have been infectious is unknown (because no defined symptom onset is known), even for those patients who repeatedly test IgM anti-HAV positive. Clinicians and public health officials who receive reports of persons who are IgM anti-HAV positive in the absence of symptoms of viral hepatitis or history of recent contact with a hepatitis A patient should consider seeking additional information when making decisions about the need for postexposure immunoprophylaxis among contacts. Acute HAV infection is unlikely in persons who have received 1 or more doses of hepatitis A vaccine $\geq$1 month before symptom onset (*3*). Testing the patient for total anti-HAV and retesting for IgM anti-HAV might be helpful. Persons with acute HAV infection will test total anti-HAV positive; if the total anti-HAV test is negative, acute HAV infection is unlikely. Retesting the same or another serum specimen, preferably by using a different test format, might indicate that the person is IgM anti-HAV negative.

Published guidelines for the workup of abnormal liver enzyme tests among asymptomatic patients do not include IgM anti-HAV testing (*9*). Health-care providers should limit use of IgM anti-HAV testing to persons with evidence of clinical hepatitis or to those who have had recent exposure to an HAV-infected person. Persons who are IgM anti-HAV positive but who do not have illness consistent with the case definition for hepatitis A should not be reported to CDC.

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Assessment of Epidemiologic Capacity in State and Territorial Health Departments — United States, 2004

In November 2001, the Council of State and Territorial Epidemiologists (CSTE) conducted a survey of state and territorial health departments to assess their core epidemiologic capacity (*1,2*). The survey was completed just before distribution of approximately $1 billion in terrorism preparedness and emergency response funds in fiscal year 2002, intended to improve the U.S. public health infrastructure (*3*). Results of the 2001 survey, published in 2003, indicated inadequate capacity in six of eight key epidemiology program areas (all except infectious disease and chronic disease) to fully perform the essential public health services most dependent on epidemiology (*1,4*). In 2004, CSTE conducted a follow-up survey that assessed epidemiologic capacity in the United States and its territories in the same eight program areas, estimated the number of additional epidemiologists needed for full performance, and identified education and training needs (*5*). This report summarizes the results of that 2004 follow-up survey, which indicated a 26.9% increase* from 2001 in the overall number of epidemiologists working in state and territorial health departments, increased capacity in two program areas (i.e., terrorism preparedness and emergency response; maternal and child health) and decreased capacity in six other program areas (i.e., infectious disease, chronic disease, environmental health, injury, occupational health, and oral health) (*2*). Results also revealed that 28.5% of epidemiologists lacked any formal training or academic coursework in epidemiology. Creation of a strong public health infrastructure fully capable of performing essential services will require additional trained epidemiologists in state and territorial health departments.

The CSTE survey was pilot tested in five states (Florida, Michigan, New York, North Carolina, and Tennessee) during April–May 2004 and made available online to all state and territorial health departments during May–September 2004. State epidemiologists or their designees provided information for the survey. Participants included representatives of all 50 states, three of eight territories (37.5%), and the District of Columbia, for an overall response rate of 91.5%. The definition of epidemiologist was unchanged from the 2001 survey, although further clarification was provided regarding who should be counted as an epidemiologist in a state or territorial health department in the 2004 assessment†. If epidemiologists divided their time between two program areas, increments of 0.5 full-time equivalent were allocated to each program area.

In 2004, a total of 2,580 epidemiologists were reported working in state and territorial health departments; survey participants estimated that a total of 3,790 epidemiologists (an increase of 47%) were needed to fully address the essential services of public health most dependent on epidemiology (Table). Participants reported that more epidemiologists were needed in all eight key program areas. The number of epidemiologists in each program area, the estimated number of additional epidemiologists needed to fully serve each program area, and the percentage increase needed were as follows: infectious disease (926 epidemiologists, 325 additional needed, 35.1% increase); chronic disease (390, 183, 46.9%); environmental health (324, 164, 50.6%), terrorism and emergency preparedness (424, 192, 45.3%), maternal and child health (239, 155, 64.9%), injury (74, 131, 177.0%), occupational health (51, 102, 200.0%), and oral health (39, 71, 182.1%).

Participants were asked to assess epidemiologic and surveillance capacity in eight key program areas by using a six-point scale, which was converted to the four-point scale§ used in the 2001 assessment to enable comparison. Participants reported increased capacity from 2001 to 2004 in two program areas (i.e., terrorism preparedness and emergency response and

* The 2004 CSTE epidemiology capacity assessment determined that 2,580 epidemiologists were working in state and territorial health departments compared with 1,366 in 2001, an increase of 89%. However, the number and percentage of states and territories responding to the 2004 survey were substantially higher than in 2001 (54 [91.5%] versus 44 [78.6%]) (*1*). Comparing only the District of Columbia and 38 states that participated in both surveys, the increase in epidemiologists was 343 (26.9%).

† The definition of epidemiologist was from *A Dictionary of Epidemiology* (*6*). For the 2004 CSTE survey, epidemiologists in state and territorial health departments were defined as any persons who performed functions consistent with this definition, regardless of job title.

§ The six-point scale was as follows: Full = 100%, almost full = 75%–99%, substantial = 50%–74%, partial = 25%–49%, minimal = <25%, and none = 0. The four-point scale was as follows: Full/almost full = 75%–100%, substantial = 50%–74%, partial = 25%–49%, and minimal or no capacity = <25%.

TABLE. Number* and percentage of epidemiologists in state and territorial health departments, by academic degree† and estimated departmental need, by academic degree — United States, 2004

			Estimated need	
Academic degree	**No.**	**(%)**	**No.**	**(%)**
Doctoral degree	660	(25.6)	1,159	(30.6)
Master's degree	1,078	(41.8)	1,682	(44.4)
Bachelor's degree	599	(23.2)	784	(20.7)
Associate degree or high school diploma	130	(5.0)	167	(4.4)
Total	**2,580***		**3,790**	

* Includes 113 epidemiologists for whom academic degree was not ascertained.
† Academic degree might be in areas other than epidemiology or public health.

maternal and child health) and decreased capacity in six other program areas (i.e., infectious disease, chronic disease, environmental health, injury, occupational health, and oral health) (Figure). The majority of state and territorial health departments reported full, almost full, or substantial capacity in only two program areas, infectious disease and terrorism preparedness and emergency response.

In addition, respondents were asked to self-assess their abilities to provide the essential public health services most dependent on epidemiology (*1,4*). Among the 50 states, 31 (62.0%) reported having substantial-to-full capacity to monitor health status and solve community health problems, and 29 (58.0%) reported substantial-to-full capacity in diagnosing and investigating health problems and health hazards in the community. In contrast, 11 states (22.0%) reported having substantial-to-full capacity in evaluating effectiveness, accessibility, and quality of personal and population-based health services, and six states (12.0%) reported substantial-to-full capacity in researching for new insights and innovative solutions to health problems.

The largest percentage of epidemiologists working in state and territorial health departments had master's degrees (41.8%), followed by doctoral degrees (25.6%), bachelor's degrees (23.2%), and associate degrees or high school diplomas (5.0%) (Table). Information on epidemiology training was obtained for 1,897 (73.5%) of the 2,580 epidemiologists. Of these 1,897, a total of 986 (51.9%) had degrees in epidemiology, and 369 (19.4%) had completed other formal training or academic coursework in epidemiology; 541 (28.5%) had no formal training or academic coursework in epidemiology.

During the 12 months preceding the assessment, 48 of 51 (94.1%) respondents reported providing or funding training or education to enhance the competence of epidemiologists. Adequate training in epidemiology varied among state and territorial health departments. For example, 17 of 49 participants (34.7%) reported providing adequate training in evaluation of public health interventions, and 38 of 48 (79.2%) provided adequate training in outbreak investigation methodology. Needs for additional training were most often cited in the following areas: evaluation of public health interventions (42 of 45 [93.3%], designing epidemiologic studies (39 of 47 [83.0%]), leadership and management training (37 of 46 [80.4%]), analyzing and characterizing epidemiologic data with statistical software (36 of 45 [80.0%]), designing and evaluating surveillance systems (37 of 47 [78.7%]), and designing data collection tools to address a health problem (37 of 47 [78.7%]).

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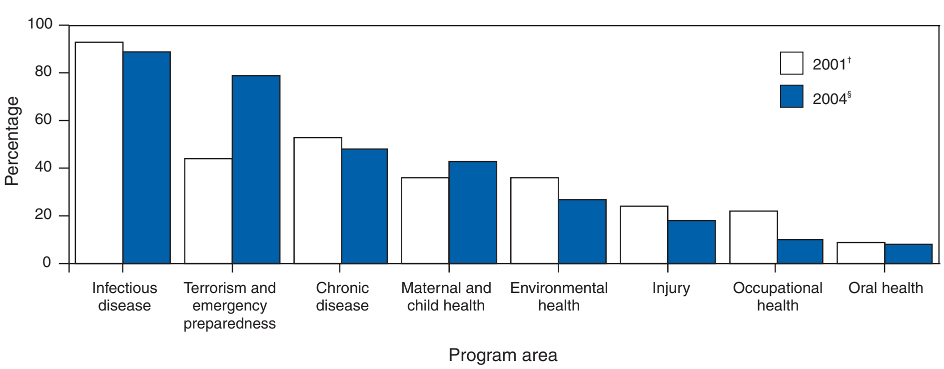
Editorial Note: The influx of approximately $1 billion in terrorism preparedness and emergency response funds substantially strengthened the epidemiologic capabilities of the public health structure in the United States. However, despite this increased funding, state and territorial health departments report that a 47% increase in the number of epidemiologists is needed to fully perform the nation's essential public health services most dependent on epidemiology. In 2003, CSTE recommended that 80% of the state and territorial epidemiology workforce should have formal training in epidemiology. However, in 2004, 48.0% of epidemiologists in state and territorial health departments had no academic degree in epidemiology, and 28.5% had no formal training or academic coursework in epidemiology. Further attention to recruitment and training are needed to increase the number of trained epidemiologists and improve the public health infrastructure in the United States.

The findings in this report are subject to at least two limitations. First, 38 states participated in the 2001 survey, compared with 50 in the 2004 survey, affecting comparability of results. Second, methods used by respondents to estimate the number of epidemiologists

FIGURE. Percentage of state and territorial health departments reporting full/almost full or substantial capacity* in epidemiology and surveillance programs, by program area — United States, 2001 and 2004



* Full/almost full = 75%–100%; substantial = 50%–74%.
† 41 states and territories reported.
§ 54 states and territories reported.

needed for their departments to perform essential public health services and to estimate epidemiologic capacity likely varied.

In 1988, and again in 2002, the Institute of Medicine recommended that every public health department regularly and systematically collect, assemble, analyze, and make available information regarding the health of the community, including statistics on health status, community health needs, and epidemiologic and other studies of health problems (*7,8*). The threat of terrorism renewed calls for strengthening the public health infrastructure. The U.S. Department of Health and Human Services has emphasized the need for a closely linked, nationwide public health network of local, regional, and state health resources (*4*). Epidemiologists in state and territorial health departments are essential to the monitoring of chronic conditions and diseases and the rapid detection and reporting of infectious disease outbreaks, whether or not related to terrorism. New and better means for estimating the epidemiologic capacity needs and measuring the performance of state and territorial health departments should continue to be created. CDC and CSTE are in the process of defining core competencies for epidemiologists, which should facilitate staffing and development of training. In the meantime, the findings from the 2004 epidemiologic capacity survey, with the limitations noted, can serve as a useful baseline for future epidemiologic assessments.

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Brief Report

Terrorism and Emergency Preparedness in State and Territorial Public Health Departments — United States, 2004

After the events of September 11, 2001, federal funding for state public health preparedness programs increased from $67 million in fiscal year (FY) 2001 to approximately $1 billion in FY 2002. These funds were intended to support preparedness for and response to terrorism, infectious disease outbreaks, and other public health threats and emergencies (*1*). The Council of State and Territorial Epidemiologists (CSTE) assessed the impact of funding on epidemiologic capacity, including terrorism preparedness and response, in state health departments in November 2001 and again in May 2004, after distribution of an additional $1 billion in FY 2003. This report describes the results of those assessments, which indicated that increased funding for terrorism preparedness and emergency response has rapidly increased the number of epidemiologists and increased capacity for preparedness at the state level. However, despite the increase in epidemiologists, state public health officials estimate that 192 additional epidemiologists, an increase of 45.3%, are needed nationwide to fully staff terrorism preparedness programs.

To assess preparedness, CSTE distributed a link to an online survey via e-mail to state and territorial health departments in 50 states, eight territories, and the District of Columbia (DC). The survey was made available online during May–September 2004. The overall response rate was 91.5%. The definition of epidemiologist was unchanged from the 2001 survey, although further clarification was provided regarding who should be counted as an epidemiologist in a state or territorial health department in the 2004 assessment*. If epidemiologists divided their time between two program areas, increments of 0.5 full-time equivalent were allocated to each program area.

Survey results indicated an improvement from 2001 in states' overall terrorism epidemiologic and surveillance capacity. All 54 (100%) respondents rated their ability to provide epidemiologic and surveillance capacity in terrorism and emergency preparedness by using a six-point scale, which was converted to the four-point scale† used in the 2001 assessment to enable comparison. A total of 21 (38%) states and territories

* The definition of epidemiologist was from *A Dictionary of Epidemiology* (*2*). For the 2004 CSTE survey, epidemiologists in state and territorial health departments were defined as any persons who performed functions consistent with this definition, regardless of job title.

† The six-point scale was as follows: Full = 100%, almost full = 75%–99%, substantial = 50%–74%, partial = 25%–49%, minimal = <25%, and none = 0. The four-point scale was as follows: Full/almost full = 75%–100%, substantial = 50%–74%, partial = 25%–49%, and minimal or no capacity = <25%.

reported having full/almost full capacity, 22 (41%) reported substantial, eight (15%) reported partial, and three (6%) reported minimal or no capacity. From 2001 to 2004, survey results indicated a 126% increase (19 versus 43) in the number of states reporting substantial to full/almost full capacity.

The overall proportion of epidemiologists assigned to terrorism preparedness programs increased from 9% (123 of 1,366) in 2001 to 16.4% (424 of 2,580) in 2004, which was the largest increase by any epidemiology program area (*3,4*). Adjusting the data to reflect only DC and the 38 states that provided information for both surveys, the number of epidemiologists working in terrorism preparedness increased 103%, from 115 epidemiologists in 2001 to 234 in 2004.

Of the 424 epidemiologists working in terrorism preparedness programs, 39% (167) had a master's degree, 29% (124) had doctoral degrees, 26% (108) had bachelor's degrees, and 6% (25) had associate degrees or high school diplomas. Information on formal training in epidemiology was obtained for 67% (283 of 424) of the epidemiologists working in terrorism preparedness: 64% (180) had a degree in epidemiology, 16% (46) had completed other formal training or had academic coursework in epidemiology, and 20% (58) had no formal training or academic course work in epidemiology. Terrorism preparedness programs had one of the highest concentrations of personnel with degrees in epidemiology, compared with programs in occupational health, 64% (29 of 45); environmental health, 61% (117 of 193); chronic diseases, 58% (182 of 313); maternal and child health, 53% (121 of 227); oral health, 48% (10 of 21); injury, 44% (26 of 59); and infectious disease, 43% (314 of 732).

As of September 2004, federally appropriated terrorism preparedness funds paid the salaries of 460 epidemiologists working in several program areas: 53% (243) worked in terrorism and emergency preparedness, 33% (153) in infectious diseases, 5% (24) in environmental health, and 9% (39) in chronic disease, injury, maternal and child health, occupational health, and other relevant program areas. Among the 390 epidemiologists working in terrorism and emergency preparedness, 62% were paid with federal terrorism preparedness funds (Table), whereas 38% were paid with state or other funds. Although an overall increase in the number of infectious disease epidemiologists did not occur from 2001 to 2004, nearly 20% were paid with federal terrorism preparedness funds.

The increase in state public health capacity reflects the substantial investment in efforts to support state terrorism preparedness programs and the corresponding public health infrastructure. Despite progress in this effort, state public health officials estimate that 192 additional epidemiologists, an increase of 45.3%, are needed nationwide in terrorism preparedness programs and that essential services provided by these epidemiologists need continued improvement to reach full capacity (*4*). The findings in this report suggest that the efforts of states to meet federal terrorism preparedness program requirements have redirected state resources from other program areas. CSTE recommends that dual use of terrorism and emergency preparedness epidemiology resources should be substantially expanded to realign functional roles and build overall capacity of state health departments to prepare for and respond to terrorism, infectious disease outbreaks, and other public health threats and emergencies.

TABLE. Number* of epidemiologists working in state and territorial health departments and number and percentage paid with federal funding for state public health preparedness programs, by program area — United States, 2004

Program area	No. of states/territories that responded	No. of epidemiologists working	Epidemiologists paid with federal funding for state public health preparedness programs No.	(%)
Terrorism and emergency preparedness	45	390	243	(62)
Chronic disease	40	285	6	(2)
Environmental health	42	218	24	(11)
Infectious disease	44	815	153	(19)
Injury	39	57	3	(5)
Maternal and child health	39	204	6	(3)
Occupational health	35	46	3	(7)
Oral health	34	23	0	(0)
Other	33	87	21	(24)

* Includes only state or territorial health departments that provided responses to both questions regarding the number of epidemiologists working in a state and territorial health department and the number of epidemiologists whose salaries were paid with federal funding for state public health preparedness programs.

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Improvement in Local Public Health Preparedness and Response Capacity — Kansas, 2002–2003

After the terrorist attacks of September 11, 2001, increased funding was provided to federal, state, and local health departments to improve their capacities for terrorism preparedness and emergency response. To evaluate the effect of this funding and to identify priority program areas in Kansas, the Kansas Association of Local Health Departments (KALHD) contracted with the Kansas Health Institute (KHI) to perform an independent assessment of local health department (LHD) preparedness capacity using a CDC assessment tool. This report summarizes the results of two surveys of LHDs and changes in preparedness capacity from 2002 to 2003. The findings indicated a substantial increase in local preparedness capacity, although increases among counties varied widely. Repeated assessments of preparedness using standardized tools can provide useful information to help guide federal, state, and local public health policies and investments.

In 2002, CDC developed the Public Health Preparedness and Response Capacity Inventory (*1*) to provide rapid assessment of a local public health agency's capacity to respond to public health threats and emergencies. The assessment tool is organized into six sections, which correspond to six focus areas (FAs) (i.e., planning and assessment [FA A], surveillance and epidemiology [FA B], laboratory capacity [FA C], communication and information technology [FA E], risk communication and health information dissemination [FA F], and education and training [FA G]), as defined in the CDC cooperative agreement that funds many state terrorism preparedness activities. The six FAs include a total of 15 critical capacities targeted for achievement. The assessment tool was field-tested, revised, and made available for national distribution in August 2002. Its validity has been described elsewhere (*2*).

The assessment tool includes 79 questions and approximately 700 subquestions. Thirty additional questions were added to target Kansas-specific preparedness capacities not fully addressed by the assessment tool (e.g., adoption of Kansas-specific disease intervention protocols or computer security standard procedures). The printed questionnaire was converted to electronic form to support data submission from LHDs via a secure, Internet-based, communication system. Answers were submitted electronically during the second half of 2002 and the second half of 2003, leaving approximately 1 year between the two assessments. LHDs representing 103 of 105 (98%) Kansas counties (i.e., one LHD per county) responded to both surveys.

Most questions in the assessment tool have a limited number of multiple-choice answers and are qualitative in nature; for example, respondents were asked to specify the extent to which a certain activity had been completed. To calculate measures of LHD capacity, the KHI project team, in consultation with representatives from LHDs, developed a method for aggregating responses from multiple questions into summary scores. Each question was assigned to one or more of the 15 critical capacities. Representatives from KALHD and KHI developed a method for converting responses to each survey question to dichotomous, "achieved" or "not achieved" classifications. These criteria were included in a computerized algorithm used to analyze all the answers from all LHDs. Through the computerized analysis, a preparedness index was calculated for each LHD for every critical capacity. FA preparedness indexes were computed by calculating the unweighted average of the critical capacities indexes included in that FA. Finally, an overall, county-level preparedness capacity index was computed as the average of the indexes for all the FAs for each LHD.

To summarize local preparedness capacity in Kansas, state averages of the critical capacities and FAs indexes were computed as the unweighted averages of the corresponding county-level indexes. State overall preparedness indexes were calculated as the average of all county overall preparedness indexes.

From 2002 to 2003, a total of 89 (86.4%) of the 103 participating counties improved their county preparedness capacity indexes (median change = 27%). The state average for the overall local preparedness capacity index increased by 27.7%, from 33.9% to 43.3%. Improvement was observed for each FA index, with the largest increase (48.3%) in FA G (education and training) and the smallest (10.4%) in FA C (laboratory capacity) (Table).

TABLE. State preparedness capacity, by focus area and year — Kansas, 2002–2003

Focus area	2002 baseline (%)	2003 follow-up (%)	Proportional increase (%)
A — Planning and assessment	49.3	57.1	15.8
B — Surveillance and epidemiology	35.6	47.9	34.3
C — Laboratory capacity	18.7	20.6	10.4
E — Communication and information technology	42.0	52.8	25.7
F — Risk communication and health information dissemination	23.6	28.9	22.6
G — Education and training	28.7	42.6	48.3
Kansas-specific interests*	39.2	52.9	34.8
State overall preparedness index	**33.9**	**43.3**	**27.7**

* Questions added to the CDC assessment tool to address interests specific to Kansas (e.g., adoption of Kansas-specific disease intervention protocols or computer security standard procedures).

Substantial differences were observed in county preparedness capacity indexes; in 2003, indexes ranged from 17.3% to 75.5% (median = 42%). Rural areas lagged in preparedness improvement. In 2003, the 33 counties in the lowest population density group achieved an average preparedness index capacity of 38%, in contrast with the average index of 56% achieved by the six urban counties in the highest population density group. From 2002 to 2003, this gap appeared to widen; the ratio of the mean preparedness index for urban and rural counties increased from 1.3 to 1.5.

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Editorial Note: Approximately $2 billion was distributed to state and local governments during 2002–2003 to improve public health capacity for terrorism preparedness and emergency response. The findings in this report suggest that this investment has resulted in measurable improvement of preparedness capacity in the majority of counties in Kansas. These achievements, however, should be balanced with the finding that state overall preparedness is only 43.3%, and disparities persist among different areas of the state. Rural areas are experiencing difficulty improving their preparedness levels, and many FA and critical capacity scores remain low.

The findings in this report are subject to at least four limitations. First, the CDC assessment tool was designed to measure preparedness capacity in health departments nationwide serving various types and sizes of jurisdictions; in certain instances, inventory questions might not have been directly applicable to the responsibilities, needs, and capacities of LHDs in Kansas, especially for parts of FA C (laboratory capacity) and E (communication and information technology). Second, all information analyzed was self-reported, and no answer validation or verification occurred. However, the assessment tool has been validated elsewhere (*2*), and nearly all the observed changes point consistently to an increase in the preparedness capacity index scores, with few internal inconsistencies in the survey results. Third, no accepted standards exist for what constitutes adequate preparedness for LHDs. The preparedness capacity indexes and thresholds used in this study were created by local officials and are among the first such measures to be used to assess terrorism preparedness at the local level. Although the use of these indexes allows easy comparisons between the 2002 and the 2003 surveys and among groups of respondents, the criteria used to compute the indexes are arbitrary. The adoption of different criteria, or the movement up or down of the achievement thresholds for individual questions, could produce different results. Finally, all indexes were computed by using unweighted means, and because the number of elements that compose each index varies, single responses might affect summary indexes disproportionately.

While determining the optimal level of preparedness capacity for LHDs in Kansas was not an objective of this study, the findings suggest that when attention and funds are allocated, preparedness capacity improves in specific and measurable ways. Investments in such a critical field as public health preparedness should be accompanied by consistent evaluation methods. For this purpose, CDC is shifting attention from assessment of public health capacity to evaluation of actual public health performance that can be expected as a result of the increased capacity. These findings also demonstrate that when the same measurable indicators are used repeatedly, important information can be obtained regarding successes and areas in need of further improvement.

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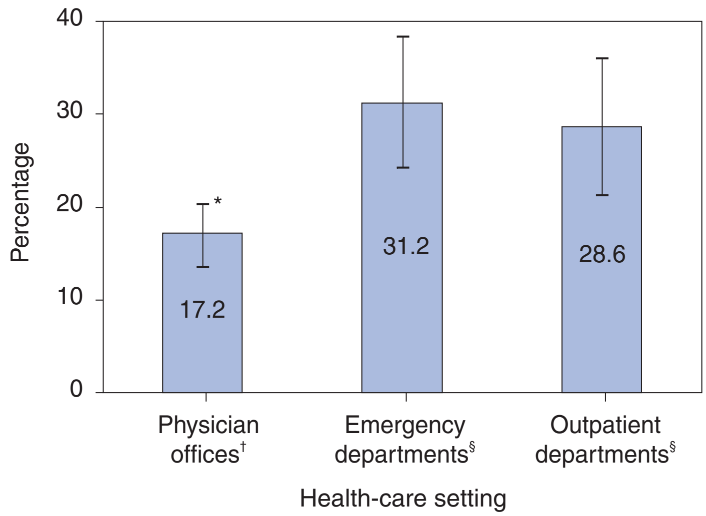
QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Health-Care Providers Using Electronic Medical Records, by Health-Care Setting — United States, 2001–2003



* 95% confidence interval.
† During 2003.
§ During 2001–2002.

Electronic medical records were used in nearly one third of emergency and outpatient hospital settings and less frequently (17.2%) in physician offices. Approximately 73% of physicians used information technology for billing patients, but only 8% used computerized systems for ordering prescriptions electronically. Additional information is available at http://www.cdc.gov/nchs/nhcs.htm.

SOURCE: Burt CW, Hing E. Use of computerized clinical support systems in medical settings: United States, 2001–03. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2005. Advance Data no. 353. Available at http://www.cdc.gov/nchs/data/ad/ad353.pdf.

Notice to Readers

Publication of *Guidance on Public Reporting of Healthcare-Associated Infections*

In U.S. hospitals alone, health-care–associated infections (HAIs) account for an estimated 2 million infections, 88,000 deaths, and $4.5 billion dollars in excess health-care costs annually (*1*). Increasingly, consumers are requesting public release of information such as HAI rates to enable them to make more informed health-care choices. Several states have initiated legislative efforts that will mandate hospitals and other health-care organizations to publicly report HAI rates.

The Healthcare Infection Control Practices Advisory Committee (HICPAC) has developed a guidance document on public reporting of HAIs to assist policymakers, program planners, consumer advocacy organizations, and others who will be tasked with designing and implementing such reporting systems. The document, *Guidance on Public Reporting of Healthcare-Associated Infections: Recommendations of the Healthcare Infection Control Practices Advisory Committee*, provides a framework for an HAI reporting system and recommendations for process and outcome measures to be included in the system; the document does not provide model legislation (*2*). These recommendations have been endorsed by the Association for Professionals in Infection Control and Epidemiology, the Council of State and Territorial Epidemiologists, and the Society for Healthcare Epidemiology of America.

References

1. Weinstein RA. Nosocomial infections update. Emerg Infect Dis 1998;4:416–20.
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Notice to Readers

Hepatitis Awareness Month — May 2005

May is Hepatitis Awareness Month. In 2003, in the United States, an estimated 61,000 new infections occurred with hepatitis A virus, 73,000 with hepatitis B virus, and 30,000 with hepatitis C virus (*1*). Effective interventions, such as hepatitis A and hepatitis B immunization (*2,3*) and counseling and testing for hepatitis C (*4*), can help prevent and control viral hepatitis and protect personal and community health. Additional information regarding Hepatitis Awareness Month, activities associated with this month, prevention and control of viral hepatitis, and free educational materials is available at http://www.cdc.gov/hepatitis.

References

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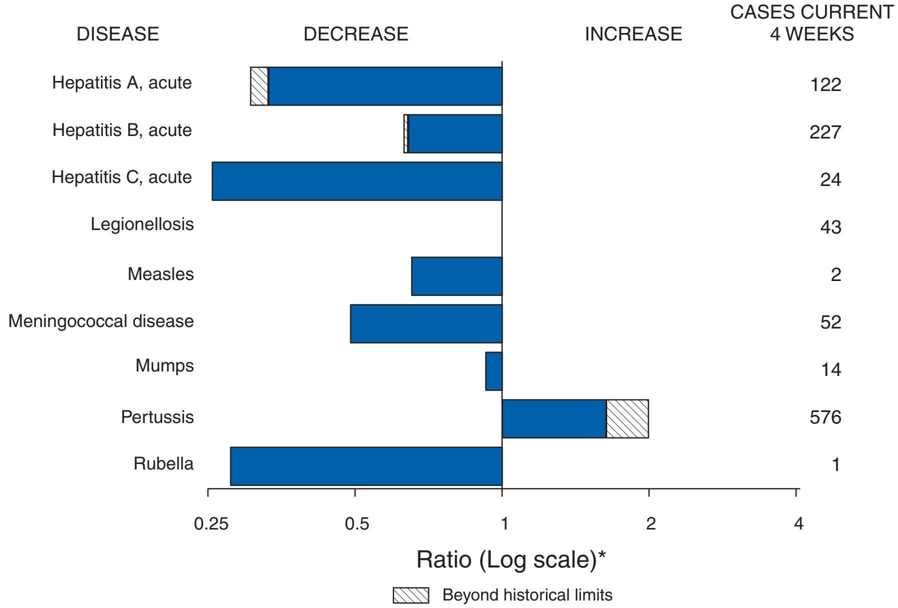
FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals May 7, 2005, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending May 7, 2005 (18th Week)*

Disease	Cum. 2005	Cum. 2004	Disease	Cum. 2005	Cum. 2004
Anthrax	—	—	Hemolytic uremic syndrome, postdiarrheal[†]	39	21
Botulism:			HIV infection, pediatric[†¶]	104	117
foodborne	5	3	Influenza-associated pediatric mortality[†**]	32	—
infant	16	25	Measles	10[††]	13[§§]
other (wound & unspecified)	7	3	Mumps	85	68
Brucellosis	23	33	Plague	—	—
Chancroid	9	13	Poliomyelitis, paralytic	—	—
Cholera	1	2	Psittacosis[†]	7	2
Cyclosporiasis[†]	89	104	Q fever[†]	21	17
Diphtheria	—	—	Rabies, human	1	—
Domestic arboviral diseases			Rubella	3	7
(neuroinvasive & non-neuroinvasive):	—	—	Rubella, congenital syndrome	1	—
California serogroup[†§]	—	—	SARS[†**]	—	—
eastern equine[†§]	—	—	Smallpox[†]	—	—
Powassan[†§]	—	—	*Staphylococcus aureus*:		
St. Louis[†§]	—	—	Vancomycin-intermediate (VISA)[†]	—	—
western equine[†§]	—	—	Vancomycin-resistant (VRSA)[†]	—	—
Ehrlichiosis:	—	—	Streptococcal toxic-shock syndrome[†]	42	56
human granulocytic (HGE)[†]	27	29	Tetanus	3	3
human monocytic (HME)[†]	25	18	Toxic-shock syndrome	34	33
human, other and unspecified [†]	6	2	Trichinellosis[¶¶]	5	—
Hansen disease[†]	13	33	Tularemia[†]	7	10
Hantavirus pulmonary syndrome[†]	4	3	Yellow fever	—	—

—: No reported cases.
* Incidence data for reporting years 2004 and 2005 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, National Center for HIV, STD, and TB Prevention. Last update March 27, 2005.
** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases.
†† Of 10 cases reported, five were indigenous and five were imported from another country.
§§ Of 13 cases reported, five were indigenous and eight were imported from another country.
¶¶ Formerly Trichinosis.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

Reporting area	AIDS		Chlamydia[†]		Coccidioidomycosis		Cryptosporidiosis	
	Cum. 2005[§]	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	10,042	12,150	288,880	314,750	1,395	1,723	578	850
NEW ENGLAND	406	370	8,731	10,347	—	—	33	49
Maine	3	5	775	673	N	N	3	8
N.H.	2	19	639	595	—	—	5	12
Vt.[¶]	1	10	330	406	—	—	9	6
Mass.	211	119	5,045	4,649	—	—	11	16
R.I.	34	44	1,096	1,212	—	—	1	1
Conn.	155	173	846	2,812	N	N	4	6
MID. ATLANTIC	1,995	2,409	34,686	39,302	—	—	82	138
Upstate N.Y.	188	186	7,585	7,442	N	N	20	27
N.Y. City	1,137	1,134	10,644	12,493	—	—	20	43
N.J.	357	524	3,823	6,413	N	N	7	10
Pa.	313	565	12,634	12,954	N	N	35	58
E.N. CENTRAL	915	1,275	46,400	56,917	2	5	109	221
Ohio	136	231	13,376	14,675	N	N	42	49
Ind.	119	164	6,594	6,276	N	N	11	30
Ill.	482	605	12,378	16,287	—	—	—	34
Mich.	135	207	7,868	13,422	2	5	18	47
Wis.	43	68	6,184	6,257	N	N	38	61
W.N. CENTRAL	227	302	17,862	19,385	3	4	82	92
Minn.	69	67	2,821	3,910	3	N	24	39
Iowa	18	19	2,357	2,373	N	N	16	13
Mo.	99	125	7,756	7,214	—	3	28	17
N. Dak.	5	12	254	689	N	N	—	—
S. Dak.	5	5	931	867	—	—	5	10
Nebr.[¶]	2	20	1,459	1,826	—	1	1	3
Kans.	29	54	2,284	2,506	N	N	8	10
S. ATLANTIC	3,395	4,148	55,454	59,547	—	—	137	161
Del.	51	55	1,173	1,025	N	N	—	—
Md.	406	475	6,127	6,676	—	—	5	9
D.C.	176	149	1,283	1,281	—	—	1	4
Va.[¶]	177	208	6,979	7,899	—	—	10	21
W. Va.	19	29	807	997	N	N	4	2
N.C.	298	238	11,956	9,037	N	N	19	31
S.C.[¶]	133	268	6,964	6,309	—	—	7	7
Ga.	503	691	5,526	11,952	—	—	39	44
Fla.	1,632	2,035	14,639	14,371	N	N	52	43
E.S. CENTRAL	581	555	19,411	18,286	—	3	10	37
Ky.	70	68	4,105	1,908	N	N	3	9
Tenn.[¶]	232	208	7,415	7,840	N	N	2	12
Ala.[¶]	168	167	2,181	4,291	—	—	4	9
Miss.	111	112	5,710	4,247	—	3	1	7
W.S. CENTRAL	1,021	1,705	38,213	39,576	—	2	17	27
Ark.	69	88	3,088	2,784	—	1	1	7
La.	170	337	6,301	8,589	—	1	2	—
Okla.	72	68	3,712	3,684	N	N	7	8
Tex.[¶]	710	1,212	25,112	24,519	N	N	7	12
MOUNTAIN	398	486	17,966	17,650	920	1,116	33	34
Mont.	3	—	722	681	N	N	4	3
Idaho[¶]	3	3	731	1,082	N	N	1	4
Wyo.	—	5	387	377	—	—	2	2
Colo.	83	97	4,360	4,631	N	N	11	17
N. Mex.	42	51	748	2,906	2	9	2	1
Ariz.	166	198	7,290	5,223	887	1,075	4	5
Utah	20	29	1,490	1,135	2	12	4	1
Nev.[¶]	81	103	2,238	1,615	29	20	5	1
PACIFIC	1,104	900	50,157	53,740	470	593	75	91
Wash.	106	166	6,663	6,061	N	N	5	—
Oreg.[¶]	66	90	3,069	2,747	—	—	13	9
Calif.	897	593	37,442	41,488	470	593	57	81
Alaska	7	10	1,329	1,394	—	—	—	—
Hawaii	28	41	1,654	2,050	—	—	—	1
Guam	1	—	—	324	—	—	—	—
P.R.	259	208	1,446	801	N	N	N	N
V.I.	7	4	32	141	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	2	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 2004 and 2005 are provisional and cumulative (year-to-date).

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

§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Last update March 27, 2005.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC) O157:H7 Cum. 2005	O157:H7 Cum. 2004	Shiga toxin positive, serogroup non-O157 Cum. 2005	Shiga toxin positive, serogroup non-O157 Cum. 2004	Shiga toxin positive, not serogrouped Cum. 2005	Shiga toxin positive, not serogrouped Cum. 2004	Giardiasis Cum. 2005	Giardiasis Cum. 2004	Gonorrhea Cum. 2005	Gonorrhea Cum. 2004
UNITED STATES	333	345	44	60	58	41	4,904	5,431	96,794	108,966
NEW ENGLAND	25	16	8	16	10	3	438	467	1,579	2,430
Maine	2	—	2	—	—	—	44	46	48	98
N.H.	2	4	1	1	—	—	20	16	50	46
Vt.	1	—	—	—	—	—	53	34	12	30
Mass.	9	7	—	5	10	3	191	244	990	1,078
R.I.	1	2	—	—	—	—	21	33	172	332
Conn.	10	3	5	10	—	—	109	94	307	846
MID. ATLANTIC	38	29	3	6	4	10	914	1,203	9,921	12,704
Upstate N.Y.	14	8	3	2	1	3	305	349	2,234	2,475
N.Y. City	1	7	—	—	—	—	257	390	2,599	4,070
N.J.	11	3	—	2	—	4	119	147	1,436	2,383
Pa.	12	11	—	2	3	3	233	317	3,652	3,776
E.N. CENTRAL	65	76	7	12	3	4	700	824	18,320	23,201
Ohio	24	18	1	1	2	4	204	253	6,234	7,542
Ind.	7	14	—	—	—	—	N	N	2,520	2,139
Ill.	6	20	1	—	—	—	126	262	4,998	6,748
Mich.	14	10	—	2	1	—	212	184	2,889	5,245
Wis.	14	14	5	9	—	—	158	125	1,679	1,527
W.N. CENTRAL	45	54	8	11	9	9	629	616	5,758	5,690
Minn.	5	21	2	6	2	2	296	206	810	1,005
Iowa	10	9	—	—	—	—	72	83	504	428
Mo.	15	5	3	4	2	2	139	185	3,189	2,892
N. Dak.	1	2	—	—	—	3	1	11	15	50
S. Dak.	2	2	—	—	—	—	30	19	119	92
Nebr.	5	8	3	1	2	—	38	53	344	375
Kans.	7	7	—	—	3	2	53	59	777	848
S. ATLANTIC	60	39	8	6	25	7	831	849	23,621	26,435
Del.	—	—	N	N	N	N	4	18	284	338
Md.	5	4	2	—	—	2	47	30	2,331	2,781
D.C.	—	1	—	—	—	—	16	29	676	832
Va.	2	1	3	5	6	—	194	123	2,544	3,141
W. Va.	—	1	—	—	—	—	10	9	234	281
N.C.	—	—	—	—	13	4	N	N	5,795	5,142
S.C.	1	3	—	—	—	—	30	28	2,993	3,064
Ga.	7	11	1	—	—	—	254	256	2,414	4,997
Fla.	45	18	2	1	6	1	276	356	6,350	5,859
E.S. CENTRAL	17	16	—	1	4	6	117	107	7,169	8,095
Ky.	1	6	—	1	3	4	N	N	1,298	804
Tenn.	9	3	—	—	1	2	60	53	2,650	2,791
Ala.	7	2	—	—	—	—	57	54	1,513	2,437
Miss.	—	5	—	—	—	—	—	—	1,708	2,063
W.S. CENTRAL	6	28	1	3	2	2	72	94	14,961	14,679
Ark.	1	5	—	1	—	—	27	42	1,570	1,306
La.	—	1	1	—	2	—	8	15	3,444	3,934
Okla.	2	4	—	—	—	—	37	37	1,593	1,576
Tex.	3	18	—	2	—	2	N	N	8,354	7,863
MOUNTAIN	38	40	9	4	1	—	352	398	3,735	3,824
Mont.	2	3	—	—	—	—	11	11	37	20
Idaho	3	10	5	1	—	—	31	55	31	29
Wyo.	—	—	1	—	—	—	6	4	20	20
Colo.	10	6	1	1	—	—	124	131	921	1,084
N. Mex.	—	6	2	1	—	—	12	22	141	344
Ariz.	8	5	N	N	N	N	55	71	1,534	1,500
Utah	7	6	—	—	—	—	87	83	236	149
Nev.	8	4	—	1	1	—	26	21	815	678
PACIFIC	39	47	—	1	—	—	851	873	11,730	11,908
Wash.	9	9	—	—	—	—	61	77	1,132	866
Oreg.	3	8	—	1	—	—	75	140	559	336
Calif.	21	26	—	—	—	—	670	601	9,570	9,961
Alaska	3	1	—	—	—	—	23	25	168	249
Hawaii	3	3	—	—	—	—	22	30	301	496
Guam	N	N	—	—	—	—	—	—	—	63
P.R.	—	—	—	—	—	—	10	17	132	78
V.I.	—	—	—	—	—	—	—	—	2	51
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

	Haemophilus influenzae, invasive							
	All ages		Age <5 years					
	All serotypes		Serotype b		Non-serotype b		Unknown serotype	
Reporting area	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	808	790	1	3	44	41	80	77
NEW ENGLAND	53	80	—	1	4	6	3	—
Maine	3	7	—	—	—	—	1	—
N.H.	—	12	—	—	—	2	—	—
Vt.	6	4	—	—	—	—	2	—
Mass.	21	39	—	1	—	2	—	—
R.I.	6	1	—	—	2	—	—	—
Conn.	17	17	—	—	2	2	—	—
MID. ATLANTIC	158	160	—	—	—	3	20	20
Upstate N.Y.	46	55	—	—	—	3	4	3
N.Y. City	25	30	—	—	—	—	6	6
N.J.	33	31	—	—	—	—	5	2
Pa.	54	44	—	—	—	—	5	9
E.N. CENTRAL	108	142	—	—	1	7	5	22
Ohio	56	52	—	—	—	2	4	9
Ind.	33	21	—	—	1	4	1	1
Ill.	4	39	—	—	—	—	—	9
Mich.	10	9	—	—	—	1	—	3
Wis.	5	21	—	—	—	—	—	—
W.N. CENTRAL	39	40	—	—	2	2	6	5
Minn.	17	14	—	—	2	2	—	—
Iowa	—	1	—	—	—	—	—	1
Mo.	17	15	—	—	—	—	4	4
N. Dak.	1	2	—	—	—	—	1	—
S. Dak.	—	—	—	—	—	—	—	—
Nebr.	3	4	—	—	—	—	1	—
Kans.	1	4	—	—	—	—	—	—
S. ATLANTIC	214	182	—	—	10	8	13	11
Del.	—	—	—	—	—	—	—	—
Md.	32	37	—	—	4	2	—	—
D.C.	—	—	—	—	—	—	—	—
Va.	18	15	—	—	—	—	—	—
W. Va.	13	8	—	—	1	3	2	—
N.C.	27	19	—	—	2	1	—	—
S.C.	10	4	—	—	—	—	1	—
Ga.	58	53	—	—	—	—	6	11
Fla.	56	46	—	—	3	2	4	—
E.S. CENTRAL	44	25	—	—	1	—	10	5
Ky.	4	—	—	—	1	—	1	—
Tenn.	31	17	—	—	—	—	6	4
Ala.	9	8	—	—	—	—	3	1
Miss.	—	—	—	—	—	—	—	—
W.S. CENTRAL	45	33	1	—	3	4	5	1
Ark.	—	—	—	—	—	—	—	—
La.	18	9	1	—	1	—	5	1
Okla.	27	24	—	—	2	4	—	—
Tex.	—	—	—	—	—	—	—	—
MOUNTAIN	109	91	—	2	14	8	15	10
Mont.	—	—	—	—	—	—	—	—
Idaho	3	3	—	—	—	—	1	1
Wyo.	1	—	—	—	—	—	—	—
Colo.	24	21	—	—	—	—	3	2
N. Mex.	12	20	—	—	4	3	—	4
Ariz.	48	39	—	—	8	5	3	1
Utah	10	6	—	2	—	—	6	1
Nev.	11	2	—	—	2	—	2	1
PACIFIC	38	37	—	—	9	3	3	3
Wash.	—	1	—	—	—	—	—	1
Oreg.	17	20	—	—	—	—	3	—
Calif.	15	10	—	—	9	3	—	1
Alaska	1	2	—	—	—	—	—	1
Hawaii	5	4	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—
P.R.	—	—	—	—	—	—	—	—
V.I.	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	—	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 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

	Hepatitis (viral, acute), by type					
	A		B		C	
Reporting area	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	1,275	2,060	1,924	1,973	217	279
NEW ENGLAND	187	299	102	133	6	4
Maine	—	7	4	1	—	—
N.H.	16	7	4	17	—	—
Vt.	—	5	1	1	6	1
Mass.	146	247	78	64	—	3
R.I.	5	6	—	1	—	—
Conn.	20	27	15	49	—	—
MID. ATLANTIC	190	252	440	265	38	42
Upstate N.Y.	31	30	45	28	10	2
N.Y. City	92	94	30	62	—	—
N.J.	29	56	293	67	—	—
Pa.	38	72	72	108	28	40
E.N. CENTRAL	131	188	130	172	43	22
Ohio	24	18	54	52	2	2
Ind.	17	15	7	9	7	1
Ill.	27	80	7	—	—	5
Mich.	50	57	62	92	34	14
Wis.	13	18	—	19	—	—
W.N. CENTRAL	45	51	96	125	14	1
Minn.	3	10	6	12	—	1
Iowa	8	15	9	5	—	—
Mo.	25	8	58	89	13	—
N. Dak.	—	1	—	1	1	—
S. Dak.	—	2	—	—	—	—
Nebr.	2	10	13	11	—	—
Kans.	7	5	10	7	—	—
S. ATLANTIC	193	357	567	620	45	67
Del.	—	3	21	14	—	2
Md.	15	54	61	56	11	—
D.C.	2	3	—	6	—	2
Va.	28	22	74	65	6	7
W. Va.	3	1	13	2	3	6
N.C.	27	22	53	57	7	5
S.C.	8	18	41	39	1	6
Ga.	38	148	107	196	1	7
Fla.	72	86	197	185	16	32
E.S. CENTRAL	80	60	113	165	25	31
Ky.	3	9	26	19	—	12
Tenn.	56	33	49	67	7	5
Ala.	9	5	23	23	7	1
Miss.	12	13	15	56	11	13
W.S. CENTRAL	79	301	96	93	24	78
Ark.	2	42	17	45	—	—
La.	20	11	15	29	5	42
Okla.	3	15	7	18	—	2
Tex.	54	233	57	1	19	34
MOUNTAIN	137	160	187	143	7	15
Mont.	6	3	—	—	—	2
Idaho	12	9	5	4	—	—
Wyo.	—	—	—	3	—	—
Colo.	14	13	10	20	—	4
N. Mex.	7	5	5	7	—	5
Ariz.	80	105	137	68	—	2
Utah	12	23	20	19	4	—
Nev.	6	2	10	22	3	2
PACIFIC	233	392	193	257	15	19
Wash.	16	21	17	22	3	3
Oreg.	13	30	34	38	7	7
Calif.	193	331	138	189	5	9
Alaska	3	2	3	6	—	—
Hawaii	8	8	1	2	—	—
Guam	—	1	—	4	—	—
P.R.	2	10	3	19	—	—
V.I.	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

Reporting area	Legionellosis		Listeriosis		Lyme disease		Malaria	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	343	364	149	157	1,784	2,518	317	374
NEW ENGLAND	18	6	3	10	95	282	15	31
Maine	1	—	—	2	2	13	—	2
N.H.	3	—	1	1	16	12	2	—
Vt.	—	—	—	—	2	10	—	1
Mass.	10	3	—	2	67	173	12	19
R.I.	1	1	—	1	2	18	1	2
Conn.	3	2	2	4	6	56	—	7
MID. ATLANTIC	97	76	28	37	1,270	1,791	83	95
Upstate N.Y.	28	17	7	10	199	650	17	13
N.Y. City	6	7	6	5	—	59	36	47
N.J.	21	13	7	12	534	396	21	19
Pa.	42	39	8	10	537	686	9	16
E.N. CENTRAL	69	88	18	20	35	86	16	23
Ohio	34	37	7	8	23	14	3	7
Ind.	3	9	1	2	2	1	—	3
Ill.	8	14	—	3	—	8	3	5
Mich.	20	24	5	5	2	—	8	4
Wis.	4	4	5	2	8	63	2	4
W.N. CENTRAL	11	9	11	3	53	32	15	22
Minn.	1	—	2	1	42	12	5	9
Iowa	—	3	4	1	6	6	2	1
Mo.	8	4	2	1	4	12	7	4
N. Dak.	1	1	2	—	—	—	—	2
S. Dak.	—	1	—	—	—	—	—	1
Nebr.	—	—	—	—	—	2	—	1
Kans.	1	—	1	—	1	—	1	4
S. ATLANTIC	75	89	36	22	282	268	77	103
Del.	1	2	N	N	62	37	—	2
Md.	17	11	4	5	145	160	22	26
D.C.	1	3	—	—	2	5	2	4
Va.	5	6	1	1	28	9	8	8
W. Va.	3	2	—	1	2	1	1	—
N.C.	9	8	9	4	15	33	11	5
S.C.	2	2	1	—	7	2	3	6
Ga.	6	11	8	5	—	5	14	17
Fla.	31	44	13	6	21	16	16	35
E.S. CENTRAL	8	16	8	9	6	11	10	10
Ky.	1	3	—	2	—	4	2	1
Tenn.	2	7	4	5	6	2	5	2
Ala.	5	5	3	1	—	—	3	5
Miss.	—	1	1	1	—	5	—	2
W.S. CENTRAL	9	32	4	16	12	18	22	30
Ark.	1	—	—	1	2	—	1	2
La.	3	2	2	1	—	1	—	2
Okla.	—	2	—	—	—	—	2	1
Tex.	5	28	2	14	10	17	19	25
MOUNTAIN	34	24	—	3	2	8	15	14
Mont.	2	—	—	—	—	—	—	—
Idaho	1	1	—	1	—	1	—	1
Wyo.	2	4	—	—	—	2	1	—
Colo.	7	3	—	1	—	—	8	5
N. Mex.	1	—	—	—	—	—	—	1
Ariz.	10	5	—	—	—	1	2	2
Utah	5	9	—	—	2	4	4	3
Nev.	6	2	—	1	—	—	—	2
PACIFIC	22	24	41	37	29	22	64	46
Wash.	—	4	2	5	—	2	3	1
Oreg.	N	N	2	4	2	11	1	7
Calif.	22	20	37	28	26	9	54	37
Alaska	—	—	—	—	1	—	2	—
Hawaii	—	—	—	—	N	N	4	1
Guam	—	—	—	—	—	—	—	—
P.R.	—	1	—	—	N	N	—	—
V.I.	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U

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TABLE II. (*Continued*) **Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)***

	Meningococcal disease									
	All serogroups		Serogroup A, C, Y, and W-135		Serogroup B		Other serogroup		Serogroup unknown	
Reporting area	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	467	591	36	38	26	20	1	—	404	533
NEW ENGLAND	32	27	1	4	—	—	—	—	31	23
Maine	1	7	—	—	—	—	—	—	1	7
N.H.	3	3	—	—	—	—	—	—	3	3
Vt.	3	1	—	—	—	—	—	—	3	1
Mass.	14	16	—	4	—	—	—	—	14	12
R.I.	2	—	—	—	—	—	—	—	2	—
Conn.	9	—	1	—	—	—	—	—	8	—
MID. ATLANTIC	65	81	16	23	4	5	—	—	45	53
Upstate N.Y.	17	25	1	4	3	3	—	—	13	18
N.Y. City	8	14	—	—	—	—	—	—	8	14
N.J.	19	14	—	—	—	—	—	—	19	14
Pa.	21	28	15	19	1	2	—	—	5	7
E.N. CENTRAL	42	55	12	8	4	5	—	—	26	42
Ohio	18	31	—	3	4	4	—	—	14	24
Ind.	7	10	—	—	—	1	—	—	7	9
Ill.	—	1	—	—	—	—	—	—	—	1
Mich.	12	5	12	5	—	—	—	—	—	—
Wis.	5	8	—	—	—	—	—	—	5	8
W.N. CENTRAL	28	33	2	—	1	1	—	—	25	32
Minn.	5	9	1	—	—	—	—	—	4	9
Iowa	9	6	—	—	1	—	—	—	8	6
Mo.	7	11	1	—	—	1	—	—	6	10
N. Dak.	—	—	—	—	—	—	—	—	—	—
S. Dak.	1	1	—	—	—	—	—	—	1	1
Nebr.	2	2	—	—	—	—	—	—	2	2
Kans.	4	4	—	—	—	—	—	—	4	4
S. ATLANTIC	87	113	2	2	4	2	—	—	81	109
Del.	—	1	—	—	—	—	—	—	—	1
Md.	8	5	1	—	2	—	—	—	5	5
D.C.	—	5	—	2	—	—	—	—	—	3
Va.	11	7	—	—	—	—	—	—	11	7
W. Va.	3	3	—	—	—	—	—	—	3	3
N.C.	11	15	1	—	2	2	—	—	8	13
S.C.	11	11	—	—	—	—	—	—	11	11
Ga.	8	7	—	—	—	—	—	—	8	7
Fla.	35	59	—	—	—	—	—	—	35	59
E.S. CENTRAL	26	26	—	—	2	—	—	—	24	26
Ky.	8	3	—	—	2	—	—	—	6	3
Tenn.	12	9	—	—	—	—	—	—	12	9
Ala.	2	6	—	—	—	—	—	—	2	6
Miss.	4	8	—	—	—	—	—	—	4	8
W.S. CENTRAL	37	66	1	1	3	1	—	—	33	64
Ark.	8	10	—	—	—	—	—	—	8	10
La.	15	18	—	1	2	—	—	—	13	17
Okla.	6	3	1	—	1	1	—	—	4	2
Tex.	8	35	—	—	—	—	—	—	8	35
MOUNTAIN	36	29	1	—	3	3	1	—	31	26
Mont.	—	1	—	—	—	—	—	—	—	1
Idaho	1	4	—	—	—	—	—	—	1	4
Wyo.	—	2	—	—	—	—	—	—	—	2
Colo.	10	9	1	—	—	—	1	—	8	9
N. Mex.	1	4	—	—	—	2	—	—	1	2
Ariz.	19	5	—	—	2	—	—	—	17	5
Utah	2	2	—	—	1	—	—	—	1	2
Nev.	3	2	—	—	—	1	—	—	3	1
PACIFIC	114	161	1	—	5	3	—	—	108	158
Wash.	20	10	1	—	4	3	—	—	15	7
Oreg.	23	32	—	—	—	—	—	—	23	32
Calif.	63	112	—	—	—	—	—	—	63	112
Alaska	2	2	—	—	—	—	—	—	2	2
Hawaii	6	5	—	—	1	—	—	—	5	5
Guam	—	—	—	—	—	—	—	—	—	—
P.R.	—	3	—	—	—	—	—	—	—	3
V.I.	—	—	—	—	—	—	—	—	—	—
Amer. Samoa	—	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—

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* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

Reporting area	Pertussis		Rabies, animal		Rocky Mountain spotted fever		Salmonellosis		Shigellosis	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	5,385	3,179	1,622	2,057	195	181	7,672	8,964	3,109	3,842
NEW ENGLAND	295	524	258	152	1	5	463	419	62	78
Maine	12	—	19	13	N	N	26	26	2	1
N.H.	—	21	3	6	—	—	30	27	4	3
Vt.	46	30	19	6	—	—	31	17	3	1
Mass.	218	449	163	64	—	5	259	232	36	51
R.I.	5	9	5	10	1	—	15	24	2	3
Conn.	14	15	49	53	—	—	102	93	15	19
MID. ATLANTIC	523	778	180	245	13	15	937	1,165	345	413
Upstate N.Y.	183	560	128	121	—	—	253	260	94	165
N.Y. City	18	55	9	2	1	7	262	349	143	126
N.J.	89	50	N	N	4	—	150	206	89	75
Pa.	233	113	43	122	8	8	272	350	19	47
E.N. CENTRAL	1,319	540	16	8	6	6	777	1,431	187	305
Ohio	606	149	4	3	5	3	259	305	21	57
Ind.	117	22	2	2	—	1	91	121	30	47
Ill.	72	17	5	2	—	1	36	543	6	139
Mich.	81	33	5	1	1	1	205	231	88	33
Wis.	443	319	—	—	—	—	186	231	42	29
W.N. CENTRAL	776	170	114	183	16	6	576	571	232	113
Minn.	136	29	24	17	—	—	147	145	21	16
Iowa	264	29	26	18	—	—	95	104	38	29
Mo.	155	86	13	3	15	6	175	161	133	32
N. Dak.	48	5	6	20	—	—	11	12	2	1
S. Dak.	1	8	12	35	—	—	37	23	8	6
Nebr.	72	3	—	50	1	—	48	45	20	7
Kans.	100	10	33	40	—	—	63	81	10	22
S. ATLANTIC	419	175	562	880	124	105	2,216	1,881	555	1,025
Del.	2	—	—	9	1	2	10	17	3	3
Md.	69	37	96	104	6	5	152	151	22	35
D.C.	3	5	—	—	—	—	13	14	4	21
Va.	67	41	200	154	4	—	236	201	31	30
W. Va.	22	2	11	23	1	—	29	41	—	—
N.C.	21	29	163	225	85	76	357	234	57	126
S.C.	161	30	5	55	6	9	161	110	35	178
Ga.	13	9	86	105	12	11	374	317	162	219
Fla.	61	22	1	205	9	2	884	796	241	413
E.S. CENTRAL	148	43	28	64	6	27	396	476	416	183
Ky.	43	7	4	7	—	—	76	88	35	26
Tenn.	63	25	5	36	5	10	147	140	262	71
Ala.	29	6	19	17	1	5	124	143	91	64
Miss.	13	5	—	4	—	12	49	105	28	22
W.S. CENTRAL	143	103	373	434	6	13	497	911	600	1,012
Ark.	74	11	11	20	2	—	103	88	18	15
La.	7	3	—	—	1	3	111	134	36	108
Okla.	—	12	37	44	3	10	79	77	223	126
Tex.	62	77	325	370	—	—	204	612	323	763
MOUNTAIN	1,233	356	61	36	20	1	551	656	196	249
Mont.	269	7	—	4	1	—	27	50	2	3
Idaho	46	15	—	—	—	—	28	49	—	5
Wyo.	7	3	9	—	1	—	10	20	—	1
Colo.	546	189	1	1	—	1	139	147	32	41
N. Mex.	52	54	—	—	—	—	40	71	25	44
Ariz.	162	63	51	31	15	—	199	215	99	122
Utah	133	24	—	—	3	—	57	70	13	16
Nev.	18	1	—	—	—	—	51	34	25	17
PACIFIC	529	490	30	55	3	3	1,259	1,454	516	464
Wash.	135	126	—	—	—	—	106	91	22	24
Oreg.	226	152	—	—	—	2	89	116	22	21
Calif.	115	195	29	44	3	1	973	1,127	457	400
Alaska	15	9	1	11	—	—	17	27	5	4
Hawaii	38	8	—	—	—	—	74	93	10	15
Guam	—	—	—	—	—	—	—	14	—	16
P.R.	—	1	26	16	N	N	28	69	—	1
V.I.	—	—	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

Reporting area	Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive disease: Drug resistant, all ages		*Streptococcus pneumoniae*, invasive disease: Age <5 years		Syphilis: Primary & secondary		Syphilis: Congenital	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	1,674	1,927	1,028	984	306	322	2,243	2,555	86	135
NEW ENGLAND	64	89	10	16	28	40	66	56	—	—
Maine	2	3	N	N	—	1	1	—	—	—
N.H.	4	9	—	—	1	N	4	1	—	—
Vt.	7	4	4	5	3	1	—	—	—	—
Mass.	45	68	—	5	24	35	55	35	—	—
R.I.	6	5	6	6	—	3	2	3	—	—
Conn.	—	—	—	—	U	U	4	17	—	—
MID. ATLANTIC	377	345	112	75	57	46	295	343	15	18
Upstate N.Y.	143	109	44	33	35	29	25	26	11	1
N.Y. City	51	64	U	U	U	U	194	204	3	7
N.J.	73	68	N	N	11	4	38	68	1	9
Pa.	110	104	68	42	11	13	38	45	—	1
E.N. CENTRAL	283	453	258	245	79	83	182	289	12	21
Ohio	89	121	173	182	38	41	73	87	2	1
Ind.	39	48	83	63	20	17	17	17	1	1
Ill.	2	128	2	—	17	—	56	115	1	1
Mich.	145	126	—	N	—	N	29	57	6	18
Wis.	8	30	N	N	4	25	7	13	2	—
W.N. CENTRAL	116	156	23	9	35	32	67	68	—	1
Minn.	41	72	—	—	17	18	12	10	—	1
Iowa	N	N	N	N	—	N	1	3	—	—
Mo.	35	37	21	8	3	8	46	38	—	—
N. Dak.	2	6	—	—	1	—	—	—	—	—
S. Dak.	9	8	2	1	—	—	—	—	—	—
Nebr.	9	10	—	—	4	4	2	5	—	—
Kans.	20	23	N	N	10	2	6	12	—	—
S. ATLANTIC	358	379	447	525	38	23	587	641	18	23
Del.	—	2	1	3	—	N	6	2	—	—
Md.	92	60	—	—	26	18	108	113	7	3
D.C.	4	3	13	6	2	4	39	20	—	1
Va.	27	28	N	N	—	N	30	18	3	1
W. Va.	8	12	37	50	10	1	2	3	—	—
N.C.	58	48	N	N	U	U	82	51	3	1
S.C.	11	38	—	45	—	N	25	50	—	7
Ga.	68	98	154	140	—	N	48	122	—	1
Fla.	90	90	242	281	—	N	247	262	5	9
E.S. CENTRAL	73	100	77	66	3	—	127	129	11	5
Ky.	17	33	11	17	N	N	11	20	—	—
Tenn.	56	67	66	49	—	N	53	48	8	1
Ala.	—	—	—	—	—	N	54	46	3	2
Miss.	—	—	—	—	3	—	9	15	—	2
W.S. CENTRAL	77	147	64	32	40	74	418	384	19	30
Ark.	7	4	6	5	8	4	18	16	—	3
La.	4	1	58	27	9	19	87	86	2	2
Okla.	55	26	N	N	14	22	12	8	1	2
Tex.	11	116	N	N	9	29	301	274	16	23
MOUNTAIN	289	222	37	16	26	24	113	134	11	8
Mont.	—	—	—	—	—	—	5	—	—	—
Idaho	1	4	N	N	—	N	9	9	—	1
Wyo.	1	5	15	4	—	—	—	1	—	—
Colo.	114	41	N	N	25	22	13	24	—	—
N. Mex.	20	47	—	5	—	—	7	35	1	2
Ariz.	117	108	N	N	—	N	50	58	10	5
Utah	35	17	21	5	1	2	2	2	—	—
Nev.	1	—	1	2	—	—	27	5	—	—
PACIFIC	37	36	—	—	—	—	388	511	—	29
Wash.	N	N	N	N	N	N	53	26	—	—
Oreg.	N	N	N	N	—	N	10	14	—	—
Calif.	—	—	N	N	N	N	320	468	—	29
Alaska	—	—	—	—	—	N	3	—	—	—
Hawaii	37	36	—	—	—	—	2	3	—	—
Guam	—	—	—	—	—	—	—	—	—	—
P.R.	N	N	N	N	—	N	45	48	5	2
V.I.	—	—	—	—	—	—	—	4	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 7, 2005, and May 8, 2004 (18th Week)*

Reporting area	Tuberculosis		Typhoid fever		Varicella (chickenpox)		West Nile virus disease† Neuroinvasive		West Nile virus disease† Non-neuroinvasive§
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005
UNITED STATES	2,716	3,912	57	80	8,148	8,989	—	—	—
NEW ENGLAND	85	128	5	10	124	342	—	—	—
Maine	6	8	—	—	101	43	—	—	—
N.H.	3	6	—	—	—	—	—	—	—
Vt.	—	—	—	—	22	287	—	—	—
Mass.	59	72	4	9	1	12	—	—	—
R.I.	3	15	—	1	—	—	—	—	—
Conn.	14	27	1	—	—	—	—	—	—
MID. ATLANTIC	658	612	15	23	1,777	22	—	—	—
Upstate N.Y.	74	68	3	2	—	—	—	—	—
N.Y. City	351	319	2	7	—	—	—	—	—
N.J.	144	131	3	10	—	—	—	—	—
Pa.	89	94	7	4	1,777	22	—	—	—
E.N. CENTRAL	403	359	3	4	2,747	3,026	—	—	—
Ohio	85	59	—	1	668	786	—	—	—
Ind.	45	45	—	—	N	N	—	—	—
Ill.	185	170	1	—	11	—	—	—	—
Mich.	62	61	1	3	1,847	1,926	—	—	—
Wis.	26	24	1	—	221	314	—	—	—
W.N. CENTRAL	149	125	1	2	69	118	—	—	—
Minn.	59	45	1	1	—	—	—	—	—
Iowa	11	13	—	—	N	N	—	—	—
Mo.	41	37	—	1	3	2	—	—	—
N. Dak.	2	2	—	—	10	68	—	—	—
S. Dak.	5	4	—	—	56	48	—	—	—
Nebr.	15	6	—	—	—	—	—	—	—
Kans.	16	18	—	—	—	—	—	—	N
S. ATLANTIC	571	832	8	8	801	1,081	—	—	—
Del.	—	8	—	—	2	4	—	—	—
Md.	63	70	1	2	—	—	—	—	—
D.C.	25	6	—	—	15	17	—	—	—
Va.	81	56	1	2	100	284	—	—	—
W. Va.	8	7	—	—	507	539	—	—	N
N.C.	55	75	1	2	—	N	—	—	—
S.C.	69	66	—	—	177	237	—	—	—
Ga.	44	231	2	—	—	—	—	—	—
Fla.	226	313	3	2	—	—	—	—	—
E.S. CENTRAL	158	166	1	2	—	—	—	—	—
Ky.	37	24	1	—	N	N	—	—	—
Tenn.	76	44	—	2	—	—	—	—	—
Ala.	45	65	—	—	—	—	—	—	—
Miss.	—	33	—	—	—	—	—	—	—
W.S. CENTRAL	71	632	3	7	1,342	3,176	—	—	—
Ark.	30	46	—	—	—	—	—	—	—
La.	—	—	—	—	90	34	—	—	—
Okla.	41	49	—	—	—	—	—	—	—
Tex.	—	537	3	7	1,252	3,142	—	—	—
MOUNTAIN	52	171	3	3	1,288	1,224	—	—	—
Mont.	—	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—	—
Wyo.	—	1	—	—	39	15	—	—	—
Colo.	8	45	—	1	909	930	—	—	—
N. Mex.	3	14	—	—	78	33	—	—	—
Ariz.	36	67	1	1	—	—	—	—	—
Utah	5	14	1	1	262	246	—	—	—
Nev.	—	30	1	—	—	—	—	—	—
PACIFIC	569	887	18	21	—	—	—	—	—
Wash.	75	68	1	1	N	N	—	—	—
Oreg.	35	32	2	—	—	—	—	—	—
Calif.	405	741	11	15	—	—	—	—	—
Alaska	11	10	—	—	—	—	—	—	—
Hawaii	43	36	4	5	—	—	—	—	—
Guam	—	14	—	—	—	34	—	—	—
P.R.	—	21	—	—	68	116	—	—	—
V.I.	—	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	—
C.N.M.I.	—	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 2004 and 2005 are provisional and cumulative (year-to-date).
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
§ Not previously notifiable.

TABLE III. Deaths in 122 U.S. cities,* week ending May 7, 2005 (18th Week)

Reporting Area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
NEW ENGLAND	483	345	88	27	12	11	42
Boston, Mass.	121	80	21	9	4	7	7
Bridgeport, Conn.	38	30	6	1	1	—	3
Cambridge, Mass.	16	11	3	2	—	—	1
Fall River, Mass.	10	9	—	—	—	1	—
Hartford, Conn.	57	40	11	4	2	—	5
Lowell, Mass.	28	17	9	1	—	1	2
Lynn, Mass.	7	3	2	2	—	—	—
New Bedford, Mass.	25	21	3	1	—	—	8
New Haven, Conn.	30	21	4	1	2	2	5
Providence, R.I.	49	40	6	2	1	—	4
Somerville, Mass.	5	4	1	—	—	—	1
Springfield, Mass.	21	17	2	1	1	—	1
Waterbury, Conn.	29	14	13	1	1	—	1
Worcester, Mass.	47	38	7	2	—	—	4
MID. ATLANTIC	2,095	1,458	434	110	38	53	142
Albany, N.Y.	48	35	6	2	2	3	—
Allentown, Pa.	16	14	2	—	—	—	1
Buffalo, N.Y.	84	58	18	7	1	—	8
Camden, N.J.	22	12	6	3	1	—	—
Elizabeth, N.J.	17	10	6	1	—	—	2
Erie, Pa.	36	26	7	3	—	—	2
Jersey City, N.J.	44	27	10	4	1	2	—
New York City, N.Y.	1,119	770	251	51	23	22	75
Newark, N.J.	51	29	16	4	1	1	4
Paterson, N.J.	9	5	4	—	—	—	—
Philadelphia, Pa.	229	158	33	16	4	18	16
Pittsburgh, Pa.§	35	23	7	2	2	1	1
Reading, Pa.	21	17	2	2	—	—	2
Rochester, N.Y.	131	96	24	3	3	5	9
Schenectady, N.Y.	20	15	5	—	—	—	—
Scranton, Pa.	28	24	4	—	—	—	2
Syracuse, N.Y.	127	96	22	9	—	—	17
Trenton, N.J.	17	13	3	—	—	1	—
Utica, N.Y.	20	17	2	1	—	—	3
Yonkers, N.Y.	21	13	6	2	—	—	—
E.N. CENTRAL	1,792	1,217	371	128	39	37	134
Akron, Ohio	53	36	10	3	2	2	5
Canton, Ohio	30	24	5	—	—	1	5
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	92	62	18	6	1	5	7
Cleveland, Ohio	239	179	45	7	4	4	6
Columbus, Ohio	204	136	38	25	1	4	15
Dayton, Ohio	119	85	25	9	—	—	11
Detroit, Mich.	170	72	60	23	7	8	11
Evansville, Ind.	46	32	8	4	2	—	3
Fort Wayne, Ind.	63	44	14	2	1	2	2
Gary, Ind.	12	9	2	1	—	—	—
Grand Rapids, Mich.	58	41	11	3	2	1	6
Indianapolis, Ind.	217	134	47	21	11	4	22
Lansing, Mich.	48	37	11	—	—	—	6
Milwaukee, Wis.	97	65	20	8	1	3	10
Peoria, Ill.	55	38	12	4	1	—	6
Rockford, Ill.	55	44	7	2	1	1	5
South Bend, Ind.	56	42	8	3	1	2	2
Toledo, Ohio	111	78	24	6	3	—	6
Youngstown, Ohio	67	59	6	1	1	—	6
W.N. CENTRAL	621	406	133	45	13	23	52
Des Moines, Iowa	94	60	22	6	3	3	12
Duluth, Minn.	38	29	4	2	2	1	6
Kansas City, Kans.	33	14	12	7	—	—	—
Kansas City, Mo.	71	44	20	5	—	2	11
Lincoln, Nebr.	57	44	9	3	1	—	2
Minneapolis, Minn.	64	39	14	6	—	5	3
Omaha, Nebr.	92	67	15	5	2	3	6
St. Louis, Mo.	48	27	13	5	1	1	9
St. Paul, Minn.	62	40	12	3	1	6	3
Wichita, Kans.	62	42	12	3	3	2	—

Reporting Area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
S. ATLANTIC	1,071	686	242	77	37	28	55
Atlanta, Ga.	100	54	27	10	6	3	4
Baltimore, Md.	137	78	40	11	4	4	9
Charlotte, N.C.	111	70	24	9	2	6	11
Jacksonville, Fla.	115	66	28	12	5	3	1
Miami, Fla.	99	72	17	8	—	2	5
Norfolk, Va.	56	37	10	7	—	2	3
Richmond, Va.	48	25	14	2	5	2	3
Savannah, Ga.	60	38	19	1	2	—	2
St. Petersburg, Fla.	45	36	5	1	2	1	5
Tampa, Fla.	184	134	27	11	9	3	8
Washington, D.C.	102	65	28	5	2	2	2
Wilmington, Del.	14	11	3	—	—	—	2
E.S. CENTRAL	820	539	191	42	24	24	63
Birmingham, Ala.	144	102	32	5	3	2	9
Chattanooga, Tenn.	84	59	18	4	1	2	8
Knoxville, Tenn.	99	68	16	10	4	1	2
Lexington, Ky.	78	49	20	—	4	5	5
Memphis, Tenn.	216	135	58	13	5	5	25
Mobile, Ala.	47	39	6	—	—	2	2
Montgomery, Ala.	25	14	7	1	2	1	3
Nashville, Tenn.	127	73	34	9	5	6	9
W.S. CENTRAL	2,927	1,967	642	176	71	71	215
Austin, Tex.	88	55	24	7	—	2	4
Baton Rouge, La.	25	21	4	—	—	—	—
Corpus Christi, Tex.	59	38	15	3	1	2	6
Dallas, Tex.	170	108	37	14	9	2	9
El Paso, Tex.	79	56	19	3	—	1	8
Ft. Worth, Tex.	122	77	25	5	5	10	10
Houston, Tex.	344	189	107	25	10	13	22
Little Rock, Ark.	73	43	23	2	3	2	—
New Orleans, La.	1,573	1,106	309	90	37	31	124
San Antonio, Tex.	236	166	50	13	3	4	19
Shreveport, La.	79	50	19	7	3	—	3
Tulsa, Okla.	79	58	10	7	—	4	10
MOUNTAIN	962	633	210	69	29	21	76
Albuquerque, N.M.	147	93	36	12	4	2	7
Boise, Idaho	U	U	U	U	U	U	U
Colo. Springs, Colo.	53	34	12	3	4	—	2
Denver, Colo.	114	72	26	6	2	8	6
Las Vegas, Nev.	293	208	58	17	4	6	21
Ogden, Utah	20	16	2	2	—	—	3
Phoenix, Ariz.	202	128	45	19	8	2	19
Pueblo, Colo.	24	15	7	2	—	—	3
Salt Lake City, Utah	109	67	24	8	7	3	15
Tucson, Ariz.	U	U	U	U	U	U	U
PACIFIC	1,707	1,188	358	101	34	26	141
Berkeley, Calif.	7	5	2	—	—	—	—
Fresno, Calif.	88	56	20	10	1	1	5
Glendale, Calif.	18	15	3	—	—	—	2
Honolulu, Hawaii	80	57	18	4	—	1	5
Long Beach, Calif.	61	42	15	1	1	2	4
Los Angeles, Calif.	364	255	68	28	9	4	42
Pasadena, Calif.	20	18	1	—	1	—	—
Portland, Oreg.	136	89	33	6	4	4	10
Sacramento, Calif.	190	138	34	14	1	3	22
San Diego, Calif.	151	109	29	6	4	3	10
San Francisco, Calif.	98	54	30	10	2	2	9
San Jose, Calif.	167	118	34	9	6	—	13
Santa Cruz, Calif.	35	24	8	2	—	1	4
Seattle, Wash.	120	79	29	6	3	3	7
Spokane, Wash.	65	46	14	4	—	1	4
Tacoma, Wash.	107	83	20	1	2	1	4
TOTAL	12,478¶	8,439	2,669	775	297	294	920

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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