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World TB Day — March 24, 2002

March 24, 2002, will mark the 20th annual World TB Day, which recognizes the collaborative efforts of all countries involved in working to eliminate tuberculosis (TB). TB is the second leading infectious cause of death among adults worldwide: approximately 2 million persons die each year from TB, and an estimated 2 billion persons—one third of the world's population—are infected with the bacteria that cause TB.

After years of steady decline in the United States, the number of reported TB cases increased by 20% during 1985–1992. This resurgence was associated with deterioration of the infrastructure for TB services, the human immunodeficiency virus epidemic, immigration of persons from countries in which TB is endemic, TB transmission in institutional settings (e.g., hospitals and prisons), and development of multidrug-resistant TB. However, since 1992, a renewed emphasis on TB control and prevention has resulted in substantial declines in the disease. In 2001, the provisional number of TB cases decreased for the ninth straight year to an all-time low of 15,991 cases, a 2% decrease over the 16,377 cases reported in 2000.

Achieving the goal of eliminating TB in the United States will require both the ability to increase resources rapidly for local TB control efforts when outbreaks occur and greatly increased efforts to combat the devastating impact of the global TB epidemic. This issue of *MMWR* highlights two of CDC's efforts to eliminate TB—both domestically and internationally. Additional information on World TB Day and CDC's TB elimination activities is available at http://www.cdc.gov/nchstp/tb.

Progress Toward Tuberculosis Control — India, 2001

Every year, approximately 2 million persons in India develop tuberculosis (TB), accounting for one fourth of the world's new TB cases (*1*). Organized TB control activities have existed in India for 40 years; however, the quality of diagnosis and treatment of TB in the public and private sectors has been variable, and TB incidence and prevalence trends have not changed substantially over this time (*2*). In 1992, the Indian government established a Revised National Tuberculosis Control Programme (RNTCP) using the directly observed treatment, short-course (DOTS) strategy recommended by the World Health Organization (WHO) (*3*). The DOTS strategy consists of sustained government commitment, effective laboratory-based diagnosis, standard treatment given under direct observation, secure drug supply, and systematic monitoring and evaluation. RNTCP was implemented in pilot areas beginning in 1993; large-scale implementation of the program began in late 1998. This report summarizes the process, outcomes, and challenges of RNTCP in India. RNTCP has implemented DOTS rapidly and has yielded positive results in TB control; however, continued commitment from Indian government authorities and the international community is needed to sustain and expand this ongoing program.

During 1993–2001, under RNTCP, patients diagnosed in health-care facilities with cough lasting ≥3 weeks underwent

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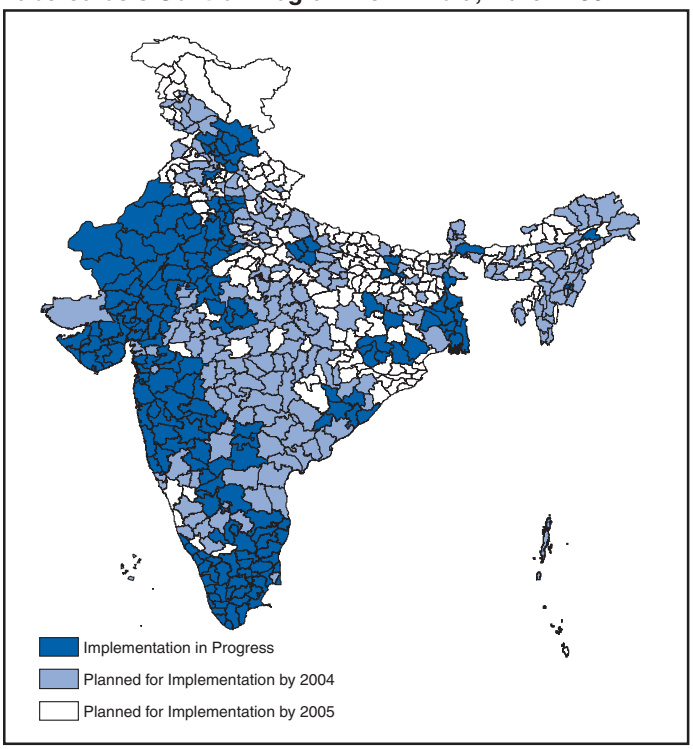
three sputum smear examinations over a 2-day period. If all three acid-fast bacilli (AFB) smears were negative, 1–2 weeks of broad-spectrum antibiotics were prescribed. If some but not all of the specimens were positive, or if a patient with negative smears continued to have symptoms after 1–2 weeks of broad-spectrum antibiotics, a chest radiograph was taken, and if indicative of disease, the patient was treated for TB. All TB treatment was given three times weekly on alternate days; the diagnostic evaluation and the entire course of treatment were free of charge. During the first 2 months of treatment (intensive phase), patients were treated with isoniazid, rifampin, pyrazinamide, and ethambutol (streptomycin was added for retreatment patients, and ethambutol was omitted for smear-negative, nonseriously ill patients); every dose was observed directly by either a health-care provider or a nonfamily community member. For the remaining 4–6 months of treatment (continuation phase), either isoniazid and rifampin or isonizaid, rifampin, and ethambutol were prepared into weekly packs, and at least the first dose each week was observed directly. To prevent drug shortages during TB therapy, medications for both phases of treatment were maintained in individualized patient boxes containing the entire course of treatment for a given patient at the health facility or residence of the community volunteer providing DOTS. Recording and reporting of case detection and treatment outcomes were conducted according to WHO recommendations (*3*).

As of November 2001, RNTCP offered TB control services to regions comprising >40% of the country's population (>440 million persons), compared with <2% in mid-1998 (Figure 1). To prepare for service delivery under RNTCP, since 1998, approximately 3,000 small laboratories have been upgraded for smear microscopy, 2,000 contractual staff hired, approximately 200,000 health-care workers trained in different aspects of DOTS service provision, and approximately 500 million tablets of anti-TB medication distributed.

During 2001, approximately 300,000 adult outpatient visits were recorded per day in facilities covered by RNTCP, with approximately 5,000 patients examined for TB and approximately 1,300 patients started on treatment each day of operation. Indicators of the quality of case-detection activities include the proportion of patients with newly diagnosed pulmonary TB who are sputum smear-positive for AFB (which should be ≥50% in a well-functioning program) (*3*). During April–June 2001, 179 (95%) of 189 districts reported that ≥50% of all new pulmonary TB patients were diagnosed as sputum smear-positive for AFB, indicating high diagnostic quality in these districts.

One year following the start of treatment, 256,621 (80%) patients had been treated successfully, and 98,302 (81%)

FIGURE 1. Implementation status of the Revised National Tuberculosis Control Programme — India, March 2002



patients who were initially sputum smear-positive had laboratory evidence of sputum conversion to negative (Table 1). During April–June 2000, 77 (75%) districts had treatment success rates* of ≥80%. However, previously treated patients had outcomes that were slightly less favorable than new TB patients (71% versus 83% treatment success). Patients who had previously failed treatment (those who were sputum smear-positive at 5 months or later during an earlier course of treatment) had a significantly higher risk for remaining smear-positive when treated again than did other types of retreatment patients, such as successfully treated patients that relapsed or those who prematurely discontinued treatment (12.9% versus 5.8% and 5.2% respectively, p<0.001).

* The sum of smear-positive patients who have laboratory evidence of sputum conversion to negative (cure) and those who have completed treatment without final laboratory confirmation of cure.

TABLE 1. Number of patients with tuberculosis and treatment outcomes, by type of TB disease — Revised National Tuberculosis Control Programme, India, January 1993–June 2000

Type of TB disease	Outcome						
	No.	Cured*	Completed†	Died§	Failed¶	Defaulted**	Transferred††
New smear positive	122,079	98,302	2,162	5,320	3,630	10,928	1,391
New smear negative	100,200	—	84,204	3,472	1,356	9,733	929
New extrapulmonary	37,286	—	33,479	660	96	2,418	310
Relapsed	17,557	12,121	577	1,178	1,017	2,299	320
Other	37,410	18,705	7,071	2,500	1,932	6,503	569
Total	**314,532**	**129,128**	**127,493**	**13,130**	**8,031**	**31,881**	**3,519**

* Patient who is sputum smear-negative in the last month of treatment and at least on one previous occasion.
† Patient who has completed treatment but who does not meet the criteria to be classified as a cure or failure.
§ Patient who dies for any reason during the course of treatment.
¶ Patient who is sputum smear-positive at 5 months or later during treatment.
** Patient who interrupts treatment for ≥2 months after treatment initiation.
†† Patient who has been transferred to another recording and reporting unit and for whom the treatment outcome is not known.

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Editorial Note: Despite the availability of highly effective and inexpensive drugs, TB causes more deaths per year in India (421,000) than malaria, hepatitis, meningitis, nutritional deficiencies, sexually transmitted diseases, leprosy, and tropical diseases (e.g., dengue fever, trypanosomiasis, schistosomiasis, leishmaniasis, lymphatic filariasis, and onchocerciasis) combined (258,000) (*4*). Since 1993, India has implemented successfully a TB control program using the WHO-recommended DOTS strategy. Many of the principles for diagnosis and treatment of the DOTS strategy were derived from studies conducted in India that demonstrated the effectiveness of ambulatory treatment of TB, the necessity and feasibility of DOTS, the efficacy of intermittent treatment with anti-TB drugs (twice weekly rather than daily), and the feasibility of case detection through sputum smear microscopy in primary-care settings (*5*). However, only recently have these findings been applied widely to establish TB control in large areas of India. The 4% death rate recorded in RNTCP areas since implementation is substantially lower than previously documented death rates of up to 29% among treated smear-positive TB patients in non-RNTCP areas (*6*).

Several obstacles impede the expansion of TB control under RNTCP (*7*). First, diagnosis and treatment of TB are uncoordinated and inconsistent because many patients initially receive TB care through the large private health-care sector, pharmacies often sell anti-TB drugs over the counter, and TB notification requirements are not enforced routinely. Second, poverty impedes program performance. Many areas lack regular electric supply, limiting the effectiveness of binocular microscopy. Economic hardships and drought cause large-scale migration, reducing treatment completion and cure rates. Third, a patient-centered approach to care—one that actively helps patients by providing them with transportation to health facilities, food, and social support to overcome obstacles to completion of treatment—

is not practiced widely in India. Fourth, anti-TB drug resistance, which reflects current or past poor program performance, is difficult to treat and might account for the noticeably higher treatment failure rate among retreated TB patients. In several surveyed areas of India, 1.0%–3.3% of new TB patients have multidrug-resistant TB (MDR-TB), which is resistant to at least isoniazid and rifampin, the two most effective anti-TB drugs (*8*). This is higher than in many countries, but much lower than in some high-prevalence areas (e.g., areas in the former Soviet Union [10%–15%] and New York City in the early 1990s [7%]) (*8*). However, even if as few as 2% of new patients were to have MDR-TB, this would represent an estimated 20,000 new infectious cases of MDR-TB in India every year. In areas with relatively good performance, pilot projects of expanded programs to treat MDR-TB should be considered.

Finally, although this report does not assess the level of human immunodeficiency virus (HIV) infection among TB patients, the increasing prevalence of HIV in India represents a serious threat to TB control efforts. Approximately 4 million persons in India (<1% of the population) are infected with HIV, of which approximately half also are infected with *M. tuberculosis* (*9*). An additional 140,000 TB cases have been estimated annually among tuberculin skin test-positive HIV-infected persons (*9*).

The TB control program in India, already one of the largest public health programs in the world, continues to expand, with plans to cover 80% of the country by 2004 and 100% by 2005. The implementation of RNTCP has resulted in a net savings of more than $400 million in economic costs; effective nationwide implementation by 2005 would save more than $27 billion through 2020 (*10*). Sustaining and expanding this program will require continued high-level commitment from the central and state governments of India, supplemented by continued and coordinated assistance from international and bilateral organizations.

Progress toward TB control in India is critical to global TB control and has direct implications for TB elimination efforts in the United States because nearly half of all TB cases in the United States occur among foreign-born persons, a substantial proportion of whom (nearly 10%) are immigrants from India (*10*). With immigration from India to the United States rising, India's proportionate contribution to U.S. domestic TB will probably increase.

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Tuberculosis Outbreak on an American Indian Reservation — Montana, 2000–2001

During May 2000–January 2001, five tuberculosis (TB) cases, linked by contact and DNA fingerprinting (*1*), were reported from the Fort Belknap Indian Reservation in rural Montana. Before this, only one case of TB had been reported from the reservation since 1992. To determine the cause of the outbreak, the Fort Belknap Tribal Health Department and the Indian Health Service (IHS) conducted an investigation and requested assistance from the Montana State Department of Public Health and Human Services (DPHHS) and CDC to improve case finding and medical management of persons with TB. This report summarizes the results of the investigation and demonstrates how, in low incidence areas, rapid expansion of local capacity for TB control is critical to eliminate TB in the United States.

Median age of the five TB patients was 44 years (range: 32–61 years); four were male. Isolates from all five TB patients were confirmed as *Mycobacterium tuberculosis* and were susceptible to first-line drugs (isoniazid, rifampin, pyrazinamide, and ethambutol). At the time of presentation, the index patient had a productive cough and a sputum smear that demonstrated acid-fast bacilli (AFB), suggesting infection with TB. Patient 5 also had sputum smears demonstrating AFB. All five patients were started on directly observed therapy (DOT) for TB.

A contact investigation of the sputum AFB smear-positive index patient yielded 126 contacts, of whom 121 (96%) received a tuberculin skin test; 22 (18%) had positive results. Chest radiographs of the 22 skin test-positive contacts were performed, and clinical and radiographic findings were reviewed for evidence of TB disease. From this investigation, patient 2 was diagnosed with TB disease and was started on treatment with isoniazid and rifampin. Of the 21 persons with latent TB infection (LTBI), 19 were started on treatment with isoniazid, and two persons refused treatment on the basis of previously positive skin tests.

The index patient had a large extended family network and regularly engaged in heavy alcohol consumption with other drinkers in confined spaces. The four secondary patients were all regular drinking partners of the index patient; however, only patient 2 had TB diagnosed by routine contact investigation. The other three were diagnosed when they presented with symptoms of TB. Patient 3, who was also a family member and a drinking partner, was included in the contact investigation but did not have a tuberculin skin test performed because the patient had a previously positive result and a normal chest radiograph. The remaining two secondary patients were not included as contacts because clinical staff focused initially on identifying transmission to extended family members.

To assist with clinical management of patients with TB and with the contact investigation, the reservation health staff sought assistance from the Montana DPHHS TB program and CDC. DPHHS and CDC reviewed the clinical management of the five TB patients and revised treatment regimens to meet current treatment guidelines. Because two of the four secondary TB patients were not named as contacts and subsequently presented to the health facility with TB, a review of the contact investigation was conducted based on skin positivity and TB disease rates. This revealed that regular alcohol-drinking partners of the index patient had a higher risk for infection with *M. tuberculosis* than nondrinking family members and other social contacts. Of the 26 drinking partners identified, 14 (56%) were infected; of the 42 nondrinking family members identified, seven (18%) were infected; and of the 56 other social contacts, one (3%) was infected.

Collaboration among the Tribal Council, IHS, the Montana DPHHS TB Program, and CDC led to four capacity-building efforts to improve TB clinical management and control on the reservation. First, six staff members from the reservation clinic attended a 1-week course in TB clinical management at the National Jewish Medical and Research Center in Denver, Colorado. The Montana State TB Program provided ongoing consultation to both clinical and public health nursing staff, including weekly case management meetings and assistance with development of DOT and incentive programs. Clinical staff also received advice and educational materials from the Montana State TB Program and the Francis J. Curry National TB Center in San Francisco, a Model Tuberculosis Center funded by CDC. Second, IHS hired an additional tribal health nurse with extensive knowledge of the community to manage the contact investigation and to emphasize case management and adherence to therapy. Third, CDC investigation team members reviewed clinical management practices and made recommendations for improvements. Finally, the team trained staff members in social network analysis to improve future contact investigations.

As of February 2002, four of the TB patients had completed treatment. One elderly patient with end-stage liver disease died from non-TB-related causes 2 months after starting therapy for TB. Of the 19 contacts, 13 (68%) patients had completed their treatment for LTBI, three (16%) had discontinued treatment before completion, and three (16%) had their treatment discontinued by their health-care providers for medical reasons. Of the 19 treated for LTBI, two received treatment by DOT, and the remainder were followed on a weekly basis by public health nursing staff; 18 of the contacts treated for LTBI were provided incentives to improve treatment adherence.

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Editorial Note: The findings in this report illustrate that local staff proficiency in the identification and management of persons with TB is necessary in geographic areas with low and declining TB trends, and that resources exist for local health-care providers and TB control programs to expand their outbreak response capacity rapidly. To help maintain and bolster capacity for TB control in low-incidence areas, timely assistance from external sources is an important component of the strategy to eliminate TB in the United States. On this American Indian reservation, recent transmission of *M. tuberculosis* was confirmed, and initial problems with the contact investigation prompted local health-care providers to mobilize and obtain the requisite information and skills to conduct a thorough investigation. The external support included short-term training courses on TB case management, clinical consultations using national hotlines, educational

materials, and assistance from a CDC outbreak response investigation team. On other occasions, CDC also has provided short-term funds for temporary staffing to conduct the additional activities required to respond to an outbreak.

This investigation also confirmed that contact investigations and early review of findings are critical to the control of a TB outbreak. In this instance, the hiring of a tribal nurse with extensive community knowledge expedited the investigation and facilitated a high follow-up rate among contacts and a high completion rate among persons treated for LTBI. However, an earlier systematic review of the relationships between contacts and cases, including social and family contacts, would have led to faster identification of persons at highest risk for infection and disease and might have led to the prevention of secondary TB cases, particularly because previous investigations have determined that heavy alcohol consumption in confined spaces has been associated with *M. tuberculosis* transmission (*2*).

The reported case rate of TB in the United States has declined steadily since 1992, reaching a record low of 5.8 cases per 100,000 population in 2000 (*3*). Case rates among American Indians are approximately twice the national average, but they also have declined at a similar pace during the past decade. TB case rates can start to rise when the public health infrastructure and resources for TB control are reduced or neglected (*4*). Local expertise in TB management varies widely across the United States. In areas where TB incidence rates are high, resources for TB control might be adequate. In low-incidence areas, TB expertise and resources are often limited. Detailed local and state outbreak response plans should include ways to augment TB control capacity before unexpected increases in *M. tuberculosis* transmission occur.

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Progress Toward Elimination of *Haemophilus influenzae* Type b Invasive Disease Among Infants and Children — United States, 1998–2000

Haemophilus influenzae type b (Hib) was the leading cause of bacterial meningitis and a major cause of other serious invasive diseases among children aged <5 years in the United States before Hib conjugate vaccines became available in 1988 (*1,2*). In 1991, all infants starting at age 2 months were recommended to receive Hib conjugate vaccines; by 1996, incidence of Hib invasive disease (i.e., illness clinically compatible with invasive disease, such as meningitis or sepsis, with isolation of the bacterium from a normally sterile site) among children aged <5 years had declined by >99% (*1,3*). This report presents 1998–2000 *Haemophilus influenzae* (Hi) surveillance data, which indicate that the incidence of reported Hib invasive disease remains low. Achieving the national health objective for 2010 of reducing to zero indigenous Hib invasive disease cases in children aged <5 years (*4*) will require improved age-appropriate vaccination of children, complete reporting of vaccination and relevant medical histories, standardization of the serotyping procedure, and complete ascertainment and reporting of serotype for all Hi invasive disease cases.

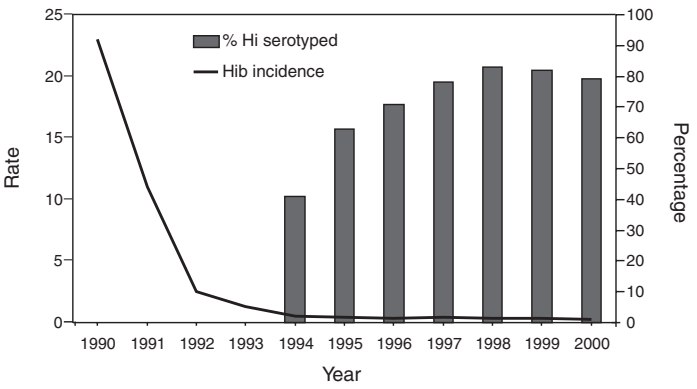
In 1991, Hi invasive disease became a nationally notifiable disease. State health agencies, the District of Columbia, and New York City provide weekly reports of provisional cases of Hi invasive disease to CDC through the National Electronic Telecommunications System for Surveillance (NETSS) and the National Bacterial Meningitis and Bacteremia Reporting System (NBMBRS). Case reports include demographic data about persons with Hi invasive disease and supplemental information (e.g., the serotype that caused the illness, type of clinical illness, outcome, and Hib vaccination history). States were contacted to obtain and confirm supplemental data for cases of Hi invasive disease in children aged <5 years with onset in 1998, 1999, and 2000. Only Hib vaccine doses given ≥14 days before illness onset were considered valid. Annual population estimates for 1998 and 1999 from the U.S. Census Bureau were used to calculate incidence rates.

CDC also coordinates the Active Bacterial Core surveillance (ABCs) system with sites in selected states. Illnesses identified as Hi invasive disease (i.e., isolation of *H. influenzae* from a normally sterile site in a resident of the surveillance

area) are reported to CDC and the various state health departments (*3*). During 1998–2000, project personnel contacted all microbiology laboratories serving acute care hospitals in each surveillance area every 2–4 weeks; specimens were sent to CDC for serotype confirmation. The population of children aged <5 years in the surveillance areas increased from 750,534 in 1989 to 2,208,625 in 2000. In 1998, the surveillance area covered three counties in the San Francisco Bay Area, five counties in Tennessee, seven counties in New York, 20 counties in Georgia, and the entire states of Connecticut, Maryland, Minnesota, and Oregon. By January 2000, the surveillance area had increased to include 15 counties in New York, 11 in Tennessee, and all of Georgia. Rates were race-adjusted to the annual U.S. population estimates.

During 1998–2000, a total of 824 Hi invasive disease cases was reported among children aged <5 years; rates were 1.4 per 100,000 children in 1998 and 1999 and 1.6 in 2000. Among children aged <5 years, serotype data were available for 219 (83%) of 265 cases in 1998, 214 (82%) of 262 cases in 1999 and 236 (79%) of 297 cases in 2000 (Figure 1). Of the 669 cases with known serotype, Hib accounted for 75 (34%) cases in 1998, 71 (33%) cases in 1999 and 51 (22%) cases in 2000; annual Hib invasive disease rates were 0.4, 0.4, and 0.3, respectively. Compared with the rate in 1990 (23 cases per 100,000), the average annual rate for 1998–2000 (0.3 cases per 100,000) represents a 99% decline. During the 3-year period, the annual average for reporting of serotype information was 81%, representing a 98% improvement from 1994 (Figure 1). By state, excluding Alaska, Hib invasive disease average annual incidence rates ranged from 0 to 2.1 per 100,000 children aged <5 years; in Alaska, the rate was 9.4 (Table 1).

FIGURE 1. Incidence rate* of *Haemophilus influenzae* type b (Hib) invasive disease and percentage of *Haemophilus influenzae* (Hi) isolates serotyped among children aged <5 years — United States, 1990–2000



*Per 100,000 persons.

TABLE 1. Number and rate* of *Haemophilus influenzae* (Hi) invasive disease among children aged <5 years†, by state and serotype — United States, 1998–2000

State	Type b		Unknown		Nontype b§	
	No.	Rate	No.	Rate	No.	Rate
Alabama	0	—	2	(0.23)	4	(0.46)
Alaska	14	(9.39)	5	(3.35)	5	(3.35)
Arizona	11	(0.96)	3	(0.26)	42	(3.66)
Arkansas	0	—	0	—	3	(0.56)
California¶	19	(0.25)	7	(0.09)	72	(0.95)
Colorado	7	(0.82)	4	(0.47)	13	(1.51)
Connecticut¶	1	(0.15)	0	—	10	(1.53)
Delaware	0	—	0	—	0	—
DC	0	—	0	—	0	—
Florida	7	(0.25)	9	(0.32)	15	(0.53)
Georgia¶	2	(0.12)	15	(0.87)	24	(1.39)
Hawaii	1	(0.41)	1	(0.41)	1	(0.41)
Idaho	2	(0.72)	1	(0.36)	2	(0.72)
Illinois	10	(0.38)	7	(0.26)	21	(0.79)
Indiana	5	(0.40)	1	(0.08)	15	(1.21)
Iowa	1	(0.18)	0	—	0	—
Kansas	1	(0.18)	1	(0.18)	0	—
Kentucky	3	(0.39)	8	(1.03)	1	(0.13)
Louisiana	0	—	8	(0.85)	4	(0.42)
Maine	2	(0.99)	0	—	0	—
Maryland¶	5	(0.48)	3	(0.29)	11	(1.06)
Massachusetts	4	(0.34)	0	—	17	(1.44)
Michigan	5	(0.25)	2	(0.10)	5	(0.25)
Minnesota¶	2	(0.21)	1	(0.10)	19	(1.98)
Mississippi	0	—	3	(0.49)	1	(0.16)
Missouri	1	—	1	(0.09)	5	(0.46)
Montana	3	(1.88)	0	—	0	—
Nebraska	0	—	0	—	3	(0.87)
Nevada	0	—	1	(0.24)	2	(0.47)
New Hampshire	4	(1.81)	0	—	4	(1.81)
New Jersey	4	(0.24)	16	(0.98)	9	(0.55)
New Mexico	4	(1.01)	4	(1.01)	23	(5.82)
New York¶	10	(0.49)	0	—	28	(1.36)
New York City	8	(0.50)	1	(0.06)	14	(0.87)
North Carolina	3	(0.19)	3	(0.19)	12	(0.75)
North Dakota	0	—	0	—	1	(0.84)
Ohio	6	(0.27)	14	(0.63)	8	(0.36)
Oklahoma	1	(0.14)	0	—	17	(2.45)
Oregon¶	5	(0.76)	0	—	11	(1.68)
Pennsylvania	12	(0.56)	2	(0.09)	4	(0.19)
Rhode Island	0	—	0	—	0	—
South Carolina	3	(0.39)	5	(0.66)	0	—
South Dakota	2	(1.34)	0	—	0	—
Tennessee¶	4	(0.36)	10	(0.91)	9	(0.82)
Texas	8	(0.16)	0	—	0	—
Utah	3	(0.48)	3	(0.48)	8	(1.28)
Vermont	2	(2.07)	0	—	4	(4.13)
Virginia	1	(0.07)	6	(0.44)	8	(0.59)
Washington	2	(0.17)	4	(0.34)	11	(0.94)
West Virginia	0	—	2	(0.66)	0	—
Wisconsin	8	(0.80)	2	(0.20)	6	(0.60)
Wyoming	1	(1.09)	0	—	0	—
Total	**197**	**(0.34)**	**155**	**(0.27)**	**472**	**(0.83)**

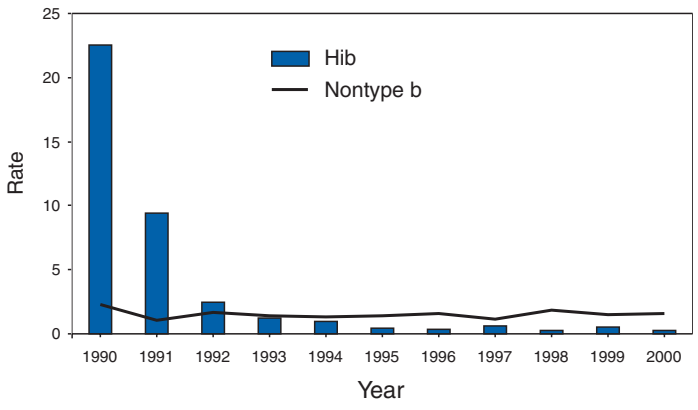
* Per 100,000 children. 1998 and 1999 (for 1999 and 2000) U.S. Census Bureau population estimates were used to calculate average annual incidence rates.
† Number of cases over the 3-year period.
§ Includes serotypes a, c, d, e, f, and nontypeable isolates.
¶ States with Active Bacterial Core surveillance (ABCs) sites for Hi invasive disease.

For nontype b Hi invasive disease, the average annual incidence rate by state ranged from 0 to 5.8 with a national average of 0.8 per 100,000 children aged <5 years (Table 1). For the 3-year period, the clinical outcome was known for 693 (84%) of the 824 Hi cases reported; 50 (7%) of the 693 patients died. Of 197 Hib cases reported, 169 (86%) had known outcome; 14 (8%) children died. By race/ethnicity, Hib invasive disease average annual incidence among children aged <5 years during 1998-2000 was 14.0 among American Indians/Alaska Natives, 1.0 among Hispanics, 0.9 among non-Hispanic whites, 0.6 among non-Hispanic blacks, and 0.4 among Asians/Pacific Islanders. Race/ethnicity data were missing for 10 (5%) Hib patients.

During 1998–2000, of 197 Hib patients, 86 (44%) were aged <6 months and had not completed the 2- or 3-dose primary Hib vaccination series. Of the 111 (56%) children who were aged ≥6 months and eligible to have completed the primary series, 19 (17%) had unknown vaccination status, 31 (28%) were unvaccinated, 22 (20%) were undervaccinated, and 39 (35%) had completed a primary series, 21 of whom received a booster dose (given at 12–15 months). Among the 14 Hib invasive disease deaths reported, 11 (79%) patients aged <6 months were unvaccinated and three (21%) patients aged ≥6 months were undervaccinated.

During 1998–2000, a total of 128 Hi invasive disease cases in children aged <5 years was reported from ABCs sites; 19 (15%) were caused by Hib, 95 (74%) by nontype b Hi, and 14 (11%) by unknown Hi serotypes. The annual race-adjusted incidence rates were 0.2, 0.6 and 0.2 per 100,000 children aged <5 years for Hib invasive disease compared with 1.8, 1.5 and 1.6 per 100,000 for nontype b Hi invasive disease in 1998, 1999, and 2000, respectively (Figure 2).

FIGURE 2. Race-adjusted incidence rate,* of *Haemophilus influenzae* type b (Hib) and nontype b† invasive disease detected through Active Bacterial Core surveillance (ABCs) among children aged < 5 Years — United States, 1990–2000



*Per 100,000 persons.
†Hi isolates with unknown serotype not included.

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Editorial Note: With widespread use of Hib conjugate vaccines beginning in 1990, the incidence of reported Hib invasive disease among children aged <5 years declined from an estimated 100 per 100,000 in the prevaccine era to a record low of 0.3 in 1996 (*2,3*). The findings in this report indicate that the incidence of invasive Hib disease remains low. During 1998–2000, although Hib remained an infrequent cause of invasive disease among children, illness and death occurred among infants aged <6 months who had not completed the 2- or 3-dose primary series of Hib vaccination and among unvaccinated or undervaccinated children; some of these cases might have been preventable. These data also suggest that primary or secondary vaccination failure occurs less frequently than failure to vaccinate. Understanding the reasons for Hib invasive disease among fully vaccinated children requires the reporting of full vaccination history (i.e., dates, dose, vaccine name, lot number, and manufacturer) and relevant medical histories (e.g., prematurity, immunosuppression, or other chronic diseases).

Localized populations with low vaccination coverage contribute to the continued circulation of Hib despite sustained national Hib vaccination coverage of >90% (*5*). In Pennsylvania, during December 1999–February 2000, eight Hib invasive disease cases occurred in unvaccinated children aged <5 years, six of whom were from communities with lower Hib vaccination coverage and higher Hib carriage rates than other groups (*6*). As in the prevaccine era, Hib invasive disease rates among American Indian/Alaska Native children remain persistently higher than in the general U.S. population (*7*), which suggests that Hib elimination will require additional characterization of colonization and disease among these high-risk populations (*7*). Attaining and maintaining high Hib vaccination coverage at the community level should reduce the Hib carriage rate among young children by decreasing exposure of susceptible infants and interrupting Hib transmission (*7*).

Because Hib vaccines protect against type b and not other Hi strains, serotyping of all Hi isolates from patients with invasive disease is necessary to monitor the vaccination program effectiveness and national progress towards Hib elimination. Serotype information is needed to measure the

sensitivity of the surveillance system and to detect the emergence of invasive disease from nontype b Hi strains (*8*). The reporting of serotype information on Hi cases among children aged <5 years has improved; however, to ensure that all Hi isolates from children aged <5 years are serotyped and to minimize false-positive results (*9*), continued promotion and standardization of the serotyping procedure by states is essential. Because of inconsistencies in Hi serotyping (*9*), until December 2002, CDC requests that state health laboratories send all Hi isolates associated with invasive disease in children aged <5 years to CDC (telephone [404] 639-3158) for serotyping.

The incidence of nontype b Hi invasive disease can be a useful indicator of the sensitivity of the surveillance system. Although Hib invasive disease in children aged <5 years declined to near-elimination levels during the last decade, the incidence of nontype b invasive disease from ABCs sites remained consistently >1 per 100,000 children aged <5 years. Adequate identification and reporting of nontype b Hi invasive disease might indicate sufficient sensitivity to readily identify cases of Hib invasive disease. States are encouraged to report invasive disease caused by all Hi strains as recommended by the Council of State and Territorial Epidemiologists and CDC (*10*).

Public health efforts to achieve and document Hib invasive disease elimination in children aged <5 years will be advanced by 1) enhanced promotion of age-appropriate Hib vaccination at the community level, 2) complete reporting of vaccination and medical histories to characterize cases of Hib suspected to be vaccine failures, 3) standardization of the serotyping procedure, and 4) ascertainment and reporting of serotype for all Hi invasive disease cases in children.

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This report is based on data contributed by state health departments to the National Notifiable Disease Surveillance System and by sites in the Active Bacterial Core surveillance (ABCs) system: L Gelling, MPH, P Daily, MPH, G Rothrock, MPH, A Reingold, MD, D Vugia, MD, State Epidemiologist, California Dept of Health Svcs. S Zansky, P Smith, MD, State Epidemiologist, New York State Health Dept. N Barrett, MS, JL Hadler, MD, State Epidemiologist, Connecticut State Dept of Health Svcs. W Baughman, MS, M Farley, MD, K McCombs, K Arnold, Georgia Dept of Human Resources, Div of Public Health. MA Pass, L Harrison, MD, J Roche, MD, State Epidemiologist, Maryland State Dept of Health and Mental Hygiene. J Rainbow, MPH, J Besser MS, R Lynfield, MD, R Danila PhD, H Hull MD, State Epidemiologist, Minnesota Dept of Health. KR Stefonek, MPH, PR Cieslak, MD, MA Kohn, MD, State Epidemiologist, Oregon Dept of Human Resources, State Health Div. W Schaffner, MD, B Barnes, Vanderbilt Univ, Nashville; A Craig, MD, State Epidemiologist, Tennessee Dept of Health.

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Notice to Readers

World Water Day, March 22, 2002

In 1992, the United Nations Conference on Environment and Development designated March 22 of each year World Water Day. This year's theme, "Water for Development," is organized by the International Atomic Energy Agency (IAEA). The objective of World Water Day is to promote activities, such as the publication and diffusion of documents and the organization of conferences and seminars, related to the conservation and development of water resources (*1*).

Approximately 1.1 billion persons lack access to potable water, and 2.4 billion persons do not have acceptable sanitation. Diarrhea accounts for approximately 4 billion episodes of illness and 2.2 million deaths every year; the greatest burden of illness occurs among children aged <5 years. Safe water, adequate sanitation, and hygiene education can reduce

diarrheal disease deaths by an estimated average of 65% and related morbidity by 26% (*2*).

In response to the need for safe drinking water, CDC, in collaboration with the CARE/CDC Health Initiative, the Rotary Club of Estes Park, Colorado, the Gangarosa International Health Foundation, the CDC Foundation, and CARE, produced *Safe Water Systems for the Developing World: A Handbook for Implementing Household-Based Water Treatment and Safe Storage Projects*, a resource for program managers, technical staff, and other personnel in organizations involved in water and sanitation projects. The Safe Water System is a water-quality intervention that uses simple, inexpensive technologies to improve water quality at the point of use. Approximately 1,000 English handbooks have been distributed; French and Spanish versions will be available later this year. CDC is developing a public health action plan for waterborne illness. A meeting to gather input for the plan from key domestic and international stakeholders will be held starting March 22, 2002, to coincide with World Water Day.

Additional information about World Water Day is available from IAEA's World-Wide Web site, http://www.waterday2002.iaea.org. Information about the Safe Water System is available at safewater@cdc.gov, telephone (404) 639-2206, and at http://www.cdc.gov/safewater.

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Notice to Readers

2002 Conference on Antimicrobial Resistance

The 2002 Conference on Antimicrobial Resistance will be held June 27–29, 2002, in Bethesda, Maryland. The conference is sponsored by the National Foundation for Infectious Diseases (NFID) in collaboration with nine agencies, institutes, and organizations involved in conducting and/or promoting research, prevention, and control of antimicrobial resistance.

The deadline for online submission of abstracts for oral and poster presentations is April 15. Program announcements and forms for abstract submission, registration, and hotel reservations are available at http://www.nfid.org/conferences/resistance02 and from NFID, 4733 Bethesda Avenue, Suite 750, Bethesda, Maryland 20814-5278; telephone (301) 656-0003, extension 19; fax (301) 907-0878; and e-mail resistance@nfid.org.

Notice to Readers

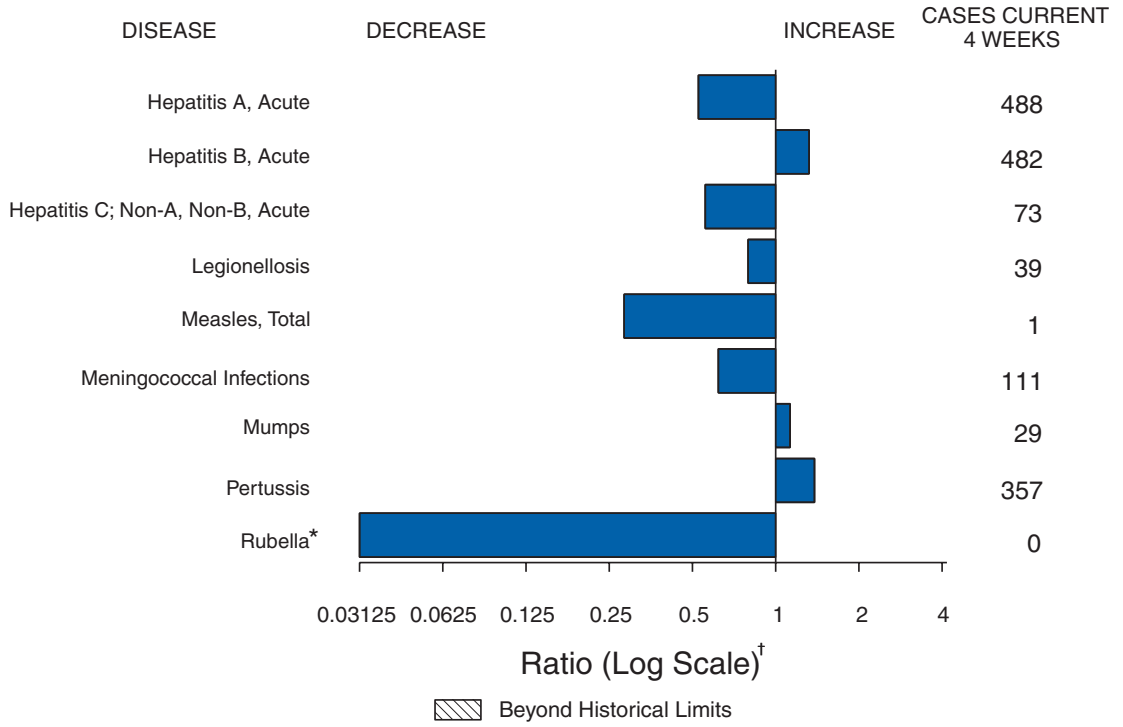
Satellite Broadcast on HIV Prevention

"Revised Recommendations for HIV Screening of Pregnant Women," a satellite broadcast, is scheduled for Thursday, April 25, 2002, at 1 p.m., EST. The 2-hour forum is cosponsored by CDC and the Public Health Training Network, and describes CDC's revised recommendations for HIV screening of pregnant women (*1*). Presentations and interviews will provide an update on implementation issues for the revised recommendations and identify special populations at high risk of perinatal transmission of HIV. This broadcast is designed for community-based organizations, service providers, and other persons in contact with women of childbearing age about any health matters such as prenatal care, primary care, and substance abuse. Viewers can fax questions and comments before and during the broadcast. Additional information is available at http://www.cdcnpin.org/broadcast and through CDC's Fax Information System, telephone (888) 232-3299, by entering document number 130036 and a return fax number. Organizations setting up viewing sites are encouraged to register online or by fax as early as possible so that viewers can access information about viewing locations when visiting the website or calling the information line.

Reference

1. CDC. Revised recommendations for HIV screening of pregnant women. MMWR 2001;50(No. RR-19).

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending March 16, 2002, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 11 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending March 16, 2002 (11th Week)*

		Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax		-	-	Encephalitis: West Nile†	5	-
Botulism:	foodborne	5	5	Hansen disease (leprosy)†	10	23
	infant	11	23	Hantavirus pulmonary syndrome†	-	2
	other (wound & unspecified)	3	1	Hemolytic uremic syndrome, postdiarrheal†	21	18
Brucellosis†		14	15	HIV infection, pediatric†§	31	40
Chancroid		16	8	Plague	-	-
Cholera		1	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis†		19	35	Psittacosis†	8	3
Diphtheria		-	-	Q fever†	5	1
Ehrlichiosis:	human granulocytic (HGE)†	10	19	Rabies, human	-	-
	human monocytic (HME)†	2	4	Streptococcal toxic-shock syndrome†	8	20
	other and unspecified	-	-	Tetanus	2	5
Encephalitis:	California serogroup viral†	8	1	Toxic-shock syndrome	23	34
	eastern equine†	-	-	Trichinosis	3	5
	Powassan†	-	-	Tularemia†	5	3
	St. Louis†	-	-	Yellow fever	-	-
	western equine†	-	-			

-:No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update February 24, 2002.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7		*Escherichia coli* Shiga Toxin Positive, Serogroup non-O157	
	Cum. 2002§	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	6,546	8,275	133,973	155,322	367	352	200	205	11	9
NEW ENGLAND	213	270	4,423	4,618	15	8	12	18	1	2
Maine	1	3	267	265	-	-	-	3	-	-
N.H.	4	12	307	241	3	-	-	2	-	-
Vt.	4	9	152	126	1	3	-	1	-	-
Mass.	137	191	2,218	1,832	2	2	6	12	1	1
R.I.	23	22	568	632	3	1	2	-	-	-
Conn.	44	33	911	1,522	6	2	4	-	-	1
MID. ATLANTIC	1,403	2,900	11,865	14,757	26	47	5	22	-	-
Upstate N.Y.	75	516	548	2,214	3	8	4	10	-	-
N.Y. City	874	1,722	5,826	5,741	18	24	-	1	-	-
N.J.	269	378	620	2,090	-	2	1	11	-	-
Pa.	185	284	4,871	4,712	5	13	N	N	-	-
E.N. CENTRAL	671	496	19,956	30,144	108	123	71	43	-	-
Ohio	156	69	3,044	8,306	35	25	13	16	-	-
Ind.	85	44	3,464	3,232	11	11	6	7	-	-
Ill.	333	230	5,006	9,012	11	10	16	8	-	-
Mich.	66	136	6,575	6,070	21	24	16	4	-	-
Wis.	31	17	1,867	3,524	30	53	20	8	-	-
W.N. CENTRAL	105	123	6,317	8,103	26	13	31	20	3	-
Minn.	20	27	1,652	1,795	9	-	10	8	3	-
Iowa	23	15	461	713	4	4	9	3	-	-
Mo.	36	38	1,963	2,854	9	6	8	4	-	-
N. Dak.	-	1	154	214	-	-	-	-	-	-
S. Dak.	1	-	459	392	2	-	1	1	-	-
Nebr.	12	18	314	762	-	3	-	-	-	-
Kans.	13	24	1,314	1,373	2	-	3	4	-	-
S. ATLANTIC	2,041	2,156	27,066	29,567	85	74	32	27	5	5
Del.	46	37	580	645	1	-	1	-	-	-
Md.	255	129	2,426	3,144	3	15	-	-	-	-
D.C.	87	166	646	664	1	3	-	-	-	-
Va.	160	196	3,183	3,611	1	4	3	6	-	1
W. Va.	13	10	465	466	1	-	-	1	-	-
N.C.	155	78	3,826	4,191	11	10	6	13	-	-
S.C.	148	193	2,762	4,008	1	1	-	1	-	-
Ga.	476	187	5,788	6,373	46	27	18	3	4	4
Fla.	701	1,160	7,390	6,465	20	14	4	3	1	-
E.S. CENTRAL	278	364	10,278	10,387	20	6	3	8	-	-
Ky.	31	51	1,764	1,812	1	-	-	-	-	-
Tenn.	133	136	3,366	3,199	6	1	3	4	-	-
Ala.	57	94	3,145	2,741	12	2	-	3	-	-
Miss.	57	83	2,003	2,635	1	3	-	1	-	-
W.S. CENTRAL	752	726	21,847	22,861	4	7	-	24	-	-
Ark.	35	45	1,365	1,849	2	2	-	-	-	-
La.	192	197	3,945	3,714	1	3	-	-	-	-
Okla.	35	35	1,888	2,079	1	1	-	5	-	-
Tex.	490	449	14,649	15,219	-	1	-	19	-	-
MOUNTAIN	208	277	8,445	8,965	22	20	15	10	1	1
Mont.	4	3	442	371	-	-	2	-	-	-
Idaho	4	5	504	394	5	2	1	2	-	-
Wyo.	1	-	181	175	1	-	-	-	1	-
Colo.	35	81	1,132	2,675	7	12	2	4	-	1
N. Mex.	7	18	1,315	1,314	1	3	2	-	-	-
Ariz.	92	81	2,433	2,689	4	1	3	4	-	-
Utah	13	21	1,247	237	2	2	3	-	-	-
Nev.	52	68	1,191	1,110	2	-	2	-	-	-
PACIFIC	875	963	23,776	25,920	61	54	31	33	1	1
Wash.	86	113	2,880	2,876	15	U	5	4	-	-
Oreg.	92	38	1,344	1,245	7	6	7	1	1	1
Calif.	686	798	18,111	20,371	39	48	18	24	-	-
Alaska	2	2	710	540	-	-	-	-	-	-
Hawaii	9	12	731	888	-	-	1	4	-	-
Guam	1	6	-	-	-	-	N	N	-	-
P.R.	166	196	-	997	-	-	-	-	-	-
V.I.	46	1	-	36	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	37	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 year 2001 and 2002 are provisional and cumulative (year-to-date).

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

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 3, 2002.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	*Escherichia coli* Shiga Toxin Positive, Not Serogrouped		Giardiasis	Gonorrhea		*Haemophilus influenzae*, Invasive			
						All Ages, All Serotypes		Age <5 Years Serotype B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1	3	2,137	58,925	72,229	300	345	2	6
NEW ENGLAND	-	-	235	1,328	1,267	28	10	-	1
Maine	-	-	35	15	34	1	-	-	-
N.H.	-	-	13	26	28	4	-	-	-
Vt.	-	-	20	24	19	2	-	-	-
Mass.	-	-	95	763	543	14	10	-	1
R.I.	-	-	18	191	155	-	-	-	-
Conn.	-	-	54	309	488	7	-	-	-
MID. ATLANTIC	-	-	331	5,169	7,276	31	57	1	-
Upstate N.Y.	-	-	41	337	1,387	8	9	1	-
N.Y. City	-	-	186	2,503	2,519	16	18	-	-
N.J.	-	-	-	402	979	4	24	-	-
Pa.	-	-	104	1,927	2,391	3	6	-	-
E.N. CENTRAL	1	2	474	10,100	15,230	36	55	-	1
Ohio	1	2	187	1,758	4,438	25	20	-	1
Ind.	-	-	-	1,529	1,444	6	5	-	-
Ill.	-	-	72	2,994	4,687	-	20	-	-
Mich.	-	-	158	3,286	3,380	2	3	-	-
Wis.	-	-	57	533	1,281	3	7	-	-
W.N. CENTRAL	-	-	240	2,853	3,454	10	5	-	-
Minn.	-	-	84	521	590	7	-	-	-
Iowa	-	-	52	134	214	1	-	-	-
Mo.	-	-	65	1,443	1,682	2	5	-	-
N. Dak.	-	-	-	10	8	-	-	-	-
S. Dak.	-	-	13	56	43	-	-	-	-
Nebr.	-	-	-	118	289	-	-	-	-
Kans.	-	-	26	571	628	-	-	-	-
S. ATLANTIC	-	-	355	16,280	18,829	87	115	-	1
Del.	-	-	10	365	345	-	-	-	-
Md.	-	-	19	1,332	1,864	16	28	-	-
D.C.	-	-	11	534	658	-	-	-	-
Va.	-	-	16	2,085	2,023	7	9	-	-
W. Va.	-	-	4	186	99	1	4	-	1
N.C.	-	-	-	2,944	3,501	10	16	-	-
S.C.	-	-	3	1,595	3,225	3	2	-	-
Ga.	-	-	115	3,223	3,516	29	28	-	-
Fla.	-	-	177	4,016	3,598	21	28	-	-
E.S. CENTRAL	-	1	59	5,816	6,826	14	16	1	-
Ky.	-	1	-	688	732	1	-	-	-
Tenn.	-	-	22	1,868	2,182	8	9	-	-
Ala.	-	-	37	2,060	2,268	5	6	1	-
Miss.	-	-	-	1,200	1,644	-	1	-	-
W.S. CENTRAL	-	-	14	9,968	11,277	16	8	-	-
Ark.	-	-	14	873	1,185	1	-	-	-
La.	-	-	-	2,533	2,567	-	2	-	-
Okla.	-	-	-	855	1,018	15	6	-	-
Tex.	-	-	-	5,707	6,507	-	-	-	-
MOUNTAIN	-	-	242	2,177	2,165	44	57	-	2
Mont.	-	-	12	26	19	-	-	-	-
Idaho	-	-	6	24	18	1	1	-	-
Wyo.	-	-	2	14	15	1	-	-	-
Colo.	-	-	87	762	752	11	10	-	-
N. Mex.	-	-	25	251	221	9	10	-	-
Ariz.	-	-	42	641	735	17	32	-	1
Utah	-	-	38	91	24	3	1	-	-
Nev.	-	-	30	368	381	2	3	-	1
PACIFIC	-	-	187	5,234	5,905	34	22	-	1
Wash.	-	-	42	624	644	-	-	-	-
Oreg.	-	-	99	190	235	24	1	-	-
Calif.	-	-	-	4,172	4,818	-	15	-	1
Alaska	-	-	18	136	62	1	1	-	-
Hawaii	-	-	28	112	146	9	5	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	253	-	-	-	-
V.I.	-	-	-	-	5	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	3	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	*Haemophilus influenzae*, Invasive, Age <5 Years, Non-Serotype B		*Haemophilus influenzae*, Invasive, Age <5 Years, Unknown Serotype		Hepatitis (Viral, Acute), By Type, A		Hepatitis (Viral, Acute), By Type, B		Hepatitis (Viral, Acute), By Type, C; Non-A, Non-B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	53	66	2	5	1,556	2,680	1,059	1,292	271	1,107
NEW ENGLAND	5	4	-	-	79	92	30	26	4	16
Maine	-	-	-	-	3	1	1	1	-	-
N.H.	-	-	-	-	3	2	3	3	-	-
Vt.	-	-	-	-	-	2	2	1	4	3
Mass.	3	4	-	-	38	36	23	4	-	13
R.I.	-	-	-	-	4	3	1	4	-	-
Conn.	2	-	-	-	31	48	-	13	-	-
MID. ATLANTIC	4	9	-	-	145	275	198	306	61	535
Upstate N.Y.	1	-	-	-	4	32	5	16	1	8
N.Y. City	3	4	-	-	79	91	127	139	-	-
N.J.	-	1	-	-	13	110	25	101	58	511
Pa.	-	4	-	-	49	42	41	50	2	16
E.N. CENTRAL	4	12	-	-	185	665	165	131	24	69
Ohio	3	3	-	-	66	58	24	26	4	4
Ind.	1	-	-	-	9	12	4	3	-	-
Ill.	-	7	-	-	46	485	11	9	1	20
Mich.	-	-	-	-	48	91	126	93	19	45
Wis.	-	2	-	-	16	19	-	-	-	-
W.N. CENTRAL	1	-	1	1	69	112	44	39	92	261
Minn.	1	-	-	-	5	5	2	1	-	-
Iowa	-	-	-	-	21	9	5	5	1	-
Mo.	-	-	1	1	13	35	31	24	91	259
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	2	1	-	1	-	-
Nebr.	-	-	-	-	-	17	-	4	-	1
Kans.	-	-	-	-	28	45	6	4	-	1
S. ATLANTIC	16	19	-	2	455	374	303	296	20	17
Del.	-	-	-	-	2	1	1	4	3	1
Md.	-	1	-	-	71	55	20	27	3	4
D.C.	-	-	-	-	20	12	2	3	-	-
Va.	2	4	-	-	11	30	26	24	-	-
W. Va.	-	-	-	-	5	-	6	3	-	-
N.C.	1	1	-	2	75	23	40	51	3	4
S.C.	1	-	-	-	13	13	7	1	1	2
Ga.	6	7	-	-	67	137	137	123	1	1
Fla.	6	6	-	-	191	103	64	60	9	5
E.S. CENTRAL	4	2	-	1	36	65	32	89	28	17
Ky.	-	-	-	-	13	8	7	14	1	1
Tenn.	2	1	-	-	-	31	-	28	8	13
Ala.	2	-	-	1	7	21	12	25	2	-
Miss.	-	1	-	-	16	5	13	22	17	3
W.S. CENTRAL	4	1	-	-	24	470	53	59	1	151
Ark.	-	-	-	-	11	16	26	17	-	1
La.	-	-	-	-	3	19	2	22	1	68
Okla.	4	1	-	-	9	38	1	17	-	1
Tex.	-	-	-	-	1	397	24	3	-	81
MOUNTAIN	10	8	1	1	147	193	83	114	17	14
Mont.	-	-	-	-	5	4	2	1	-	-
Idaho	-	-	-	-	-	23	-	4	-	1
Wyo.	-	-	-	-	3	1	5	-	4	2
Colo.	1	-	-	-	25	24	20	24	9	2
N. Mex.	4	4	-	1	4	6	10	35	-	6
Ariz.	4	4	-	-	81	93	35	35	-	-
Utah	-	-	-	-	12	16	5	4	-	-
Nev.	1	-	1	-	17	26	6	11	4	3
PACIFIC	5	11	-	-	416	434	151	232	24	27
Wash.	-	-	-	-	22	15	9	15	2	7
Oreg.	4	-	-	-	30	4	29	6	7	1
Calif.	-	10	-	-	359	404	111	203	15	19
Alaska	1	-	-	-	5	10	2	2	-	-
Hawaii	-	1	-	-	-	1	-	6	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	12	26	6	41	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	4	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	119	157	63	82	445	911	187	243	1†	40§
NEW ENGLAND	5	2	8	8	30	158	12	21	-	4
Maine	-	-	1	-	-	-	1	-	-	-
N.H.	1	-	2	-	10	2	4	1	-	-
Vt.	-	1	-	-	1	1	-	-	-	1
Mass.	2	1	3	6	16	47	2	10	-	3
R.I.	-	-	-	-	3	-	-	-	-	-
Conn.	2	-	2	2	-	108	5	10	-	-
MID. ATLANTIC	12	33	6	13	294	613	31	59	-	3
Upstate N.Y.	-	5	1	3	145	156	3	7	-	2
N.Y. City	-	3	2	4	20	7	18	33	-	-
N.J.	1	6	-	4	25	110	6	12	-	-
Pa.	11	19	3	2	104	340	4	7	-	1
E.N. CENTRAL	47	51	11	11	13	26	16	43	-	3
Ohio	29	20	6	1	12	4	7	5	-	-
Ind.	3	3	-	-	1	-	1	7	-	-
Ill.	-	8	-	3	-	3	-	12	-	3
Mich.	13	12	3	5	-	-	7	12	-	-
Wis.	2	8	2	2	U	19	1	7	-	-
W.N. CENTRAL	4	10	1	2	10	9	16	6	-	2
Minn.	1	1	-	-	2	7	7	1	-	-
Iowa	-	2	-	-	3	-	2	1	-	-
Mo.	2	4	1	1	5	2	4	3	-	2
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	1	-	-	-	-	-	-	-	-	-
Nebr.	-	2	-	-	-	-	-	-	-	-
Kans.	-	1	-	1	-	-	3	1	-	-
S. ATLANTIC	27	22	9	8	69	70	73	52	1	3
Del.	3	-	-	-	5	5	1	1	-	-
Md.	4	6	1	1	41	56	16	19	-	3
D.C.	-	1	-	-	3	3	2	4	-	-
Va.	2	3	1	1	-	3	4	8	-	-
W. Va.	N	N	-	1	-	1	-	-	-	-
N.C.	3	2	1	-	5	2	6	1	-	-
S.C.	3	-	2	-	1	-	2	1	-	-
Ga.	3	2	3	2	-	-	32	10	-	-
Fla.	9	8	1	3	14	-	10	8	1	-
E.S. CENTRAL	3	11	3	4	1	2	3	8	-	-
Ky.	1	5	-	1	-	2	-	2	-	-
Tenn.	-	2	2	2	1	-	1	3	-	-
Ala.	2	2	1	1	-	-	1	3	-	-
Miss.	-	2	-	-	-	-	1	-	-	-
W.S. CENTRAL	-	2	2	9	2	19	2	3	-	1
Ark.	-	-	-	1	-	-	-	-	-	-
La.	-	1	-	-	1	1	2	1	-	-
Okla.	-	-	2	-	-	-	-	1	-	-
Tex.	-	1	-	8	1	18	-	1	-	1
MOUNTAIN	12	7	8	5	5	1	7	13	-	1
Mont.	1	-	-	-	-	-	-	1	-	-
Idaho	2	-	-	-	-	-	-	1	-	1
Wyo.	3	-	-	-	-	-	-	-	-	-
Colo.	3	3	2	1	2	-	2	6	-	-
N. Mex.	1	1	-	1	1	-	-	1	-	-
Ariz.	-	2	4	1	2	-	2	1	-	-
Utah	2	-	2	-	-	-	2	2	-	-
Nev.	-	1	-	2	-	1	1	1	-	-
PACIFIC	9	19	15	22	21	13	27	38	-	23
Wash.	-	4	1	-	-	-	1	1	-	15
Oreg.	N	N	1	2	1	1	-	2	-	2
Calif.	9	15	13	20	20	12	23	32	-	4
Alaska	-	-	-	-	-	-	1	1	-	-
Hawaii	-	-	-	-	N	N	2	2	-	2
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	2	-	-	N	N	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† This case of measles was imported from another country.
§ Of 40 cases reported, 27 were indigenous and 13 were imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	344	778	52	35	854	1,190	652	1,102
NEW ENGLAND	31	44	3	-	150	147	118	92
Maine	2	-	-	-	3	-	5	14
N.H.	4	3	2	-	1	16	1	1
Vt.	3	4	-	-	26	21	24	21
Mass.	18	25	1	-	120	104	37	23
R.I.	2	-	-	-	-	-	4	9
Conn.	2	12	-	-	-	6	47	24
MID. ATLANTIC	23	91	6	2	29	85	32	72
Upstate N.Y.	1	19	-	1	13	56	11	-
N.Y. City	4	16	1	1	5	8	5	1
N.J.	5	36	1	-	-	-	-	24
Pa.	13	20	4	-	11	21	16	47
E.N. CENTRAL	51	86	7	4	147	139	2	8
Ohio	24	26	3	1	99	96	1	-
Ind.	10	1	-	-	12	3	1	1
Ill.	-	21	2	3	17	8	-	-
Mich.	12	24	2	-	15	14	-	3
Wis.	5	14	-	-	4	18	-	4
W.N. CENTRAL	31	40	6	1	122	36	55	64
Minn.	5	-	-	-	30	-	5	12
Iowa	5	11	-	-	43	6	6	12
Mo.	15	16	3	-	30	18	1	4
N. Dak.	-	2	-	-	-	-	-	11
S. Dak.	2	2	-	-	5	2	16	10
Nebr.	-	2	-	-	-	-	-	-
Kans.	4	7	3	1	14	10	27	15
S. ATLANTIC	65	132	7	3	77	48	329	372
Del.	1	-	-	-	1	-	3	-
Md.	1	17	1	2	9	10	38	74
D.C.	-	-	-	-	-	-	-	-
Va.	8	12	2	1	21	6	100	67
W. Va.	-	4	-	-	1	1	25	30
N.C.	10	33	1	-	11	15	101	108
S.C.	10	8	1	-	18	6	15	18
Ga.	9	23	2	-	8	6	47	41
Fla.	26	35	-	-	8	4	-	34
E.S. CENTRAL	19	47	4	-	27	25	27	112
Ky.	2	8	1	-	8	8	6	3
Tenn.	6	16	1	-	18	11	16	106
Ala.	9	17	1	-	1	3	5	3
Miss.	2	6	1	-	-	3	-	-
W.S. CENTRAL	16	169	4	2	81	30	22	262
Ark.	7	7	-	1	5	3	-	-
La.	2	31	-	1	-	-	-	2
Okla.	6	11	-	-	9	1	22	15
Tex.	1	120	4	-	67	26	-	245
MOUNTAIN	34	32	3	4	131	518	27	51
Mont.	1	-	-	-	2	3	-	5
Idaho	-	3	1	-	20	128	-	-
Wyo.	-	-	-	1	3	-	1	15
Colo.	11	11	-	1	70	117	-	-
N. Mex.	1	5	-	2	19	13	-	1
Ariz.	10	6	-	-	10	250	26	30
Utah	4	4	2	-	6	7	-	-
Nev.	7	3	-	-	1	-	-	-
PACIFIC	74	137	12	19	90	162	40	69
Wash.	12	21	-	-	56	14	-	-
Oreg.	16	2	N	N	12	2	-	-
Calif.	42	108	12	11	20	138	22	45
Alaska	1	1	-	1	2	-	18	24
Hawaii	3	5	-	7	-	8	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	1	1	-	-	-	1	14	22
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.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	Rocky Mountain Spotted Fever		Rubella				Salmonellosis	
			Rubella		Congenital Rubella			
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	56	17	-	3	-	-	4,372	5,052
NEW ENGLAND	-	-	-	-	-	-	249	317
Maine	-	-	-	-	-	-	41	13
N.H.	-	-	-	-	-	-	9	21
Vt.	-	-	-	-	-	-	11	16
Mass.	-	-	-	-	-	-	134	210
R.I.	-	-	-	-	-	-	5	11
Conn.	-	-	-	-	-	-	49	46
MID. ATLANTIC	4	1	-	2	-	-	367	793
Upstate N.Y.	-	-	-	1	-	-	33	124
N.Y. City	-	-	-	1	-	-	176	186
N.J.	-	-	-	-	-	-	49	289
Pa.	4	1	-	-	-	-	109	194
E.N. CENTRAL	3	2	-	1	-	-	757	661
Ohio	3	-	-	-	-	-	273	186
Ind.	-	1	-	-	-	-	48	42
Ill.	-	1	-	1	-	-	237	207
Mich.	-	-	-	-	-	-	135	120
Wis.	-	-	-	-	-	-	64	106
W.N. CENTRAL	5	3	-	-	-	-	371	281
Minn.	-	-	-	-	-	-	77	92
Iowa	-	-	-	-	-	-	58	39
Mo.	5	3	-	-	-	-	178	71
N. Dak.	-	-	-	-	-	-	-	1
S. Dak.	-	-	-	-	-	-	18	21
Nebr.	-	-	-	-	-	-	-	17
Kans.	-	-	-	-	-	-	40	40
S. ATLANTIC	41	7	-	-	-	-	1,211	1,168
Del.	-	-	-	-	-	-	9	13
Md.	4	2	-	-	-	-	81	119
D.C.	-	-	-	-	-	-	15	15
Va.	1	-	-	-	-	-	91	105
W. Va.	-	-	-	-	-	-	5	3
N.C.	27	4	-	-	-	-	197	205
S.C.	4	1	-	-	-	-	66	121
Ga.	4	-	-	-	-	-	368	339
Fla.	1	-	-	-	-	-	379	248
E.S. CENTRAL	3	3	-	-	-	-	264	276
Ky.	-	-	-	-	-	-	34	48
Tenn.	3	2	-	-	-	-	83	69
Ala.	-	1	-	-	-	-	93	105
Miss.	-	-	-	-	-	-	54	54
W.S. CENTRAL	-	-	-	-	-	-	102	540
Ark.	-	-	-	-	-	-	49	37
La.	-	-	-	-	-	-	1	118
Okla.	-	-	-	-	-	-	50	21
Tex.	-	-	-	-	-	-	2	364
MOUNTAIN	-	1	-	-	-	-	334	293
Mont.	-	-	-	-	-	-	5	9
Idaho	-	1	-	-	-	-	18	12
Wyo.	-	-	-	-	-	-	11	11
Colo.	-	-	-	-	-	-	97	79
N. Mex.	-	-	-	-	-	-	50	33
Ariz.	-	-	-	-	-	-	83	103
Utah	-	-	-	-	-	-	30	31
Nev.	-	-	-	-	-	-	40	15
PACIFIC	-	-	-	-	-	-	717	723
Wash.	-	-	-	-	-	-	29	52
Oreg.	-	-	-	-	-	-	55	11
Calif.	-	-	-	-	-	-	576	581
Alaska	-	-	-	-	-	-	14	9
Hawaii	-	-	-	-	-	-	43	70
Guam	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	22	157
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	2	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		*Streptococcus pneumoniae*, Drug Resistant, Invasive		*Streptococcus pneumoniae*, Invasive (<5 Years)	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	2,238	2,624	729	925	474	776	48	40
NEW ENGLAND	44	38	35	34	1	3	14	1
Maine	2	-	7	6	-	-	-	-
N.H.	3	-	12	4	-	-	-	-
Vt.	-	-	1	5	1	3	14	1
Mass.	35	30	15	19	-	-	-	-
R.I.	-	-	-	-	-	-	-	-
Conn.	4	8	-	-	-	-	-	-
MID. ATLANTIC	88	325	67	171	3	40	2	28
Upstate N.Y.	5	87	11	56	3	39	2	28
N.Y. City	60	93	30	63	U	U	-	-
N.J.	1	86	17	46	-	-	-	-
Pa.	22	59	9	6	-	1	-	-
E.N. CENTRAL	322	378	117	222	30	47	12	10
Ohio	195	83	49	53	-	-	1	-
Ind.	12	54	5	-	30	47	8	10
Ill.	62	128	1	78	-	-	-	-
Mich.	36	75	62	75	-	-	3	-
Wis.	17	38	-	16	-	-	-	-
W.N. CENTRAL	202	290	54	59	80	10	5	1
Minn.	31	132	21	-	42	-	5	-
Iowa	20	39	-	-	-	-	-	-
Mo.	31	62	17	26	1	2	-	-
N. Dak.	-	9	-	2	-	1	-	1
S. Dak.	100	4	3	2	1	-	-	-
Nebr.	-	19	-	8	-	3	-	-
Kans.	20	25	13	21	36	4	-	-
S. ATLANTIC	926	385	168	185	303	540	15	-
Del.	4	2	-	1	3	-	-	-
Md.	80	21	16	13	-	-	-	-
D.C.	13	13	3	-	4	2	13	-
Va.	205	22	14	37	-	-	-	-
W. Va.	2	3	-	8	6	13	-	-
N.C.	60	91	43	25	-	-	-	-
S.C.	10	22	12	2	53	85	2	-
Ga.	399	95	50	66	101	208	-	-
Fla.	153	116	30	33	136	232	-	-
E.S. CENTRAL	156	180	28	25	41	93	-	-
Ky.	29	61	4	10	4	10	-	-
Tenn.	14	19	24	15	37	82	-	-
Ala.	62	37	-	-	-	1	-	-
Miss.	51	63	-	-	-	-	-	-
W.S. CENTRAL	70	470	12	108	2	30	-	-
Ark.	24	87	-	-	2	9	-	-
La.	4	53	-	-	-	21	-	-
Okla.	41	2	11	15	-	-	-	-
Tex.	1	328	1	93	-	-	-	-
MOUNTAIN	87	146	108	92	14	12	-	-
Mont.	-	-	-	-	-	-	-	-
Idaho	2	5	1	1	-	-	-	-
Wyo.	1	-	3	1	7	-	-	-
Colo.	23	29	72	51	-	-	-	-
N. Mex.	12	29	32	28	7	12	-	-
Ariz.	35	71	-	10	-	-	-	-
Utah	7	4	-	1	-	-	-	-
Nev.	7	8	-	-	-	-	-	-
PACIFIC	343	412	140	29	-	1	-	-
Wash.	12	39	26	-	-	-	-	-
Oreg.	27	3	-	-	-	-	-	-
Calif.	291	360	98	16	-	-	-	-
Alaska	1	1	-	-	-	-	-	-
Hawaii	12	9	16	13	-	1	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	1	6	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	-	-	U	U
C.N.M.I.	-	U	-	U	-	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
*Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 16, 2002, and March 17, 2001 (11th Week)*

Reporting Area	Syphilis				Tuberculosis		Typhoid Fever	
	Primary & Secondary		Congenital†					
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1,090	1,091	2	96	1,197	1,855	39	60
NEW ENGLAND	13	4	-	-	54	68	3	4
Maine	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	3	6	-	-
Vt.	-	-	-	-	-	1	-	-
Mass.	8	1	-	-	23	34	2	4
R.I.	2	-	-	-	7	6	-	-
Conn.	3	3	-	-	21	21	1	-
MID. ATLANTIC	100	88	-	15	243	279	7	21
Upstate N.Y.	-	4	-	10	8	-	2	4
N.Y. City	58	53	-	-	194	155	5	2
N.J.	23	12	-	5	-	79	-	15
Pa.	19	19	-	-	41	45	-	-
E.N. CENTRAL	219	172	-	18	171	170	7	3
Ohio	37	14	-	1	33	33	3	1
Ind.	10	32	-	2	19	15	1	-
Ill.	50	63	-	13	79	79	-	1
Mich.	119	57	-	2	34	26	2	1
Wis.	3	6	-	-	6	17	1	-
W.N. CENTRAL	11	20	-	2	72	63	-	4
Minn.	3	11	-	-	37	34	-	-
Iowa	-	-	-	-	-	9	-	-
Mo.	3	5	-	1	30	14	-	4
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	5	1	-	-
Nebr.	3	-	-	-	-	5	-	-
Kans.	2	4	-	1	-	-	-	-
S. ATLANTIC	277	397	-	25	235	324	8	10
Del.	4	3	-	-	-	-	-	-
Md.	13	58	-	1	13	26	-	3
D.C.	10	8	-	1	-	16	-	-
Va.	7	31	-	-	7	42	-	1
W. Va.	-	-	-	-	6	7	-	-
N.C.	73	102	-	2	41	22	-	1
S.C.	28	55	-	7	21	32	-	-
Ga.	35	49	-	5	27	62	5	3
Fla.	107	91	-	9	120	117	3	2
E.S. CENTRAL	132	118	-	6	107	132	-	-
Ky.	14	9	-	-	18	14	-	-
Tenn.	51	64	-	3	41	42	-	-
Ala.	49	23	-	2	38	56	-	-
Miss.	18	22	-	1	10	20	-	-
W.S. CENTRAL	156	154	2	16	27	315	-	4
Ark.	6	12	-	2	9	23	-	-
La.	34	27	-	-	-	-	-	-
Okla.	14	19	-	1	18	8	-	-
Tex.	102	96	2	13	-	284	-	4
MOUNTAIN	51	40	-	4	36	76	3	2
Mont.	-	-	-	-	-	-	-	1
Idaho	1	-	-	-	-	4	-	-
Wyo.	-	-	-	-	1	-	-	-
Colo.	-	3	-	-	8	20	2	-
N. Mex.	9	4	-	-	7	8	-	-
Ariz.	38	26	-	4	12	23	-	-
Utah	3	6	-	-	6	4	1	-
Nev.	-	1	-	-	2	17	-	1
PACIFIC	131	98	-	10	252	428	11	12
Wash.	11	13	-	-	42	38	-	-
Oreg.	4	2	-	-	13	15	2	-
Calif.	115	80	-	10	156	334	9	11
Alaska	-	-	-	-	18	11	-	-
Hawaii	1	3	-	-	23	30	-	1
Guam	-	-	-	-	-	-	-	-
P.R.	-	77	-	2	-	11	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	11	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE III. Deaths in 122 U.S. cities,* week ending March16, 2002 (11th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	567	418	94	36	7	12	67
Boston, Mass.	172	113	33	16	4	6	24
Bridgeport, Conn.	35	27	4	3	-	1	1
Cambridge, Mass.	14	14	-	-	-	-	2
Fall River, Mass.	33	30	2	1	-	-	3
Hartford, Conn.	48	37	8	2	1	-	-
Lowell, Mass.	28	25	2	1	-	-	1
Lynn, Mass.	13	10	3	-	-	-	2
New Bedford, Mass.	U	U	U	U	U	U	U
New Haven, Conn.	53	34	15	1	1	2	14
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	U	U	U	U	U	U	U
Springfield, Mass.	48	28	14	3	1	2	6
Waterbury, Conn.	35	32	1	2	-	-	3
Worcester, Mass.	88	68	12	7	-	1	11
MID. ATLANTIC	2,294	1,647	436	140	38	33	169
Albany, N.Y.	60	45	9	4	1	1	10
Allentown, Pa.	19	15	4	-	-	-	-
Buffalo, N.Y.	118	92	17	4	4	1	16
Camden, N.J.	35	24	6	1	3	1	5
Elizabeth, N.J.	17	11	3	3	-	-	1
Erie, Pa.	59	54	4	-	-	1	9
Jersey City, N.J.	U	U	U	U	U	U	U
New York City, N.Y.	1,176	802	265	78	18	13	52
Newark, N.J.	U	U	U	U	U	U	U
Paterson, N.J.	27	22	3	2	-	-	2
Philadelphia, Pa.	359	251	62	27	9	10	26
Pittsburgh, Pa.§	40	22	10	3	1	4	1
Reading, Pa.	19	17	1	1	-	-	1
Rochester, N.Y.	158	127	22	8	-	1	18
Schenectady, N.Y.	23	17	5	1	-	-	3
Scranton, Pa.	28	22	4	2	-	-	5
Syracuse, N.Y.	86	71	12	2	-	1	16
Trenton, N.J.	45	35	6	2	2	-	3
Utica, N.Y.	25	20	3	2	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,786	1,272	318	107	41	48	159
Akron, Ohio	63	51	11	-	1	-	10
Canton, Ohio	27	21	4	1	1	-	5
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	U	U	U	U	U	U	U
Cleveland, Ohio	151	97	34	7	2	11	12
Columbus, Ohio	220	164	35	13	2	6	24
Dayton, Ohio	136	114	18	4	-	-	12
Detroit, Mich.	198	117	51	19	5	6	17
Evansville, Ind.	61	47	12	2	-	-	6
Fort Wayne, Ind.	67	54	4	5	4	-	2
Gary, Ind.	19	10	7	-	2	-	1
Grand Rapids, Mich.	55	34	13	2	1	5	6
Indianapolis, Ind.	231	149	46	16	11	9	20
Lansing, Mich.	40	34	3	3	-	-	9
Milwaukee, Wis.	146	104	23	12	2	5	11
Peoria, Ill.	52	38	9	5	-	-	3
Rockford, Ill.	49	38	5	3	3	-	4
South Bend, Ind.	71	53	8	6	4	-	8
Toledo, Ohio	113	77	22	8	1	5	5
Youngstown, Ohio	87	70	13	1	2	1	4
W.N. CENTRAL	490	367	83	19	12	9	56
Des Moines, Iowa	65	51	12	2	-	-	12
Duluth, Minn.	U	U	U	U	U	U	U
Kansas City, Kans.	23	11	7	2	3	-	1
Kansas City, Mo.	97	72	16	4	4	1	5
Lincoln, Nebr.	42	33	6	2	-	1	4
Minneapolis, Minn.	3	2	1	-	-	-	-
Omaha, Nebr.	92	72	14	2	1	3	9
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	98	76	15	4	2	1	16
Wichita, Kans.	70	50	12	3	2	3	9
S. ATLANTIC	1,311	874	274	101	35	25	121
Atlanta, Ga.	171	106	40	14	3	8	7
Baltimore, Md.	188	122	40	20	5	1	22
Charlotte, N.C.	148	103	30	8	3	4	26
Jacksonville, Fla.	169	106	35	19	4	4	20
Miami, Fla.	66	40	14	7	5	-	4
Norfolk, Va.	63	38	19	3	1	2	6
Richmond, Va.	79	57	11	5	3	2	4
Savannah, Ga.	68	43	17	5	2	1	7
St. Petersburg, Fla.	43	31	7	3	1	1	4
Tampa, Fla.	216	159	39	10	6	2	20
Washington, D.C.	100	69	22	7	2	-	1
Wilmington, Del.	U	U	U	U	U	U	U
E.S. CENTRAL	1,033	702	213	70	17	29	104
Birmingham, Ala.	170	117	38	8	4	1	18
Chattanooga, Tenn.	110	80	23	4	1	2	10
Knoxville, Tenn.	147	97	36	11	-	3	5
Lexington, Ky.	126	84	29	7	-	6	26
Memphis, Tenn.	225	145	42	18	8	12	16
Mobile, Ala.	63	42	11	8	-	2	4
Montgomery, Ala.	47	34	10	2	1	-	9
Nashville, Tenn.	145	103	24	12	3	3	16
W.S. CENTRAL	1,518	1,028	294	114	46	36	132
Austin, Tex.	81	54	15	8	2	2	8
Baton Rouge, La.	61	36	15	8	1	1	3
Corpus Christi, Tex.	69	48	14	3	3	1	5
Dallas, Tex.	228	149	48	18	7	6	25
El Paso, Tex.	136	92	30	10	3	1	4
Ft. Worth, Tex.	U	U	U	U	U	U	U
Houston, Tex.	373	239	76	30	16	12	35
Little Rock, Ark.	63	43	11	6	1	2	6
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	301	213	57	13	11	7	23
Shreveport, La.	27	21	4	2	-	-	3
Tulsa, Okla.	179	133	24	16	2	4	20
MOUNTAIN	1,131	784	226	66	32	22	100
Albuquerque, N.M.	142	101	32	5	1	3	20
Boise, Idaho	59	37	17	2	2	1	3
Colo. Springs, Colo.	53	38	11	4	-	-	5
Denver, Colo.	125	84	22	7	4	8	17
Las Vegas, Nev.	282	204	55	13	8	2	20
Ogden, Utah	33	29	1	3	-	-	1
Phoenix, Ariz.	74	34	19	13	6	1	-
Pueblo, Colo.	31	24	4	2	1	-	4
Salt Lake City, Utah	124	82	26	8	5	3	15
Tucson, Ariz.	208	151	39	9	5	4	15
PACIFIC	1,786	1,273	340	107	40	26	195
Berkeley, Calif.	18	12	5	1	-	-	-
Fresno, Calif.	135	101	18	12	3	1	11
Glendale, Calif.	17	13	1	3	-	-	3
Honolulu, Hawaii	95	73	12	8	-	2	8
Long Beach, Calif.	85	63	16	6	-	-	13
Los Angeles, Calif.	290	179	70	28	8	5	13
Pasadena, Calif.	28	21	5	2	-	-	5
Portland, Oreg.	128	87	37	1	2	1	18
Sacramento, Calif.	219	164	36	10	4	5	32
San Diego, Calif.	186	126	42	8	10	-	24
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	197	150	24	15	4	4	36
Santa Cruz, Calif.	33	23	7	1	2	-	3
Seattle, Wash.	142	98	33	6	3	2	3
Spokane, Wash.	72	56	9	3	3	1	16
Tacoma, Wash.	141	107	25	3	1	5	10
TOTAL	11,916¶	8,365	2,278	760	268	240	1,103

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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