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Weekly

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# World TB Day — March 24, 2008

World TB Day is observed each year on March 24 to commemorate the date in 1882 when Robert Koch announced the discovery of *Mycobacterium tuberculosis*, the bacterium that causes tuberculosis (TB). Worldwide, TB remains one of the leading causes of death from infectious disease. An estimated 2 billion persons (i.e., one third of the world's population) are infected with *M. tuberculosis*. In 2005, approximately 8.8 million persons became ill from TB, and 1.6 million died from the disease. World TB Day provides an opportunity for TB programs, nongovernmental organizations, and other partners to describe problems and solutions related to the TB pandemic and to support worldwide TB-control efforts. The U.S. theme for this year's observance is Partnerships for TB Elimination.

After approximately 30 years of decline, the number of TB cases reported in the United States increased 20% during 1985–1992. This led to a renewed emphasis on TB control and prevention during the 1990s and actions that reversed the increase in cases. Although the 2007 TB rate (4.4 cases per 100,000 population) was the lowest recorded in the United States since national reporting began in 1953, the average annual decline has slowed since 2000. In addition, multidrug-resistant TB remains a threat, extensively drug-resistant TB has become an emerging threat, and racial/ethnic minorities and foreign-born persons continue to account for a disproportionate number of TB cases.

CDC and its partners are committed to eliminating TB in the United States. In many states, education and awareness programs convened by local TB coalitions will be conducted in commemoration of World TB Day. Additional information about World TB Day and CDC TB-elimination activities is available at http://www.cdc. gov/tb/worldtbday.

# Trends in Tuberculosis — United States, 2007

In 2007, a total of 13,293 tuberculosis (TB) cases were reported in the United States; the TB rate declined 4.2% from 2006 to 4.4 cases per 100,000 population. This report summarizes provisional 2007 data from the National TB Surveillance System and describes trends since 1993. The TB incidence rate in 2007 was the lowest recorded since national reporting began in 1953. Despite this overall improvement, progress has slowed in recent years; the average annual percentage decline in the TB rate slowed from 7.3% per year during 1993–2000 to 3.8% during 2000–2007.\* Foreign-born persons and racial/ethnic minorities continued to bear a disproportionate burden of TB disease in the United States. In 2007, the TB rate in foreign-born persons in the United States was 9.7 times higher than in U.S.-born persons.<sup>†</sup> TB rates

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<sup>\*</sup> Population denominators for TB case rates for 1993–1999 were calculated using bridged-race 1990–1999 intercensal population estimates for 1993–1999 (available at ftp://ftp.cdc.gov/pub/health\_statistic/nchs/datasets/nvss/bridgepop/ documentationbridgedintercena1.doc). Population denominators for TB case rates for 2000–2007 were calculated using annual estimates of the U.S. population (available at http://www.census.gov/popest/states/NST-ann-est.html).

<sup>&</sup>lt;sup>†</sup>A U.S.-born person is defined as someone born in the United States or its associated jurisdictions or someone born in a foreign country but having at least one U.S.-born parent. Persons not meeting this definition are classified as foreignborn. For 2007, persons with unknown origin of birth represented 1.0% (139 of 13,293) of total cases.

<sup>285</sup> Provider-Initiated HIV Testing and Counseling of TB Patients — Livingstone District, Zambia, September 2004–December 2006

<sup>289</sup> Immunization Information Systems Progress — United States, 2006

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among Hispanics,<sup>§</sup> blacks, and Asians were 7.4, 8.3, and 22.9 times higher than among non-Hispanic whites, respectively. In 2007, foreign-born persons accounted for a majority of TB cases among Hispanics (77.2% [2,942 of 3,812]) and among Asians (96.1% [3,261 of 3,393]), whereas U.S.-born persons accounted for a majority of TB cases among blacks (71.2% [2,439 of 3,427]). Among U.S.-born racial and ethnic groups, the greatest disparity in TB rates was for U.S.-born blacks, whose rate remained nearly eight times that of U.S.-born whites.<sup>9</sup> The slowing decline in TB incidence and persistent disparities between U.S.-born and foreign-born persons and between whites and minorities threaten progress toward TB elimination in the United States. The strategic plan for the elimination of TB issued in 1989 by CDC and the Advisory Committee for the Elimination of Tuberculosis set a goal of TB elimination (i.e., less than one case per 1 million population) by 2010 and an interim target case rate of 3.5 per 100,000 population by 2000 (1).

Health departments in the 50 states and the District of Columbia (DC) electronically report to CDC verified TB cases that meet the CDC/Council of State and Territorial Epidemiologists case definition.\*\* Reports include the patient's race, ethnicity (i.e., Hispanic or non-Hispanic), treatment information, and, whenever available, drug-susceptibility test results. CDC calculates national and state TB rates overall, by country of origin, and by racial/ethnic group by using current U.S. census population estimates (2–4).

In 2007, TB rates in reporting areas ranged from 0.4 (Wyoming) to 10.2 (DC) cases per 100,000 population (median: 3.5 cases). Twenty-nine states and DC had lower rates in 2007 than 2006; 21 states had higher rates. In 2007, for the third consecutive year and the third time since national reporting began, more than half of states (52.0% [26 of 50]) had TB rates less than or equal to the 2000 interim target case rate of 3.5 per 100,000 population (Figure 1); however, 12 (46.2%) of those 26 had higher rates of TB in 2007 than in 2006. Five states (California, Florida, Illinois, New York, and Texas) reported more than 500 cases each for 2007; combined, these five states accounted for more than half (52.0% [6,912]) of all TB cases.

<sup>§</sup> For this report, persons identified as white, black, Asian, American Indian/ Alaska Native, native Hawaiian or other Pacific Islander, or of multiple races are all classified as non-Hispanic. Persons identified as Hispanic can be of any race.

<sup>&</sup>lt;sup>9</sup> Rate ratios of TB rates among U.S.-born blacks versus U.S-born whites for the previous 5 years were: 7.8 in 2007, 7.5 in 2006, 7.7 in 2005, 7.7 in 2004, and 7.6 in 2003.

<sup>\*\*</sup> Additional information available at http://www.cdc.gov/epo/dphsi/casedef/ tuberculosis\_current.htm.

FIGURE 1. Rate\* of tuberculosis cases, by state/area — United States,  $2007^{\dagger}$ 



<sup>\*</sup> Per 100,000 population.

<sup>†</sup>Data are provisional.

Among U.S.-born persons, the number and rate of TB cases continued to decline in 2007. The number of TB cases in U.S.-born persons (5,464 [or 41.5% of all cases in persons with known origin]) declined 7.4% compared with 2006 and 68.6% compared with 1993 (Figure 2). In 2007, the TB rate among U.S.-born persons was 2.1 per 100,000 population, representing a 7.8% decline since 2006 and a 71.4% decline since 1993.<sup>††</sup>

Among foreign-born persons in the United States, both the number and rate of TB cases declined in 2007. A total of 7,690 TB cases were reported among foreign-born persons (58.5% of all cases in persons with known origin), a 1.6% decrease from the 7,814 cases reported in 2006. The TB rate among foreign-born persons in 2007 was 20.6 per 100,000 population, which was a 6.5% decline since 2006 and a 39.5% decline since 1993. In 2007, more than half (51.8%) of foreign-born TB cases were reported in persons from four countries: Mexico (1,846), the Philippines (952), India (619), and Vietnam (568).

For the fourth consecutive year, more TB cases were reported among Hispanics than any other racial/ethnic group in 2007. From 2006 to 2007, TB rates declined for all racial/ethnic minorities except for Asians (+0.8%) FIGURE 2. Number and rate\* of tuberculosis (TB) cases among U.S.- and foreign-born persons, by year reported — United States,  $1993-2007^{\dagger}$ 



<sup>&</sup>lt;sup>\*</sup> Per 100,000 population.

and Native Hawaiian or other Pacific Islanders  $(+42.9\%)^{\$\$}$  (Table).

In 2007, among persons with TB with a known human immunodeficiency virus (HIV) test result, 11.3% (869 of 7,708) were coinfected with HIV. California data were not included in this calculation.<sup>¶</sup>

A total of 116 cases of multidrug-resistant TB (MDR TB)\*\*\* were reported in 2006, the most recent year for which complete drug-susceptibility<sup>†††</sup> data are available. The proportion of MDR TB cases was 1.1% in 2006 (116 of 10,306), compared with 1.2% in 2005 (124 of 10,633). The proportion of MDR TB cases among persons without a previous history of TB has remained stable at approximately 1.0% since 1997, but has been approximately four to five times higher for persons with a previous history of TB. In 2006, MDR TB continued to disproportionately impact

<sup>&</sup>lt;sup>††</sup> U.S. Census annual estimates for the U.S. population (2) were used to calculate the national TB rate and the percentage change from 2006 to 2007. To obtain data on national origin, the U.S. Census Current Population Survey (4) was used to calculate the TB rate and percentage change from 2006 to 2007 for U.S.-born versus foreign-born persons. The use of these different population estimates accounts for the higher annual percentage change reported among U.S-born versus foreign-born persons compared with the annual percentage change reported for the national TB rate.

<sup>&</sup>lt;sup>†</sup>Data for 2007 are provisional.

<sup>§§</sup> Reporting of TB statistics for race/ethnicity changed beginning in 2003. A "Native Hawaiian and other Pacific Islanders" category was added to the race/ ethnicity reporting options, and multiple races also could be reported for a given patient.

For this report, California was excluded from the analysis because the state reports HIV data separately from TB data and 1 year later than all other states. HIV data reported by California only include the number of patients with TB that are HIV positive. The number of TB patients who tested negative for HIV, refused testing, or were not offered testing is not reported. Therefore, determining the percentage of patients with known HIV status for California is not possible. For this report, the "known HIV status" category is based on the number of cases with reported "positive" or "negative" status. The "unknown HIV status" category is based on "indeterminate," "refused," "not offered," "test done but status unknown," "unknown," and "data missing" categories.

<sup>\*\*\*</sup> Defined as a case of TB in a person with a *Mycobacterium tuberculosis* isolate resistant to at least isoniazid and rifampin (5).

<sup>&</sup>lt;sup>+++</sup> Drug-susceptibility test results for isoniazid and rifampin were reported for 97.1% (10,633 of 10,951) and 95.7% (10,306 of 10,771) of cultureconfirmed TB cases in 2005 and 2006, respectively.

	20	06	20	07	% change in rates	Popu	lation	
Race/Ethnicity	No.	Rate	No.	Rate	2006 to 2007	2006	2007	
Hispanic Non-Hispanic	4,062	9.2	3,836	8.4	-8.6	44,321,038	45,786,825	
Black	3,733	10.2	3,454	9.3	-8.4	36,689,680	37,067,179	
Asian	3,295	25.6	3,423	25.8	0.8	12,881,639	13,274,840	
White	2,394	1.2	2,240	1.1	-6.6	198,744,494	199,177,984	
Other <sup>§</sup>	254	3.8	267	3.9	2.7	6,761,633	6,919,034	
Unknown	13	—	73	—	—	—	—	
Total	13,751	4.6	13,293	4.4	-4.2	299,398,484	302,225,862	

TABLE. Number and rate\* of tuberculosis cases and percentage change, by race and ethnicity — United States, 2006 and 2007<sup>†</sup>

\* Per 100,000 population. <sup>†</sup> Data for 2007 are provisional.

<sup>§</sup> Includes American Indian/Alaska Native (2007, n = 136, rate = 6.0 per 100,000; 2006, n = 164, rate = 7.3 per 100,000), Native Hawaiian or other Pacific Islander (2007, n = 98, rate = 23.4 per 100,000; 2006, n = 55, rate = 13.3 per 100,000), and multiple race (2007, n = 33, rate = 0.8 per 100,000; 2006, n = 35, rate = 0.9 per 100,000).

foreign-born persons, who accounted for 84.5% of MDR TB cases. Foreign-born persons had higher percentages of MDR TB, both among persons with (7.0%) and without (1.4%) a previous history of TB. Since drug-susceptibility reporting began in 1993, cases of extensively drug-resistant TB (XDR TB)<sup>§§§</sup> have been reported every year in the United States except 2003. Two XDR TB cases were reported in 2005 and four in 2006. As of February 13, 2008, two XDR TB cases had been reported for 2007.

The recommended length of drug therapy for most types of TB is 6–9 months. In 2004, the latest year for which end-of-treatment data are complete, 82.1% of patients for whom  $\leq$ 1 year of treatment was indicated completed therapy within 1 year, which is below the *Healthy People 2010* target of 90% (objective 14-12).

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**Editorial Note:** After the resurgence of TB in the United States during 1985–1992, the annual TB rate decreased steadily. However, that decrease has now slowed. Furthermore, the proportion of TB cases contributed by foreignborn persons has increased each year since 1993. To achieve the goal of TB elimination in the United States (*1*), intensified efforts are required to strengthen domestic TB control and to address the global TB pandemic.

CDC is pursuing several strategies to address the higher rate of TB among foreign-born persons in the United States and the increasing proportion of cases they represent. In 2007, CDC published revised requirements for overseas medical screening of applicants for U.S. immigration (6,7). These revised technical instructions include 1) expanding TB screening by adding targeted tuberculin skin testing of children aged 2–14 years who live in countries with high TB incidence (i.e., WHO-estimated rates of  $\geq$ 20 cases per 100,000 population) and all contacts of persons known to have TB, and 2) adding cultures and drug-susceptibility testing for persons with suspected TB.<sup>515</sup> Implementation of these new guidelines began in 2007 in Mexico, Nepal, the Philippines, and Thailand, and is scheduled to start in 2008 in Kenya, Tanzania, Turkey, Vietnam, and several countries in Southern Africa. Also, CDC continues to work with international partners, including the Stop TB Partnership,\*\*\*\* to strengthen TB control in countries with high TB incidence.

To address the disproportionately high rate of TB among U.S.-born blacks, CDC is working with its state and local partners to focus attention on the problem of TB in the black community.<sup>††††</sup> To better understand how to reduce these disparities, CDC's TB Epidemiologic Studies Consortium is conducting the National Study of Determinants of Early Diagnosis, Prevention, and Treatment of TB in the African-American Community.

HIV is the most important known risk factor for progression from latent TB infection (LTBI) to TB disease. CDC recommends routine screening for HIV for all persons with TB or LTBI at the initiation of TB or LTBI treatment.<sup>\$\$\$\$\$</sup> CDC continues to work with domestic and international partners to increase awareness of TB/HIV coinfection and improve the integration of TB/HIV health-care services (8).

<sup>§§§</sup> Defined as a case of TB in a person with an *M. tuberculosis* isolate with resistance to at least isoniazid and rifampin among first-line anti-TB drugs, resistance to any fluoroquinolone (e.g., ciprofloxacin or ofloxacin), and resistance to at least one second-line injectable drug (e.g., amikacin, capreomycin, or kanamycin) (5).

<sup>555</sup> Additional information available at http://www.cdc.gov/ncidod/dq/pdf/ comparison\_1991\_2007\_tb\_ti.pdf.

<sup>\*\*\*\*</sup> Additional information available at http://www.stoptb.org.

<sup>\*\*\*\*</sup> Additional information available at http://www.cdc.gov/tb/tbinafrican americans.

<sup>\$\$\$\$</sup> Additional information available at http://www.cdc.gov/mmwr/preview/ mmwrhtml/rr5514a1.htm and http://www.cdc.gov/mmwr/preview/ mmwrhtml/rr4906a1.htm.

In February 2008, the World Health Organization released its fourth global report on anti-TB drug resistance, which indicated that the number of MDR TB cases world-wide was the highest ever reported (489,139 cases in 2006) and that XDR TB had been reported in 45 countries (4). A critical need exists for new drugs and new drug regimens to address this growing challenge. The Global Alliance for TB Drug Development, of which CDC is a member, continued to make progress in this area in 2007, with new candidate drugs moving forward in clinical trials (9,10).

The findings in this report are subject to at least two limitations. First, the analysis was based on provisional data that are subject to change. This applies to TB case counts and HIV data, both of which are incomplete at this point in the reporting cycle. Second, population denominator data are drawn from multiple U.S. Census sources and also are subject to periodic adjustment in the estimates. CDC's annual TB surveillance summary, scheduled to be published in fall 2008, will provide updated data.

Despite targeted measures to control TB, the slowing decline of TB in the United States indicates a need for improved case management and contact investigation, intensified outreach and testing of populations at high risk, better treatments and diagnostic tools, improved understanding of TB transmission, and continued collaboration with other nations to reduce TB globally. These measures are required to reach the goal of TB elimination in the United States.

#### Acknowledgments

The findings in this report are based, in part, on data contributed by state and local TB-control officials.

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# Provider-Initiated HIV Testing and Counseling of TB Patients — Livingstone District, Zambia, September 2004–December 2006

Tuberculosis (TB) is the second most common cause of death from infectious disease in the world after human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) (1). Immunosuppressed HIV-infected persons are highly susceptible to TB disease, and countries in sub-Saharan Africa have the highest TB incidence rates, primarily because of the HIV epidemic (2,3). In Zambia, the TB rate increased during 1984-2005 from approximately 100 cases per 100,000 population to 580 cases per 100,000 population (4). Much of this increase has been attributed to the high rate of coinfection with HIV; currently, an estimated 50%-70% of TB patients are infected with HIV (N. Kapata, Ministry of Health, Zambia, personal communication, 2008). In 2007, the World Health Organization (WHO) recommended that countries with high coinfection rates develop TB/HIV collaborative activities, including routine provider-initiated HIV testing and counseling (PITC) of TB patients in TB clinical settings, using an "opt-out" approach (5). This report summarizes results from a PITC pilot study conducted by the Zambian Ministry of Health, with assistance from the CDC Global AIDS Program Zambia, during September 2004-December 2006 with TB patients at three clinics in the Livingstone District in the Southern Province of Zambia. The results indicated that, among 4,148 persons who had TB diagnosed, 2,072 (50%) were tested for HIV; of these, 1,497 (72%) tested positive. These findings demonstrate the practicality and acceptance of PITC and HIV rapid testing and support the need to expand this program to TB clinical settings in Zambia and other countries with high rates of TB and HIV.

The usual manner in which HIV-testing services are offered in sub-Saharan Africa is through voluntary counsel-

ing and testing (VCT), also called client-initiated counseling and testing. VCT uses an "opt-in" approach, in which patients seek HIV testing and must consent to be tested; VCT also requires pretest counseling sessions of up to 45 minutes with a trained counselor. In contrast, PITC is offered by health-care providers as part of routine clinical care with brief pretest counseling of less than 15 minutes. All patients are offered HIV testing and consent to be tested is implied as with any other clinically indicated laboratory test; patients may opt out if they do not want to be tested. In Zambia, management of TB, including diagnosis, notification, and treatment, primarily occurs through primary health centers. Specialized TB clinics are found only in larger district hospitals, provincial hospitals, and tertiary-care hospitals. Treatment for TB is provided on an outpatient basis, with hospital admission limited to patients who are too ill to go home. Zambia has adopted the WHO Stop TB strategy for control of TB using directly observed therapy (6).

In 2004, in response to a recommendation by WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) that diagnostic HIV counseling and testing be part of routine management of TB patients (7), CDC Zambia provided technical assistance to the Ministry of Health in development of a pilot study to test the feasibility of offering these services as part of routine TB care. Livingstone District, the capital of Southern Province, which had an estimated adult HIV prevalence of 28% in 2002 (Zambia Central Statistics Office, unpublished data, 2004) and a TB incidence of 751 cases per 100,000 population in 2003, was chosen as the site for the pilot study. The district has three TB diagnostic clinics: the Livingstone General Hospital chest clinic and urban TB clinics in Dambwa and Maramba.

In September 2004, the pilot study was begun at the three clinics. Counseling and testing data were collected from record books, using an abstraction form; monthly reports of the number of TB patients counseled and tested for HIV and their test results were sent to CDC Zambia. Data also included basic sociodemographic, clinical, and referral information.

The pilot study was implemented in three phases: 1) VCT was provided by referral off-site, 2) VCT was provided on-site; and 3) PITC and rapid testing were provided on-site by TB clinic staff members. During the first phase of the study (September–December 2004), TB patients in the Livingstone General Hospital chest clinic were referred for VCT to the hospital's VCT unit. At Dambwa Clinic and Maramba Clinic, during the first phase (September 2004–June 2005 for the two urban clinics), patients were referred to off-site nurse-counselors for VCT.

During the second phase (January–December 2005), at Livingstone General Hospital, a room adjacent to the chest clinic was renovated for counseling, and VCT was provided on-site by part-time counselors. During the second phase at Dambwa and Maramba clinics (July 2005–March 2006), part-time nurse-counselors provided on-site VCT. The nurse-counselors were given transportation allowances that enabled them to travel from their homes to the clinics. Later, full-time counselors were assigned to these clinics. Finally, in the third phase, TB clinic staff members at the hospital and two urban clinics received training on PITC and the use of HIV rapid tests. The staff members provided PITC to TB patients at the chest clinic during January–December 2006 and at the two urban clinics during April–December 2006.

During September 2004–December 2006, a total of 4,148 TB cases were reported by the three clinics (Table). Among the patients, 1,922 (46%) were female. A total of 1,717 (41%) TB cases were diagnosed at Maramba Clinic, 1,637 (40%) at the Livingstone General Hospital chest clinic, and 794 (19%) at Dambwa Clinic.

At Livingstone General Hospital, during September– December 2004 (during the first phase), when patients were referred out of the TB clinic to the VCT unit of the hospital, of 252 patients in whom TB was diagnosed at the chest clinic, 178 (71%) were counseled; of these, 92 (52%) TB patients were tested, and 80 (87%) tested HIV positive. In 2005, during the second phase, after VCT services were made available on-site in the room adjacent to the chest clinic, of 624 TB patients, 366 (59%) were counseled, and 291 (80%) were tested, of whom 196 (67%) tested HIV positive. In 2006, during the third phase, after staff members in the chest clinic had been trained in PITC, the percentage of TB patients receiving HIV counseling increased to 93% (709 of 761 patients); of those counseled, 618 (87%) were tested, and 412 (67%) tested HIV positive.

In the Dambwa and Maramba clinics, during the first phase in September 2004–June 2005, when patients were referred off-site for VCT, 970 new TB patients were identified, and 196 (20%) were counseled; of these, 174 (89%) were tested, and 150 (86%) tested HIV positive. In the second phase (July 2005–March 2006), after counselors were made available in the clinics, the percentage of TB patients who were counseled increased to 62% (602 of 965); of these, 501 (83%) were tested, and 358 (71%) tested HIV positive. During April–December 2006, after the clinical staff had been trained and had implemented on-site PITC, 494 (86%) of the TB patients were counseled; of these, 396 (80%) were tested, and 301 (76%) tested HIV positive.

		Couns	seled	Tes	ted	Testing	positive
Clinic/Program phase/Period	No.	No.	(%)	No.	(%)*	No.	(%)†
Livingstone General Hospital chest clinic							
VCT <sup>§</sup> : Clients referred							
September-December 2004	252	178	(71)	92	(52)	80	(87)
VCT: Provided onsite by part-time counselor							
January-March 2005	149	121	(81)	105	(87)	80	(76)
April–June 2005	100	71	(71)	69	(97)	35	(51)
July–September 2005	223	99	(44)	72	(73)	56	(78)
October-December 2005	152	75	(49)	45	(60)	25	(56)
PITC <sup>¶</sup> : Provided by clinical staff					. ,		. ,
Januarv-March 2006	227	175	(77)	97	(55)	74	(78)
April–June 2006	186	186	(100)	186	(100)	127	(68)
July-September 2006	150	150	(100)	150	(100)	87	(58)
October–December 2006	198	198	(100)	185	(93)	124	(67)
Livingstone General total	1,637	1,253	(77)	1,001	(80)	688	(69)
Dambwa Clinic							
VCT: Clients referred							
September-December 2004	166	27	(16)	24	(89)	15	(63)
January-March 2005	95	36	(38)	33	(92)	27	(82)
April–June 2005	66	35	(53)	31	(89)	27	(87)
VCT: Counselors assigned to TB clinic							
July-September 2005	88	101	(115)**	79	(78)	53	(67)
October-December 2005	95	75	(79)	64	(85)	41	(64)
January-March 2006	60	83	(138)**	72	(87)	49	(68)
PITC: Provided by clinical staff							
April–June 2006	54	64	(119)**	44	(69)	24	(55)
Julv-September 2006	89	63	(71)	43	(68)	29	(67)
October–December 2006	81	75	(93)	56	(75)	49	(88)
Dambwa total	794	559	(70)	446	(80)	314	(70)
Maramba Clinic							
VCT: Clients referred							
September–December 2004	189	49	(26)	43	(88)	43	(100)
January-March 2005	271	15	(6)	13	(87)	10	(77)
April–June 2005	183	34	(19)	30	(88)	28	(93)
VCT: Counselors assigned to TB clinic			( )		~ /		( )
July-September 2005	312	91	(29)	80	(88)	64	(80)
October–December 2005	259	107	(41)	84	(79)	63	(75)
January–March 2006	151	145	(96)	122	(84)	88	(72)
PITC: Provided by clinical staff			(00)		(0.)		(
April-June 2006	109	88	(81)	64	(73)	50	(78)
July-September 2006	120	92	(77)	86	(93)	68	(79)
October–December 2006	123	112	(91)	103	(92)	81	(79)
Maramba total	1.717	733	(43)	625	(85)	495	(79)
Total	4,148	2,545	(61)	2,072	(81)	1,497	(72)

TABLE. Number and percentage of tuberculosis (TB) patients who received human immunodeficiency virus (HIV) counseling and testing and percentage testing positive, by clinic, type of counseling and testing, and period — Livingstone District, Zambia, 2004–2006

\* Percentage of patients counseled who accepted HIV testing.

<sup>†</sup> Percentage of patients tested with a positive HIV test.

§ Voluntary counseling and testing.

<sup>¶</sup> Provider-initiated testing and counseling.

\*\* Exceeds 100% because certain patients counseled were started on TB treatment during an earlier period.

By sex, the percentage of TB patients agreeing to HIV testing was similar at the three clinics: 83% among males and 85% among females in Maramba and Dambwa clinics and 82% among males and 78% among females in the chest clinic. The percentage of tested patients who had positive HIV test results was similar by sex at the two

urban clinics (79% among males and 78% among females) and at the hospital chest clinic (70% among males and 74% among females).

TB patients who tested HIV positive at the hospital chest clinic were referred to an HIV care and treatment clinic in a building approximately 200 meters away. In 2005, receipt of antiretroviral therapy (ART) was documented for 118 (60%) of the 196 HIV-positive TB patient referred to treatments; these 118 patients met the ART eligibility criterion (i.e., CD4 cell count of <200 cells/ $\mu$ L) of the Zambian national HIV/AIDS program. In 2006, a total of 370 (90%) of the 412 HIV-positive TB patients were referred for HIV care and treatment, and ART was documented as having begun for 106 (29%) of those referred. These are minimum estimates of ART eligibility and uptake because documentation of CD4 counts and ART was inconsistent.

At the two urban clinics, a total of 538 HIV-positive TB patients were referred for HIV care and treatment during September 2004–December 2006. Initially, these patients were referred to Livingstone General Hospital's ART clinic. Later, patients were referred to ART clinics established on-site at Maramba and Dambwa clinics. Follow-up treatment information often was not available for patients referred from the two urban clinics. However, in 2006, of 230 HIV-positive TB patients referred by the urban clinics to ART clinics, 86 (37%) were documented as having commenced ART; of these, 50 (58%) were female.

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**Editorial Note:** Persons with TB disease and HIV infection are at greater risk for morbidity and mortality than those with either TB disease or HIV infection alone. Identifying those TB patients with HIV infection can get them into HIV care and treatment sooner and improve their prospects for survival. Introduction of routine HIV testing and counseling for TB patients in countries with high rates of TB and HIV can be challenging for TB programs and overextended clinic staffs. However, the pilot study described in this report demonstrates the feasibility of providing HIV testing and counseling as part of the routine management of TB patients in Zambia.

Until TB clinic staffs were trained in PITC, TB patients in the pilot study were offered HIV testing using the VCT model, which limited the number of TB patients who could be offered testing because of a lack of trained counselors and the long duration of pretest counseling sessions. Providing transportation allowances to part-time counselors enabled VCT to be provided on-site and increased the proportion of patients offered VCT in the two urban clinics, but this method was not considered sustainable over the long term. Assigning full-time VCT counselors to TB clinics also was not considered to be sustainable. Implementation of PITC on-site by TB clinic staff members in 2006 resulted in an increase in the percentage of TB patients being tested for HIV or maintenance of high rates of testing. In addition, training TB staff members to use HIV rapid test kits enabled same-day results and eliminated the need for patients to return to clinics to pick up test results. Finally, shifting the task of HIV testing from laboratorians to other health-care personnel surmounted the problem of shortages of trained laboratory workers. PITC by TB clinic staff using rapid tests was considered the most economical and sustainable approach in the long term.

Since 2007, the Zambian Ministry of Health has recommended that all TB clinic staff members be trained in PITC, including the use of HIV rapid tests, and that these services be implemented in TB clinics throughout the country. A national TB/HIV coordinating committee developed specific guidelines, and a training manual for PITC was created based on a CDC training module and supported by the U.S. President's Emergency Plan for AIDS Relief. During 2007, training in PITC was provided using a training-of-trainers approach to ensure availability of training teams throughout the country. PITC for TB patients has now begun in all 72 districts of Zambia.

Although the pilot study demonstrated that by using PITC, larger percentages of TB patients can be tested for HIV, ensuring follow-up of patients with ART clinics remains a challenge. Because staffs at TB and ART clinics are overextended with patients, referral forms often are not completed and returned to the referring units; therefore, documentation of uptake of referrals to HIV care and treatment is incomplete. In the future, use of individual-level electronic medical records might provide a better means of ensuring that data on HIV care and TB care are shared with providers of TB and HIV services (8). Also, initiation of one-stop services with greater integration of TB and HIV care might improve follow-up.

The pilot study demonstrated that PITC in TB clinics is both acceptable and feasible for patients and clinic staffs. The high percentage of TB patients who tested positive for HIV underscores the need to implement PITC in TB clinical settings in sub-Saharan African countries with high prevalence of both diseases. Expansion of PITC to other clinical settings will contribute to the effective scale-up of HIV prevention and care measures in those areas of the world that are in greatest need (9).

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# Immunization Information Systems Progress — United States, 2006

A CDC program goal for 2010 is to achieve >95% participation in an immunization information system (IIS) (defined as having two or more recorded vaccinations) among children aged <6 years. IISs, previously known as immunization registries, are confidential, computerized information systems that collect and consolidate vaccination data from multiple health-care providers, generate reminder and recall notifications, and assess vaccination coverage within a defined geographic area (1). Most IISs have additional capabilities, such as vaccine management, adverse event reporting, maintenance of birth-to-death vaccination histories, and interoperability with other health information systems (1). IISs can provide accurate data on which to make informed vaccination decisions and better protect against vaccine-preventable diseases (2). This report highlights selected data from CDC's 2006 Immunization Information System Annual Report (IISAR), a survey of grantees in 50 states, five cities,\* and the District of Columbia that receive funding under the Public Health Service Act.<sup>†</sup> The data indicated that 65% of all U.S. children aged <6 years (approximately 15 million children) participated in an IIS in 2006, an increase from 56% in 2005 (1). The majority of grantees (70%) reported that their IISs have the capacity to track vaccinations for persons of all ages. Data on vaccinations were entered within 30 days of vaccine administration for 69% of children aged <6 years. However, results for certain data completeness measures were low. These findings underscore the need to continue to address challenges to full IIS participation and ensure high-quality information.

The 2006 IISAR, a self-administered, Internet-based questionnaire, was made available to immunization program managers as part of an annual reporting requirement. As in previous years, respondents were asked about the number of children aged <6 years participating in an IIS, the number of health-care-provider sites participating in an IIS, and other programmatic and technical capabilities (e.g., data linkages with other health information systems, data use, vaccine management, software and hardware capabilities, and report functions). All 56 grantees were asked to complete the IISAR; 51 reported on the number of children aged <6 years participating in an IIS during 2006. The percentage of all U.S. children aged <6 years participating in an IIS was calculated by dividing the number of children aged <6 years participating in an IIS reported by the 51 grantees by the 2006 mid-year U.S. Census projection for all children aged <6 years.

In 2006, approximately 15 million (65%) U.S. children aged <6 years participated in an IIS. Fifteen (27%) grantees reported that >95% of children aged <6 years participated in an IIS (Figure), and 10 (18%) grantees reported participation ranging from 81% to 94%. Data also were reported for participation of persons aged  $\geq$ 6 years. Fortyseven (84%) grantees reported maintaining vaccination data in their IIS for persons aged 11–18 years, of whom approximately 22.3 million (66%) had two or more vaccinations recorded in an IIS. In addition, 39 (70%) grantees reported having capacity to maintain vaccination data from birth to death, with 33.5 million (18%) persons aged  $\geq$ 19 years in the United States having one or more vaccinations recorded in an IIS.

IIS data quality measures include the timeliness of vaccination data submission to an IIS and two measures of completeness of National Vaccine Advisory Committee (NVAC) core data elements (3). The first measure assesses the proportion of core data fields that are populated consistently in the IIS, and the second is a proxy measure for completeness of vaccination history for each IIS participant. The timeliness standard specifies that all vaccine doses for children aged <6 years should be recorded in a grantee IIS

<sup>\*</sup>Chicago, Illinois; Houston, Texas; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas.

<sup>&</sup>lt;sup>†</sup>42 USC Sect. 247b, Project grants for preventive health services.

FIGURE. Percentage of children aged <6 years participating\* in a grantee<sup>†</sup> immunization information system — United States, five cities, and the District of Columbia,<sup>§</sup> 2006



**SOURCE:** 2006 Immunization Information System Annual Report. \* Participation is defined as having two or more vaccinations recorded in , an immunization information system.

Grantees include 50 states, five cities, and the District of Columbia, under the Public Health Service Act (42 USC Sect. 247b, Project grants for preventive health services).

<sup>5</sup>Chicago, Illinois (34%–66%); District of Columbia (95%–100%); Houston, Texas (67%–94%); New York, New York (95%–100%); Philadelphia, Pennsylvania (95%–100%); and San Antonio, Texas (67%–94%).

within 30 days of administration. IISAR data for 2006 indicated that 69% of vaccine doses for children aged <6 years were recorded in a grantee IIS within 1 month of administration, 11% within 31–60 days, and 20% more than 60 days after administration.

Completeness of data is measured by examining each of 14 standardized core data elements to determine the proportion that are completed in >90% of records. These 14 standardized core data elements, approved by NVAC (3,4), include demographic and vaccine event information. The core data elements are designed to standardize a set of patient demographic and vaccine event elements that are necessary for data exchanges between IISs, identification and removal of duplicate records, and exchanges with other health information systems (3,4). Collectively among responding grantees, data were reported for six of 14 core data elements in >90% of IIS records (Table), including four of seven patient core data elements and two of four vaccine core data elements, but none of three maternal core data elements.

Completeness of data in IISs also is gauged by the proportion of children aged 19–35 months participating in an IIS who were recorded as having received the complete

States, 2006 <sup>†</sup>	
Core data elements	% of records with element populated
Patient first name	100
Patient middle name	67
Patient last name	100
Patient birth date	100
Patient sex	96
Patient birth state	54
Patient birth country	18
Mother's first name	71
Mother's maiden name	55
Mother's last name	66
Vaccine type	99
Vaccine manufacturer	37
Vaccine date	99
Vaccine lot number	37

TABLE. Percentage of records in immunization information

systems with core data elements\* that contain data - United

\* Recommended by the National Vaccine Advisory Committee. Additional information available at http://www.cdc.gov/vaccines/programs/iis/stds/ \_ coredata.htm.

<sup>†</sup>For children aged <6 years.

4:3:1:3:3 series<sup>§</sup> of recommended vaccine doses. IISAR data for 2006 indicate that of the 3.7 million (62%) children aged 19–35 months participating in an IIS, an estimated 1.8 million (48%) had complete histories for the full 4:3:1:3:3 vaccination series. Although not directly comparable, this is lower than the estimated proportion (>75%) of children reported by the National Immunization Survey (NIS) to have received the same vaccination series (5). Completeness of IIS vaccination histories varies substantially by state; however, nine grantees have complete 4:3:1:3:3 vaccination series that are comparable to traditional coverage survey rates for 2006.

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Editorial Note: IISs are used increasingly for managing vaccine inventories, identifying pockets of need (i.e. specific geographic areas within state or urban jurisdictions that contain large numbers of children who are either under-immunized or at risk for under-immunization), tracking vaccination histories for outbreaks and public health emergencies, and measuring uptake of newly recommended vaccines (4,6–8). The findings in this report illustrate two major challenges for IISs: 35% of U.S. children aged <6 years are not participating in an IIS, and the data on participating children is not reported completely and in a timely manner.

<sup>§ 4</sup> doses diphtheria and tetanus toxoids and acellular pertussis vaccines, 3 doses poliovirus vaccine, 1 dose measles, mumps, and rubella vaccine, 3 doses *Haemophilus influenza*e type B vaccine, and 3 doses hepatitis B vaccine.

CDC is pursuing three major strategies to address these challenges and ensure that the 2010 program goal of >95% IIS child participation is achieved. First, CDC implemented an enhanced technical assistance project, in collaboration with the Public Health Informatics Institute, to provide planning support services to grantees with low child-participation rates ( $\leq 33\%$ ). Second, CDC has been encouraging CDC grantees to increase IIS child-participation rates by promoting IIS data use by health-care providers, schools, and health plans. IIS data are used increasingly by school district administrative staff to assess compliance with school immunization laws. Increased use of IIS data by school districts reduces the number of requests to provider practices for records of students who have been vaccinated. By reporting complete and accurate vaccination data to an IIS, practices can reduce staff time required to produce or locate vaccination records or certificates (4). A third strategy to increase IIS child-participation rates is to promote health plan use of IIS data for Health Plan Employer Data and Information Set (HEDIS) vaccination coverage measures, in lieu of using more costly chart reviews. HEDIS is a tool used by >90% of health plans in the United States to measure performance on selected criteria of care and services, including vaccinations (9).

CDC has validated the usefulness of IIS data in supplementing NIS data, but noted that the quality and completeness of the registry data must be improved and must be comparable across all states before consideration can be given to supplement or replace provider-reported data in NIS (10). The low percentages for five NVAC core data elements might be the result of IIS use of billing system data rather than more complete medical records. Billing systems often do not collect core data elements such as vaccine manufacturer and lot number, and mother's first, maiden, and last names, which are needed to improve vaccination data quality. CDC will promote increased interoperability between IISs and electronic medical record (EMR) systems through use of updated Health Level Seven<sup>9</sup> messaging standards and reduced use of clinical billing systems data. Measures are under way to ensure that EMR standards for vaccination data facilitate links between EMR systems and IISs, thus facilitating recording of vaccination data in IIS.

The findings in this report are subject to at least two limitations. First, data from the 2006 IISAR are selfreported, which might have resulted in reporting bias. Grantees might, for example, miscalculate totals provided in response to some questions on the annual survey, although observations during site visits have found little or no bias. Second, because some grantees did not report data, the IIS participation rates for children aged <6 years and providers might be underestimated. Several grantees that had good responses in previous years missed reporting because they were installing new software programs.

As IISs continue to expand their capacity to collect information on persons of all ages, they will be important in assessing national vaccination coverage levels, identifying pockets of need, tracking vaccinations for outbreaks and public health emergencies, monitoring vaccine uptake for newly introduced vaccines or pandemic influenza vaccine, and managing vaccine inventories (4, 6-8). This report underscores the need for continued efforts to improve child participation and to ensure that IISs meet data quality measures for timeliness and completeness.

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<sup>&</sup>lt;sup>9</sup> Health Level Seven is an accredited organization that develops standards for the exchange of electronic health-care data. Additional information is available at http://hl7.org.

## Notice to Readers

# Revised Technical Instructions for Tuberculosis Screening and Treatment for Panel Physicians

CDC's Division of Global Migration and Quarantine (DGMQ) has released the 2007 Technical Instructions for Tuberculosis Screening and Treatment for Panel Physicians. These revised technical instructions and a list of the populations whose applicants for U.S. immigration are being screened in accordance with them are available at http://www.cdc.gov/ncidod/dq/panel\_2007.htm.

CDC has U.S. regulatory authority over overseas medical examinations for immigrants, refugees, and asylees immigrating to the United States.\* Panel physicians, who are appointed by the U.S. Department of State, perform overseas medical examination of applicants for U.S. immigration in accordance with technical instructions provided by DGMQ.

The previous technical instructions for tuberculosis screening have been in effect since 1991. Under the 1991 instructions, applicants aged  $\geq 15$  years are required to have a chest radiograph and provide three sputum smears for acid-fast microscopy if the chest radiograph is suggestive of active tuberculosis; however, no cultures (or drugsusceptibility testing) are required. Applicants who are sputum smear-positive must undergo treatment until they are smear-negative before traveling to the United States, but the 1991 requirements do not specify the therapy they should receive (1). In addition, the screening algorithms used for the 1991 instructions are insensitive and miss smear-negative, culture-positive cases (2); the algorithms also are inadequate to prevent importation of multidrugresistant tuberculosis into the United States (3).

To address these shortcomings, CDC has updated the tuberculosis technical instructions, and several important changes have been introduced. Applicants with chest radiographs suggestive of tuberculosis now are required to submit three sputum specimens for both sputum smears for acid-fast microscopy and mycobacterial culture. Drugsusceptibility testing is required to be performed on positive cultures. Before immigrating to the United States, applicants in whom tuberculosis disease has been diagnosed must complete treatment, which must be administered according to American Thoracic Society/CDC/Infectious Diseases Society of America guidelines and under a directly observed therapy (DOT) program. Guidance has been added for evaluation of contacts of tuberculosis patients. To reduce the risk of immigrants becoming infected with tuberculosis or activating latent disease, the period for which the examination is valid for travel has been reduced to 6 months for applicants with a normal evaluation and 3 months for applicants with a Class B1 classification (Table). The tuberculosis classification system also has been modified to better reflect the tuberculosis status of the applicant and to help ensure follow-up upon arrival in the United States.

CDC is working with the U.S. Department of State, panel physicians, the International Organization for Migration, and other organizations to implement these changes. The technical instructions are being implemented first in priority countries, as determined by immigration patterns and tuberculosis burden. By the end of 2007, applicants for

\* Medical examination of aliens. 42 CFR, Part 34.

TABLE. Tuberculosis (TB) classifications and descriptions for applicants for U.S. immigration — 2007 Technical Instructions for Tuberculosis Screening and Treatment for Panel Physicians\*

Classification	Description
No TB classification	Applicants with normal TB screening examinations.
Class A	Applicants who have infectious TB disease and have been granted a waiver permitting travel before completion of therapy.
Class B1, Pulmonary	No treatment: applicants who have medical history, physical examination, or chest radiograph findings suggestive of pulmonary TB but who have negative acid-fast bacilli sputum smears and cultures and do not have TB diagnosed or who can wait to have TB treatment started after immigration.
	Completed treatment: applicants who have had pulmonary TB diagnosed and have successfully completed directly observed therapy before immigration.
Class B1, Extrapulmonary	Evidence of extrapulmonary TB.
Class B2, Latent TB Infection Evaluation	Applicants who have a tuberculin skin test of ≥10 mm induration but otherwise have a negative evaluation for TB.
Class B3, Contact Evaluation	Applicants who are a contact of a person known to have TB.

\* Available at http://www.cdc.gov/ncidod/dq/panel\_2007.htm.

U.S. immigration screened according to the new technical instructions included all applicants from Mexico, the Philippines, Nepal, and Thailand. CDC will notify state and local health departments when panel physicians in a country begin implementing this revised algorithm.

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## Notice to Readers

# World Water Day — March 22, 2008

In 1992, the United Nations Conference on Environment and Development designated March 22 as World Water Day to promote activities related to conservation and development of water resources through advocacy, publication, and the organization of conferences (1). The theme for World Water Day 2008 is The International Year of Sanitation.

Basic sanitation includes access to facilities for the safe disposal of human waste and the ability to maintain hygienic conditions through services such as garbage collection, industrial or hazardous waste management, and wastewater disposal (2). Approximately 2.6 billion persons live without basic sanitation, including 1 billion children. Each year, an estimated 1.5 million children die as a result of poor sanitation, from preventable conditions such as diarrhea and malnutrition (3). To meet the United Nations Millennium Development Goal to reduce by half the proportion of persons without sustainable access to safe drinking water and basic sanitation, 1.6 billion persons will need access to improved sanitation during 2005–2015 (4).

Effective sanitation programs should include measures to promote personal hygiene, increase access to sanitation facilities, improve drinking water quality, and improve wastewater and industrial waste management processes. Without proper sanitation facilities and wastewater and industrial waste management, local environment and drinking water supplies can become contaminated by bacteria, viruses, parasites, and chemicals, increasing the risk for disease. Programs such as CDC's Water Plus/Agua y Mas empower communities to participate in development of water safety plans, helping them to build skills for maintaining and sustaining improved sanitation programs (5).

When access to safe drinking water is not possible, simple, inexpensive technologies that enable families to treat and safely store drinking water in their homes can prevent illness and save lives. The CDC Safe Water System uses pointof-use water treatment, safe-storage vessels, and effective communications to improve water quality and hygiene in homes, schools, and clinics (6,7). Additional information about World Water Day is available at http://www.unwater. org/worldwaterday/flashindex.html, http://www.world waterday.org/page/1023, and http://www.who.int/water\_ sanitation\_health/hygiene/iys/wwd\_2008/en. Additional information regarding the International Year of Sanitation is available at http://esa.un.org/iys/ap.shtml.

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# **QuickStats** FROM THE NATIONAL CENTER FOR HEALTH STATISTICS Percentage of Women\* Who Gained <15 Pounds During Pregnancy, by Age Group and Race/Ethnicity<sup>†</sup> of Mother — United States, 2005<sup>§</sup>



\* Includes only mothers with a term (≥37 completed week's gestation), singleton delivery.

<sup>†</sup> Includes non-Hispanic white, non-Hispanic black, and Hispanic women (who might be of any race). Data for other women are included in the total.

<sup>§</sup> Excludes data for California. Total number of women who gained <15 pounds was 26,179 for those aged <20 years; 229,031 for those aged 20–34 years; and 41,582 for those aged ≥35 years.

The recommended amount of weight gain during pregnancy is based on a woman's height and prepregnancy weight. Maternal weight gain of <15 pounds is not recommended for women having a singleton birth, regardless of the woman's height and prepregnancy weight. Inadequate weight gain has been associated with an increased risk for intrauterine growth retardation, low birthweight, and perinatal mortality. In 2005, overall, 10% of mothers of term singletons gained <15 pounds. Differences by age and race/ethnicity were substantial. For all racial/ethnic groups, inadequate weight gain increased with age. Non-Hispanic black women of all ages were more likely than non-Hispanic white and Hispanic women to gain <15 pounds during pregnancy.

SOURCES: National Vital Statistics System annual natality file. Available at http://www.cdc.gov/nchs/vitalstats.htm.

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## **MMWR**

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending March 15, 2008 (11th Week)\*

			5-year						
	Current	Cum	weekly	Total	cases rep	ported for	previous	syears	
Disease	week	2008	averaget	2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Anthrax		_		_	1	_	_	_	
Botulism:									
foodborne	_	1	0	23	20	19	16	20	
infant	_	7	2	83	97	85	87	76	
other (wound & unspecified)	1	1	0	24	48	31	30	33	WA(1)
3rucellosis	_	8	2	129	121	120	114	104	
Chancroid	_	10	0	31	33	17	30	54	
Cholera	_	_	_	7	9	8	6	2	
Cyclosporiasis <sup>§</sup>	1	13	3	99	137	543	160	75	GA (1)
Diphtheria	_	_	_	_	_	_	_	1	
omestic arboviral diseases <sup>§,¶</sup> :									
California serogroup	_	_	0	44	67	80	112	108	
eastern equine	_	_	_	4	8	21	6	14	
Powassan	_	_	_	1	1	1	1	_	
St. Louis	_	_	_	7	10	13	12	41	
western equine	_	_	_	_	_	_	_	_	
hrlichiosis/Anaplasmosis <sup>§,**</sup> :									
Ehrlichia chaffeensis	_	15	2	746	578	506	338	321	
Ehrlichia ewingii	_	1	—	_	—	_	—	_	
Anaplasma phagocytophilum	_	4	1	682	646	786	537	362	
undetermined	_	1	0	162	231	112	59	44	
laemophilus influenzae,††									
invasive disease (age <5 yrs):									
serotype b	1	7	0	23	29	9	19	32	AZ (1)
nonserotype b	1	30	3	168	175	135	135	117	OH (1)
unknown serotype	1	48	4	193	179	217	177	227	OH (1)
lansen disease§	3	14	2	70	66	87	105	95	CA (3)
lantavirus pulmonary syndrome§	—	1	0	32	40	26	24	26	
lemolytic uremic syndrome, postdiarrheal§	2	10	2	275	288	221	200	178	NY (2)
lepatitis C viral, acute	6	110	16	822	766	652	720	1,102	MO (1), KY (2), CA (3)
IIV infection, pediatric (age <13 yrs) <sup>§§</sup>	_	—	5	—	—	380	436	504	
nfluenza-associated pediatric mortality <sup>§,11</sup>	7	48	2	76	43	45	—	N	CA (2), IL (1), MA (1), MD (1), NYC (1), PA (1)
isteriosis	7	83	10	782	884	896	753	696	PA (1), OH (2), GA (2), FL (1), CA (1)
Aeasles***	1	3	1	40	55	66	37	56	ID (1)
Aeningococcal disease, invasive <sup>TTT</sup> :									
A, C, Y, & W-135	5	52	8	282	318	297	—	_	FL (1), OK (1), TX (2), WA (1)
serogroup B	4	36	4	146	193	156	_	_	OH (1), MN (1), SC (1), WA (1)
otherserogroup	1	8	1	31	32	27	_	_	
unknown serogroup	19	142	20	608	651	765	_	_	NY (1), NYC (1), OH (1), GA (1), FL (1), MS (1),
			~ /				0.50		OR (1), CA (12)
/lumps	3	122	34	//6	6,584	314	258	231	PA (1), CA (2)
Novel Influenza A Virus Infections	_	_		4	17	IN O	IN O	1	
	_	_	0	0	17	0	3	1	
'oliomyelitis, paralytic	_	_	_	_		I NI			
		-			21	16	10	10	
Siliacosis	1	7	0	100	160	10	70	71	FL(I)
	1	6	2	190	169	130	70	71	TV(1)
chronic	-	0	_	_	_	_	_	_	1^(1)
Pahias human	_	'	_	_	~ ~		7		
abies, numan Rubella	_	_		11	11	11	10	2	
Rubella concenital syndrome	_	_	0		1	1		1	
SARS-CoV <sup>§,****</sup>	_	_	Ő	_	_	_	_	8	

-: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

\* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

<sup>†</sup> Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

<sup>1</sup> Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.

\*\* The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingil*).

<sup>††</sup> Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

<sup>§§</sup> Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

11 Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Forty-eight cases occurring during the 2007–08 influenza season have been reported.

\*\*\* The one measles case reported for the current week was indigenous.

ttt Data for meningococcal disease (all serogroups) are available in Table II.

§§§ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

111 No rubella cases were reported for the current week.

\*\*\*\* Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

# TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending March 15, 2008 (11th Week)\*

	Current	Cum	5-year weekly	Total	cases rep	orted for	previous	syears	
Disease	week	2008	averaget	2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Smallpox <sup>§</sup>	_	_	_	_	_	_	_	_	
Streptococcal toxic-shock syndrome§	2	20	5	103	125	129	132	161	NY (1), MO (1)
Syphilis, congenital (age <1 yr)	_	14	7	277	349	329	353	413	
Tetanus	_		0	23	41	27	34	20	
Toxic-shock syndrome (staphylococcal)§	1	8	2	85	101	90	95	133	PA (1)
Trichinellosis	_	2	0	6	15	16	5	6	
Tularemia	_	2	0	115	95	154	134	129	
Typhoid fever	3	56	6	370	353	324	322	356	PA (1), AL (1), CA (1)
Vancomycin-intermediate Staphylococcus aurel	us§ —	1	0	27	6	2	_	N	
Vancomycin-resistant Staphylococcus aureus	_	_	_	_	1	3	1	N	
Vibriosis (noncholera Vibrio species infections)§	3	21	1	378	N	N	N	N	FL (1), AZ (1), CA (1)
Yellow fever	_	_	_	_	_	_	_	_	

-: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

\* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

<sup>†</sup> Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

<sup>§</sup> Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

#### CASES CURRENT 4 WEEKS DISEASE DECREASE INCREASE Giardiasis 669 Hepatitis A, acute 95 Hepatitis B, acute 137 Hepatitis C, acute 20 Legionellosis 81 Measles 1 Meningococcal disease 87 Mumps 22 Pertussis 161 0.25 0.5 2 4 Ratio (Log scale)\* Beyond historical limits

# FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals March 15, 2008, 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.

Notifiable Disease Data Team and 122 Cities Mortality Data TeamPatsy A. HallDeborah A. AdamsRosaline DharaWillie J. AndersonCarol WorshamLenee BlantonPearl C. Sharp

<b>k</b>	Chlamydia <sup>†</sup>							Cryptosporidiosis							
	Previous Current <u>52 weeks</u> Cum Cun				<u></u>	Current	Pre	vious	<b>C</b>	<u></u>	Current	Prev	/ious	C	<b>C</b>
Reporting area	week	<u> </u>	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	10,692	20,840	25,026	181,293	217,521	134	137	334	1,571	1,657	30	84	974	531	624
New England Connecticut Maine <sup>§</sup> Massachusetts New Hampshire Rhode Island <sup>§</sup> Vermont <sup>§</sup>	641 65 66 428 22 60	686 223 49 303 38 61 14	1,516 1,092 67 661 73 98 32	7,097 1,492 571 3,895 456 677 6	6,783 1,481 545 3,384 423 753 197	N  -  - N	0 0 0 0 0 0	1 0 0 1 0 0	1  -  -       	N       N	1  1 	4 0 1 1 1 0	16 2 5 11 5 3 4	16 2  4 10	71 42 6 10 8 
<b>Mid. Atlantic</b> New Jersey New York (Upstate) New York City Pennsylvania	1,542 198 611 151 582	2,735 402 557 902 787	4,141 523 2,037 2,172 1,754	21,402 2,712 4,800 5,535 8,355	28,716 4,678 4,334 10,697 9,007	N N N N	0 0 0 0	0 0 0 0	N N N N N		8 6 2	10 1 3 1 6	117 7 20 10 103	80 3 20 13 44	73 3 14 21 35
<b>E.N. Central</b> Illinois Indiana Michigan Ohio Wisconsin	853 2 547 54 250	3,332 1,016 392 704 835 375	6,194 2,198 629 994 3,617 607	27,551 7,270 2,975 7,704 5,393 4,209	35,676 10,592 4,601 8,570 7,648 4,265	   N	1 0 0 0 0	3 0 2 1 0	6  - 3 N	9  7 2 N	6  -   6	20 2 4 5 7	134 13 32 11 61 59	129 4 14 32 45 34	130 21 7 21 44 37
W.N. Central lowa Kansas Winnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota	732 137 170 308 81  36	1,204 161 149 258 463 89 27 52	1,462 251 393 318 551 183 65 81	11,161 1,804 1,173 1,987 4,780 819 37 561	13,232 1,862 1,691 2,838 4,874 1,066 393 508	N N   N N N	0 0 0 0 0 0 0	77 0 77 1 0 0	N N     N N N N	2 N   2 N N N	1 — 1 — —	15 3 2 3 2 2 0 2	124 61 16 34 13 24 6 16	85 23 9 24 11 11 1 6	79 13 11 20 13 5 1 16
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	2,529 60 1,060 1 298 - 29 1,062 19	4,031 64 115 1,266 564 463 302 504 485 61	6,249 140 182 1,565 1,502 696 2,595 3,030 710 95	35,526 770 1,082 13,804 54 4,522 4,946 4,488 5,245 615	39,528 789 1,101 8,601 8,484 3,089 6,449 5,402 4,976 637	Z Z     Z Z Z	0 0 0 0 0 0 0 0 0 0	1 0 0 1 0 0 0 0	1     N 1   N N N	2    N 2   N N N	5 — 3 1 — —	20 0 8 5 0 1 1 1	69 4 0 35 17 3 18 15 5 5	121 4 59 38 1 7 5 4 3	149 2 3 79 29 5 7 11 12 12
<b>E.S. Central</b> Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	99 — 74 25	1,502 490 196 275 505	2,277 605 357 1,049 719	14,201 3,744 2,316 2,969 5,172	17,862 5,394 1,201 4,918 6,349	N N N N	0 0 0 0	0 0 0 0		N N N N N	 	4 1 1 0 1	65 14 40 11 18	19 11 2 2 4	32 14 8 2
<b>W.S. Central</b> Arkansas <sup>§</sup> Louisiana Oklahoma Texas <sup>§</sup>	2,152 279 120 272 1,481	2,600 204 367 240 1,724	3,551 395 851 467 3,405	29,089 2,898 2,561 2,350 21,280	23,399 1,798 3,631 2,693 15,277	N N N	0 0 0 0	1 0 1 0 0	N N N	N   N N	1 — — 1	5 0 1 3	28 8 4 11 16	35 2 9 22	40 3 12 9 16
Mountain Arizona Colorado Idaho <sup>\$</sup> Montana <sup>\$</sup> Nevada <sup>\$</sup> New Mexico <sup>\$</sup> Utah Wyoming <sup>\$</sup>	504 66 340 55 26 — 17	1,419 476 310 59 44 183 161 121 21	1,854 672 488 233 356 291 394 217 35	6,043 623 900 795 589 1,086 873 1,166 11	14,641 4,497 3,915 659 595 1,954 1,709 1,045 267	72 72 N N 	94 90 0 0 1 0 1 0	171 169 0 0 6 2 7 1	1,101 1,086 N N 11 2 2	1,090 1,064 N N 7 7 12 —	7 2 2 3 — — —	8 1 2 1 1 0 2 1 0	571 6 26 72 7 6 9 488 8	37 9 2 11 5 1 4 2 3	35 6 15 1 2 - 9 1
<b>Pacific</b> Alaska California Hawaii Oregon <sup>§</sup> Washington	1,640 45 1,429 — 166 —	3,311 85 2,690 109 181 140	4,016 123 3,430 134 403 621	29,223 795 25,196 971 2,153 108	37,684 963 29,675 1,223 1,994 3,829	62 N 62 N N N	40 0 40 0 0 0	217 0 217 0 0 0	462 N 462 N N N	554 N 554 N N N	1   1	1 0 0 1 0	20 2 0 4 16 0	9  9 	15 
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	  295 	0  10 114 3	32 — 34 612 9	37  1,195 	 173 1,748 53	N  -     	0 0 0 0	0 0 0 0	N       	N       	 N	0 0 0 0	0 0 0 0	  	  

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly. Chamydia refers to genital infections caused by *Chlamydia trachomatis*. S Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

		Giardiasis Gonorrhea Previous Previous								Hae	emophilu All age	<i>is influen:</i> s, all sero	z <i>ae</i> , invas otypes†	ive	
		Prev	vious	•	•		Pre	evious	•	•		Pre	vious	•	•
Reporting area	week	<u>52 w</u> Med	<u>еекs</u> Мах	2008	2007	week	Med	Max	2008	2007	week	<u>52 v</u> Med	Max	2008	2007
United States	162	298	1,072	2,355	3,022	2,636	6,668	7,941	53,131	70,978	24	43	116	547	579
New England	4	23	54	118	218	86	103	227	964	1.091	_	3	8	10	45
Connecticut		6	18	45	57	13	42	199	305	329	_	0	7		15
Maine <sup>s</sup>	4	3	10	23	34	1	2	107	18	16	_	0	3	4	3
New Hampshire	_	0	29	11	100	2	50 2	127	23	592 31	_	0	2	1	22
Rhode Island§	_	1	15	14	_	8	7	14	79	109	_	õ	2	2	_
Vermont <sup>§</sup>	—	3	8	25	24	_	1	5	—	14	—	0	1	3	
Mid. Atlantic	41	59	118	400	554	402	662	1,008	5,011	7,573	4	9	27	109	124
New Jersey	24	22	15	21 176	/3 169	136	114	158 517	1,031	1,321		1	6	16	22
New York City	2	16	29	79	186	18	164	375	704	2.451		1	6	17	32
Pennsylvania	5	14	30	124	127	132	232	551	2,113	2,675	2	3	11	46	44
E.N. Central	15	48	91	361	471	244	1,285	2,579	9,781	14,650	2	6	14	74	77
Illinois		14	33	70	132	—	378	766	2,236	3,819	—	2	6	16	24
Indiana Michigan	N	0 11	22	N 64	N 137	156	159 285	308	1,302	1,827	_	1	/	10	6
Ohio	15	15	37	169	140	9	350	1.558	1.987	3.844	2	2	6	43	33
Wisconsin	_	7	21	58	62	79	125	210	1,285	1,550	_	0	1	2	5
W.N. Central	9	22	580	282	192	175	370	446	2,984	4,257	_	3	24	44	27
lowa	—	5	23	51	42	10	31	56	278	447	_	0	1	1	_
Kansas Minnesota	_	3	11 575	20 100	24 4	42	40 65	102	294 544	517 746	_	0	21	1 Q	4
Missouri	6	8	23	72	86	86	187	255	1,549	2,227	_	1	5	25	13
Nebraska§	_	3	8	24	23	35	25	57	271	239	—	0	3	7	2
North Dakota	3	0	3	7	1	_	2	6	2	21	_	0	1	1	1
South Dakota			0	8	12	2	5	11	40	60		0	0		
S. Atlantic	40	54	96	484	509	563	1,575	2,340	12,485	15,761	14	12	30	160	143
District of Columbia	_	0	6		15	20	46	71	369	473	_	0	1	_	2
Florida	17	23	47	208	218	347	489	623	4,954	3,817	5	3	10	50	40
Georgia	15	12	39	160	120	3	237	621	27	3,419	3	2	8	41	32
Maryland <sup>s</sup>	1	4	18	37	51	67	126	234	1,263	1,081	2	1	6	36	27
South Carolina <sup>§</sup>	5	3	6	23	11	25	201	1.361	1.792	2.177	1	1	4	10	12
Virginia§	1	10	40	40	87	100	126	224	1,229	1,086		1	23	5	12
West Virginia	—	0	8	7	1	1	17	38	144	182	—	0	3	4	4
E.S. Central	4	10	23	67	104	59	584	868	5,212	6,654	—	2	8	25	34
Alabamas	4 N	4	11	44 N	62 N		208	282	1,560	2,314		0	3	5	9
Mississippi	N	0	0	N	N	52	122	401	1.189	1.739	_	ő	2	1	2
Tennessee§	_	5	16	23	42	7	175	261	1,571	2,183	_	2	6	19	21
W.S. Central	2	6	21	30	68	703	1,012	1,346	10,044	10,027	1	2	15	25	23
Arkansas <sup>§</sup>	1	1	9	10	28	103	77	138	989	838	_	0	2	_	1
Louisiana	-	2	14	4	21	46	208	384	1,442	2,239		0	2	1	4
Texas <sup>§</sup>	N	0	9	N	N	450	638	207 962	6.651	5.748		0	3	23	1
Mountain	15	31	68	163	286	75	261	335	962	2 697	3	5	14	81	74
Arizona	1	3	11	24	46	15	101	130	177	912	3	2	10	49	36
Colorado	10	10	26	34	103	54	58	91	117	758	_	1	4	2	17
Idaho <sup>s</sup>	3	3	19	28	22	2	5	19	40	34	_	0	1	1	2
Nevada <sup>§</sup>	_	2	8	12	20		44	48 85	286	25 468	_	0	1	4	4
New Mexico <sup>§</sup>	_	2	5	11	29	_	30	64	212	321	_	ĩ	4	7	7
Utah	—	7	33	32	43	3	14	39	115	163	_	1	6	17	7
Wyoming <sup>s</sup>	_	1	3	5	10	_	1	5	_	16	_	0	1	_	1
Pacific	32	60	214	450	620	329	655	799	5,688	8,268	_	3	6	19	32
Aldska California	4 25	1 42	5 84	13 327	13 460	5 296	9 577	18 711	// 5 101	7 015	_	0	4	4	4
Hawaii		1	4	2	14	200	12	23	102	136	_	ŏ	2	3	1
Oregon <sup>§</sup>	2	8	17	79	96	26	23	63	302	220	_	1	4	12	20
Washington	1	8	126	29	37	_	20	142	16	795	_	0	3	_	_
American Samoa		0	0	—	—	—	0	1	1	2	—	0	0	—	_
Guam	_		1	_	_	_	2	13	12	15	_		1	_	
Puerto Rico	_	3	21	5	57	7	5	23	57	85	_	ŏ	1	_	_
U.S. Virgin Islands	—	0	0	—	—	_	1	3	_	16		0	0	_	

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Me \* Incidence data for reporting years 2007 and 2008 are provisional. Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I. Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Med: Median. Max: Maximum.

			Hepati	itis (viral, a	acute), by i	type <sup>†</sup>		_							
		Dress	<u>A</u>				Dress	B				Le	egionellos	is	
	Current	52 w	eeks	Cum	Cum	Current	52 w	veeks	Cum	Cum	Current	52 w	/eeks	Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	23	52	137	476	545	38	80	222	568	852	23	47	91	353	311
New England	1	2	6	15	14	_	1	6	6	13	_	2	14	12	11
Connecticut Maino <sup>§</sup>	1	0	3	4	4	—	0	5	3	3	—	0	4	3	2
Massachusetts	_	0	4		7	_	0	1		1	_	0	2	_	8
New Hampshire	—	0	3	—	3	—	0	1	1	4	—	0	2	1	_
Rhode Island <sup>§</sup>	_	0	2	9	_	_	0	3	_	3	_	0	6	6	1
	_	0	1			_	0	1		100		14	2	70	1
New Jersev	_	9	21	9	80 25	4	0 1	4	49	36	- -	14	37 11	70 6	15
New York (Upstate)	_	1	6	14	15	2	2	7	11	11	4	4	15	18	19
New York City		3	9	17	31		2	7	2	34	-	3	11	4	15
Pennsylvania	1	2	5	22	14	2	3	13	30	41	1	C 10	21	48	34
E.N. Central	3	5	13	55 9	78 34	1	8	15 6	61 5	113 33	9	10	30 12	93	78 15
Indiana	_	ō	4	4	2	_	Ö	8	5	2	_	1	7	4	5
Michigan	2	2	5	32	20	_	2	6	18	35	1	3	11	24	26
Unio Wisconsin		0	4	8	6		2	2	30	32	8	4	1/	58	27
W N Central	2	3	19	55	12	_	2	8	15	41	_	1	م	17	11
lowa		1	5	17	4	_	0	2	2	8	_	Ó	2	3	1
Kansas	_	0	3	4	—	—	0	2	4	3	—	0	1	_	_
Minnesota Missouri	1	0	18	12	3	_	0	5	7	22	_	0	6	1 7	1
Nebraska§	1	õ	3	14	3	_	Ö	1	2	3	_	ò	2	5	2
North Dakota	_	0	0	_	_	_	0	1	—	_	_	0	0	_	_
South Dakota	_	0	1	1	2		0	1	_	3	_	0	1	1	1
S. Atlantic	3	10	21	70	90	14	18	53	175	209	5	8	27	75	72
District of Columbia	_	0	5	_	8	_	0	1	_		_	0	1	_	_
Florida	2	3	8	29	33	8	6	12	74	67	3	3	12	36	32
Georgia Mandand <sup>§</sup>	_	1	4	10	15	2	2	6	12	34	_	1	3	14	16
North Carolina	_	0	9	9	3		0	16	24	32	_	0	4	3	7
South Carolina <sup>§</sup>		0	4	2	4	1	1	6	16	14	1	0	2	2	3
Virginia <sup>s</sup> West Virginia	1	1	5	8	16	1	2	15 23	17 4	27	1	1	6	6	4
ES Control		2	5	7	22		7	15	59	69	1	2	6	16	15
Alabama <sup>§</sup>	_	0	4	1	5	_	2	6	20	23	_	0	1	2	2
Kentucky	_	0	2	3	4	_	1	7	18	6	1	1	3	9	5
Mississippi Tennessee§	_	0	1		4	_	0	3	6 14	9 30	_	0	0		
		-	46	20	10	10	10	110	100	114				7	0
Arkansas <sup>§</sup>	4	5 0	40		40	12	19	4	122	9	_	2	3	1	0
Louisiana		0	3		5		1	6	7	19	_	0	1	_	1
Oklahoma Texas§	1	0	8	3		1	1	38 94	11	7	_	0	2	6	6
Neumtein	0		10	45	57		10		102	73 FC	-	2		01	17
Arizona	2	4	10	45 28	54 42		3	8	2	56 30	1	2	6 5	21	3
Colorado	_	ō	2	3	5	1	Ö	3	3	7	_	Ó	2	1	4
ldaho <sup>§</sup>	1	0	2	7	—	_	0	1	1	3	-	0	1	1	1
Nevada <sup>§</sup>	_	0	2	_	3	_	1	3	7	12	_	0	2	2	2
New Mexico <sup>§</sup>	_	Ō	1	3	1	_	0	2	1	2	_	Ō	1	_	2
Utah	_	0	2	2	2	—	0	2	2	2	—	0	3	4	3
vvyorning <sup>.</sup>		10	1	2	140	_	0	1			_	0	1		2
Alaska		12 0	43	128	143	6	9	29	66 2	116	2	3	15 0	36	16
California	7	11	34	103	132	5	6	19	49	85	2	2	13	31	15
Hawaii	—	0	2	2	2	_	0	2	1		—	0	1	1	—
Washington	_	1	3	10	4	1	1	10	7	22 7	_	0	2	3	1
American Samoa	_	0	0			_	0	12	· 		N	ů N	-	N	N
C.N.M.I.	_	_	_	_	_	_			_	_			_		
Guam	—	0	0		_	—	0	1		1	—	0	0	—	
Puerto Rico	_	0	3	1	20	_	1	4	4	19	_	0	1	_	2

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		L	.yme disea	ise			I	Malaria			Mer	ningoco Al	ccal disea I serogrou	se, invasi <sup>,</sup> ıps	vet
<b>_</b>	Current	Prev 52 w	vious veeks	Cum	Cum	Current	Prev 52 w	vious /eeks	Cum	Cum	Current	Pre 52 v	vious veeks	Cum	Cum
Reporting area	week	Ivied	Max	2008	2007	week	Ivied	Max	2008	2007	week	Med	Max	2008	2007
United States	28	325	1,313	997	1,583	8	25	109	136	186	29	19	52	238	275
Connecticut		44 12	302 214	42	121 20	_	1	23 16	1		_	0	3	2	11
Maine <sup>§</sup>	7	6	61	28	9	_	Õ	2	_	2	_	Õ	1	1	2
Massachusetts	—	0	31		46	—	0	3	- 1	5	—	0	2	—	5
Rhode Island <sup>§</sup>	_	0	79		42	_	0	7	_	_	_	0	1	_	_
Vermont <sup>§</sup>	_	1	13	3	4	—	0	2	—	—	_	0	1	—	2
Mid. Atlantic	9	167	674	611	827	_	7	18	27	44	2	2	8	26	27
New Jersey New York (Unstate)	7	39 54	182 220	84 69	262 108	_	1	4	3	5	1	0	2	1	6
New York City	_	5	27	4	36	_	4	9	18	28	1	ò	4	2	4
Pennsylvania	2	52	324	454	421	—	0	4	6	6	—	1	5	14	11
E.N. Central	—	11	169	16	56	—	2	7	24	30	2	3	7	38	46
Illinois Indiana	_	1	16 7	_	5	_	1	6	9	15 1	_	1	3	8	16
Michigan	_	Õ	5	5	2	_	Õ	2	5	5	_	õ	2	7	g
Ohio	—	0	4	3	2	_	0	3	8	4	2	1	2	11	9
WISCONSIT	_	10	149	0	40		0	1	1	10	-	1	1	4	00
lowa	_	4	686 11	2	20	2	0	8	4	12		0	8	30	23
Kansas	_	Ó	2	_	1	_	Õ	1	_	_	_	õ	1	_	2
Minnesota	—	0	686	—	15	—	0	8	1	7	1	0	7	11	4
Nebraska <sup>§</sup>	_	0	1	_	_	2	0	1	3	2	_	0	2	3	1
North Dakota	—	0	2	—	—	—	0	1	—	—	—	0	1		1
South Dakota		0	0				0	1				0	1	1	1
S. Atlantic	8	62 12	215	282 70	523	3	4	14	42	38	4	3	11	31	36
District of Columbia	_	0	7		2	_	0	1	_	1	_	ŏ	Ó	_	_
Florida	_	1	11	13	4	1	1	7	15	8	2	1	7	13	10
Georgia Marvland <sup>§</sup>	8	33	133	180	377	1	1	3	12	11		0	3	3	10
North Carolina	_	0	8	2	_	_	Ö	4	2	4	_	õ	4	3	3
South Carolina <sup>§</sup>	—	0	4	1	3	—	0	1	1	10	1	0	3	9	3
West Virginia	_	0	9	14		_	0	1	_		_	0	1	_	_
E.S. Central	_	0	5	_	4	_	0	3	2	7	1	1	3	16	15
Alabama <sup>§</sup>	_	0	3	_	1	_	0	1	1	1	_	0	2		3
Kentucky Mississinni	_	0	2	_	_	_	0	1	1	1	1	0	2	4	2
Tennessee§	_	Ő	4	_	3	_	õ	2	_	4		Ő	2	8	6
W.S. Central	_	1	7	2	10	_	2	55	6	13	4	2	11	20	30
Arkansas <sup>§</sup>	_	0	1	—	_	—	0	1	—	_	_	0	2	1	3
Oklahoma	_	0	0	_	2	_	0	2	1	6 1	2	0	3	3	4
Texas <sup>§</sup>	—	1	7	2	8	—	1	54	5	6	2	1	6	11	12
Mountain	1	1	3	2	2	1	1	5	6	14	_	1	4	16	22
Arizona		0	1	_	_	-	0	1	1	4	_	0	2	3	3
Idaho§		0	2		_	_	0	2		<u> </u>	_	0	2	2	2
Montanas	—	0	2	—	1	—	0	1		—	—	Ō	1	1	1
Nevada <sup>§</sup>	—	0	2	—	1	—	0	3	3	1	—	0	2	3	3
Utah	_	0	2	_	_	_	0	3	_	1	_	0	2	1	6
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	_
Pacific	3	3	11	40	20	2	3	9	24	21	15	4	21	59	65
Alaska California		0	2		2 18		0	0 8		2 15	10	0 3	1 10		1 10
Hawaii	2 N	2	9	N	N		20	o 1	1			0	2	40	40
Oregon <sup>§</sup>	1	0	1	1	—	—	0	2	3	3	1	1	3	8	8
vvashington	_	0	7	_	_	_	0	3	2	1	2	0	8	8	6
American Samoa	N	0	0	N	N	—	0	0	_	—	—	0	0	_	_
Guam	_	0	0	_	_	_	0	1	_	_	_	0	0	_	_
Puerto Rico	Ν	0	0	Ν	Ν	—	0	1	—	1	—	0	1	—	3
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	

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		Pertussis					Rabies, animal						Rocky Mountain spotted fever				
		Prev	ious				Prev	vious				Pre	vious				
Reporting area	Current	<u>52 w</u>	eeks Max	Cum 2008	Cum 2007	Current	<u>52 w</u>	veeks Max	Cum 2008	Cum 2007	Current	52 v	veeks Max	Cum 2008	Cum 2007		
United States	37	165	588	1.011	2.001	34	103	198	524	884	2	34	147	39	95		
New England	_	21	45	25	342	7	10	22	50	93	_	0	1	_	1		
Connecticut	—	0	5		17	5	4	10	30	38	—	Ö	Ö	—			
Maine <sup>†</sup> Massachusetts	_	1 17	5	14	25	_	1	5	3	20 N	_	0	1	_	1		
New Hampshire	_	1	5	2	15	_	1	4	6	8	_	Ő	1	_	_		
Rhode Island <sup>†</sup>	_	0	8	5	2		1	4	5	6	_	0	0	_	_		
	_	0	0	4	10	2	2	13	0	21	_	0	0				
New Jersev	4	22	36	155	357	9 N	25	56 0	65 N	214 N	_	0	3	3	10		
New York (Upstate)	1	8	24	50	181	9	9	20	60	67	—	0	1		_		
New York City Pennsylvania	3	2	7 22	15 89	37 84	_	1 13	5 44	5	16 131	1	0	3	1	4		
F N Central	1	, 24	184	383	384	_	4	49	1	4	_	1	4	1	3		
Illinois	_	24	8	10	57	_	1	15	_	1	_	0	3	_	1		
Indiana	_	0	9	3	2	_	0	1	_	_	_	0	2	_	_		
Michigan Ohio	1	4 12	16 176	28 342	85 180	_	1	28 11	1	2	_	0	1	1	1		
Wisconsin	_	0	24	_	60	Ν	Ö	0	Ň	Ň	_	Ő	ō	_	_		
W.N. Central	_	12	108	89	124	_	4	13	14	25	_	5	37	9	11		
lowa	—	2	8	12	43	—	0	3	1	2	—	0	4	—	1		
Minnesota	_	2	106		40	_	0	6	9	3	_	0	4	_			
Missouri	—	2	16	61	14	_	0	3	—	1	—	5	29	9	7		
Nebraska <sup>⊤</sup> North Dakota	_	1	12 4	12	5 1	_	0	0	2	3	_	0	2	_	_		
South Dakota	_	0	7	2	15	_	Ő	2	2	_	_	0	1	_			
S. Atlantic	8	15	48	102	224	12	40	63	335	466	1	14	111	21	47		
Delaware	_	0	2	1	1	_	0	0	_	—	_	0	2	_	4		
Florida	3	3	9	28	71	_	0	6	25	124	_	0	3	1	3		
Georgia	_	0	3	1	13	_	5	31	70	40	_	0	6	3	3		
Maryland <sup>®</sup> North Carolina	3	2	6 34	15 35	36 54	12	9	18	58 78	69 78	_	1	5	4	9 18		
South Carolina <sup>†</sup>	2	1	22	12	16	12	0	11		26	_	0	7		4		
Virginia <sup>†</sup>	_	2	11	10	28	_	12	31	91	113	1	2	11	2	6		
vvest virginia	_	0	12		3	_	0		10	10	_	0	3		10		
E.S. Central Alabama <sup>†</sup>	_	6 1	35	39 10	64 19	_	3	0	13	26	_	5	10	3	19		
Kentucky	—	0	4	6	3	—	Ō	3	2	6	—	0	2	_	_		
Mississippi Tennesseet	_	3	32	16	11	_	0	1	11	20	_	0	3 10	1	1		
WS Control		20	112	40	70	2	- 1	22	0	14		- 1	20	1	3		
Arkansas <sup>†</sup>	_	20	17	40	6	2	1	23	9	5	_	0	15	_			
Louisiana	—	0	2	_	4	—	0	0	—	_	_	0	1	_	1		
Oklanoma Texast	_	0 16	26 102	1 32	69	_	0	22	_	9	_	0	20 6	1	1		
Mountain	3	19	40	103	295	_	4	19	21	11	_	0	4	1	1		
Arizona	_	2	10	10	88	—	2	13	14	10	—	0	1	_	_		
Colorado Idabo <sup>†</sup>	2	5	14	19	81 0	_	0	0	_	_	_	0	2	_	1		
Montana <sup>†</sup>	_	1	11	26	9	_	0	3	_	_	_	0	1	_			
Nevadat	—	0	6	2	7	—	0	2	_	—	_	0	0		_		
New Mexico' Utah	_	1	27	1 41	12 78	_	0	2	6	1	_	0	1	1	_		
Wyoming <sup>†</sup>	_	Ő	2	_	11	_	Ő	4	1		_	Ő	2	_	_		
Pacific	21	16	230	75	132	4	4	10	16	31	_	0	2	_	1		
Alaska	_	1	6	17	9 74	1	0	3	5	19	N	0	0	N	N 1		
Hawaii	_	0	29 2	1	/4 8	3 N	3 0	0	N	N	N	0	2 0	N	I N		
Oregon <sup>†</sup>		1	14	9	14	_	0	3	—	—		0	1				
vvasnington	21	3	207	48	27	_	0	0			N	0	0	N	N		
American Samoa C N M L	_	0	0	_	_	N	0	0	N	N	N	0	0	N	N		
Guam	_	0	0	_	_	_	0	0	_	_	N	0	0	Ν	N		
Puerto Rico	—	0	1	—	—	_	0	5	4	15	N	0	0	N	N		

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Salmonellosis						Ohima	· 0)+	Shigellosis							
		Bros	aimonello	ISIS		Shiga	toxin-pro	baucing E		(U)		Dro	Snigellos	IS	
	Current	52 w	eeks	Cum	Cum	Current	52 v	veeks	Cum	Cum	Current	52 \	veeks	Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	303	861	1,866	4,594	6,529	21	73	216	332	414	154	359	1,048	2,528	2,172
New England	_	31	73	116	659	_	3	11	11	72	_	3	11	12	80
Connecticut Maine <sup>§</sup>	_	0	60 14	60 24	430 20	_	0	4	4	45 6	_	0	5	5	44
Massachusetts	_	21	58	_	171	_	2	10	_	15	_	2	8	_	32
New Hampshire	_	3	10	10	20	_	0	4	2	6	_	0	1	1	2
Vermont <sup>§</sup>	_	1	15 5	13 9	10 8	_	0	2	1	_	_	0	9	5	_
Mid Atlantic	15	108	190	526	898	2	q	27	29	54	Q	18	153	184	112
New Jersey		19	48	16	184		2	7		20		4	11	32	17
New York (Upstate)	7	26	63	151	198	2	3	12	14	14	7	3	19	52	19
New York City Pennsylvania	1	25 34	52 69	154 205	216 300	_	1	5 11	4 11	4 16	1	5	13	76 24	62 14
E N Central	, 13	105	255	123	842	2	0	35	32	56	, Q	56	13/	/81	207
Illinois		30	188	62	318		1	13		8		15	27	141	113
Indiana	_	11	34	42	65	_	2	13	5	1	_	4	81	164	9
Michigan	3 10	19 25	43 64	104 161	137 174	1	2	8 9	9 12	28		1 18	/ 104	10	11 45
Wisconsin		15	50	54	148	1	2	11	6	10		4	13	27	29
W.N. Central	17	49	103	336	403	1	12	38	49	38	10	29	80	143	354
Iowa	_	9	18	56	66	_	3	13	12	2	_	2	6	8	11
Kansas Minnosota		12	20	26	59	_	0	4	12	5 15		0	3	3	7
Missouri	11	13	29	104	123	1	2	12	12	9	8	19	72	20 64	252
Nebraska <sup>§</sup>	2	5	13	37	28	_	2	6	2	7	_	0	3		3
North Dakota	_	03	9 11	5 11	7	_	0	1	2	_	_	0	5 30	13	6 12
Soull Dakola	100	000	405	1 400	1 700	_	10		2			01	150	29	706
Delaware	130	228	435	1,493	1,706	0	0	2	2	87 4	52	0	153	629	/20
District of Columbia	_	Ō	4	_	8	_	Ō	1	_	_	_	Ō	1	_	3
Florida	71	87	181	765	694	3	3	18	31	21	13	35	75	216	467
Marvland <sup>§</sup>	4	34 14	44	235	137	_	1	5	13	13	1	29	7	12	202
North Carolina	25	23	191	147	297	_	1	24	10	15	5	ō	12	17	8
South Carolina <sup>§</sup>	12	18	51	128	134	1	0	3	5		14	5	20	89	8
West Virginia		4	50 25	85 24	154		0	3	4	21		0	62	18	10
F S Central	11	59	145	310	430	_	4	26	39	20	11	49	177	322	177
Alabama§	6	16	50	104	114	_	1	19	23	4	5	13	43	89	64
Kentucky	5	10	23	55	85	—	1	12	3	7	3	8	35	39	17
Mississippi Tennessee§	_	13 17	57 35	58 93	101 130	_	2	1 12	1 12	1	3	18 5	111 32	98 96	45 51
W.S. Control	22	02	Q17	330	245	1	4	12	21	21	11	46	607	466	150
Arkansas <sup>§</sup>	6	13	50	47	44	_	0	3	4	6	4	2	11	30	13
Louisiana	_	16	43	32	85	_	0	0	_	3	_	8	22	13	54
Oklahoma Texas§	6 21	9 52	43 770	50 210	44 172	1	0	3 11	2 15	2 10	2	32	9 606	24 399	84 84
Mountain	21	40	00	200	401	· 0	10	40	10	26	00	17	40	109	140
Arizona	23 10	49 17	83 39	329 140	145	2	2	42	45 20	30 10	2	10	40 30	62	65
Colorado	12	10	24	44	105	_	1	17	_	9	_	2	6	5	20
Idaho <sup>§</sup>	1	3	10	25	23	—	2	16	16	2	_	0	2	1	1
Nevada§	_	5	9 12	8 34	15 44	_	0	3	2	4	_	1	10	31	11
New Mexico <sup>§</sup>	_	5	13	42	44	_	1	3	5	9	_	1	6	6	26
Utah	—	4	17	27	30 15	—	1	9	2	2	—	0	5	1	5
<b>D</b> aaifia		145	077	3	10		0	0			47	0	70	400	014
Alaska	61	115	377	10	825 14	7 N	9	38 0	23 N	30 N	1/	27	70 1	183	214
California	56	85	230	581	670	5	5	33	13	18	16	21	61	161	180
Hawaii	2	5	14	41	49	—	0	4	1	1	—	0	3	6	8
Washington	_	12	142	43 47	49 43	2	1	18	3 6	47	1	2	21	o 8	10
American Samoa	_	0	1	1	_	_	0	0	_	_	_	0	1	- 1	1
C.N.M.I.	_	_		_	_	_	_	_	_	_	_	_			_
Guam	—	0	5	1	2	N	0	0	N	N	—	0	3	2	4
U.S. Virgin Islands	_	12	55 ()	30	138	_	0	0	_	_	_	0	∠ 0	_	10

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	Stre	eptococca	l disease, i	invasive, gr	oup A	Streptoco	ccus pi	neumon	Age <5 yea	e disease, no ars	ondrug resis	tant
Reportingarea	Current	Prev 52 w	rious eeks	Cum	Cum	Curre	ent	Prev 52 w	vious eeks	Cum	Cum	
	week	Med	Max	2008	2007	wee	k	Med	Max	2008	2007	
United States	62	91	183	1,098	1,230	16		34	143	333	407	
New England	—	4	28	17	79	_		1	4	5	39	
	_	0	22	8	2 7	_		0	1	1		
Massachusetts	_	1	12	_	55	_		1	4	_	29	
New Hampshire	_	0	4	5	7	_		0	1	4	_	
Rhode Island <sup>§</sup>	—	0	1	_	_			0	1	_	2	
Vermont <sup>s</sup>	_	0	2	4	8	—		0	1	—	1	
Mid. Atlantic	11	16	40	202	258	2		6	38	47	55	
New Jersey New Verk (Unetete)		2	11	12	54			1	6	9	13	
New York City		3	20 13	26	65			2	35	24 14	29 13	
Pennsylvania	4	4	11	73	76	N		ō	0	N	Ň	
F N Central	6	16	55	255	245	А		5	19	71	60	
Illinois	_	4	10	48	89	_		1	6	16	11	
Indiana	_	2	10	32	20	_		0	11	7	3	
Michigan	1	3	10	42	54	_		1	5	15	24	
Unio Wisconsin	5	4	14 38	76 57	/1 11	1		1	5	15 18	18	
		-	00	57	= 4	0		0		10	4	
W.N. Central	1	5	33	76	74			3	21	28	20	
Kansas	_	0	3	8	10	_		0	1	2	_	
Minnesota	_	õ	20	20	29	_		ĩ	20	8	7	
Missouri	_	2	10	28	25	_		0	2	13	10	
Nebraska <sup>§</sup>	_	0	3	11	3	_		0	3	2	2	
North Dakota South Dakota	_	0	3	4	5	_		0	1	3	_	
	07	0	40	050	2	_		5	10	10		
S. Atlantic	27	23	49	258	261	3		5	10	48	85	
District of Columbia	_	õ	3		4	_		õ	0	_	_	
Florida	3	6	16	69	51	1		1	4	14	13	
Georgia	2	4	12	54	59	_		0	4	_	26	
Maryland <sup>®</sup>	9	4	9	57	50	1		1	5	18	23	
North Carolina South Carolina	9	2	22	28 14	30	1		0	0	13	8	
Virginia <sup>§</sup>	3	2	12	27	39	_		Ö	3	3	14	
West Virginia	_	0	3	4	3	_		Ō	1	_	1	
E.S. Central	_	4	13	36	55	_		2	11	21	23	
Alabama§	N	0	0	N	N	N		0	0	N	N	
Kentucky		1	3	8	15	N		0	0	N	N	
Mississippi	N	0	0	N	N 10			0	3	5	2	
Tennessee.		3	15	20	40			2	9	10	21	
W.S. Central	8	7	64	83	71	3		5	59	46	57	
Arkansas <sup>®</sup> Louisiana	_	0	2	1	8	_		0	2	3	4	
Oklahoma	4	1	9	35	24	2		1	5	22	14	
Texas§	4	5	55	46	31	1		3	54	21	24	
Mountain	7	10	21	140	160	4		4	12	57	58	
Arizona	2	4	9	55	57	2		2	8	38	30	
Colorado	5	2	9	34	39	1		1	4	9	12	
Idaho <sup>s</sup>		0	2	6	5			0	1	1		
Nontaria <sup>®</sup>	N	0	1	2	2	N		0	1	1	IN	
New Mexico <sup>§</sup>	_	2	5	31	27	1		õ	4	7	13	
Utah	_	1	6	12	28	_		0	2	1	3	
Wyoming <sup>§</sup>	—	0	1	—	2	—		0	0	—	—	
Pacific	2	3	7	31	27	_		0	4	10	10	
Alaska	1	0	3	9	3			0	4	10	6	
California	N ₁	0	0	N	N 24	N		0	0	N	N	
Oregon <sup>§</sup>	I N	∠ 0	5 0	22 N	∠4 N	N		0	0	N	4 N	
Washington	N	õ	õ	N	N	N		õ	õ	N	N	
American Samoa	_	0	4	_	_	N		0	0	N	Ν	
C.N.M.I.	_	_	_	_	_			_	_			
Guam	—	0	0	—		N		0	0	Ν	Ν	
Puerto Rico	—	0	0	—		N		0	0	N	Ν	
U.S. VIRGIN ISIANOS		U	0	_				U	0	—	—	

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717). \* Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

		S	treptococo All ages	cus pneum	<i>ioniae</i> , inva	sive disease	e, drug res Age	sistant† e <5 years	5	Syphilis, primary and secondary					
	Previous						vious				Previous				
Reporting area	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	52 w Med	veeks Max	Cum 2008	Cum 2007	Current week	<u>52 w</u> Med	<u>veeks</u> Max	Cum 2008	Cum 2007
United States	29	43	95	660	783	8	8	23	95	155	105	220	282	1,962	1,995
New England	_	1	6	8	46	_	0	2	2	3	4	6	14	50	42
Connecticut	—	0	4	_	29	—	0	1	_	2	—	0	6	3	5
Maine <sup>s</sup> Massachusetts	_	0	1	3	3	_	0	1	1	_	4	0	2	1 41	27
New Hampshire	_	õ	õ	_	_	_	õ	ŏ	_	_	_	Ő	3	3	4
Rhode Islands	_	0	2	2	7	_	0	1	_	1	_	0	5	2	5
Vermont	_	0	2	3	1	_	0	1	1			0	5	_	1
Mid. Atlantic	2	2	6	34	48	1	0	3	4	13	36	31	46	363	332
New York (Upstate)	1	1	4	9	18	1	0	1	1	7	1	3	10	23	26
New York City		0	0	-		_	0	0	_		25	18	31	227	215
Pennsylvania	1	1	6	25	30	_	0	2	3	6	3	5	11	59	52
E.N. Central	11	12	38	193	213	3	2	12	27	35	6	15	25	137	183
Indiana	_	3	22	37 46	46 29	_	0	9	8 4	3	_	6 1	14	18	89 12
Michigan	_	Õ	1	3		_	Õ	1	1	_	1	2	12	25	23
Ohio	11	6	17	107	138	3	1	3	14	16	5	3	14	68	51
vvisconsin	IN	0	0	IN	IN	_	0	0	_	_	_	I	4	11	8
W.N. Central	1	2	49	39	56	_	0	3	1	8	1	7	14	81	50
Kansas	_	0	7	2	33	_	0	1	_	2	_	0	2 5	6	4
Minnesota	—	0	46	—	_	—	0	3	—	4	—	1	4	21	12
Missouri	1	1	8	37	22	—	0	1	1	—		5	10	52	33
North Dakota	_	0	0	_	_	_	0	0	_	_		0	1		_
South Dakota	_	0	1	_	1	_	0	1	_	2	_	Ō	3	_	
S. Atlantic	14	18	43	273	312	3	4	11	42	69	26	50	131	403	359
Delaware	_	0	1	—	2	—	0	1	—	1	—	0	3	1	2
District of Columbia		0	1 27	171	4 162	1	0	0	 27	35	6	2 17	12	20 165	34 108
Georgia	3	5	16	93	135	2	1	5	13	28	_	9	113	9	43
Maryland <sup>§</sup>	_	0	1	1	_	_	0	1	1	_	5	6	15	66	57
North Carolina	_	0	0	_	_	_	0	0	_	_	1	5	23	69 10	55
Virginia <sup>§</sup>	N	0	0	N	N	_	0	Ö	_	_	13	4	16	54	42
West Virginia	_	1	12	8	9	_	0	1	1	5	_	0	1	_	2
E.S. Central	1	4	12	83	40	1	1	4	11	9	3	20	31	194	142
Alabamas	N	0	0	N	N	_	0	0	_	—	_	8	17	83	47
Mississinni		0	3	15	9		0	2	4	_	1	2	4 15	21	19
Tennessee§	_	3	12	68	31	_	Õ	3	7	9	2	8	15	78	53
W.S. Central	_	1	12	13	48	_	0	3	4	9	24	39	56	398	325
Arkansas <sup>§</sup>	—	0	1	3	1	—	0	1	2	_	2	2	10	16	23
Louisiana	—	1	4	10	23	—	0	2	2	2	1	10	20	75	70
Texas <sup>§</sup>	_	0	0	_		_	0	0	_	_	21	25	43	295	213
Mountain	_	1	5	17	20	_	0	2	3	9	1	9	28	38	88
Arizona	_	Ö	Ő	_		_	õ	ō	_	_	_	5	20	2	41
Colorado		0	0			—	0	0	—	—	1	1	5	13	11
Idanos Montanas	N	0	0	N	N	_	0	0	_	_	_	0	1	1	1
Nevada§	_	õ	3	14	12	_	õ	1	1	3	_	2	6	16	21
New Mexico <sup>§</sup>	—	0	1	_	_	_	0	0	_	_	—	1	3	6	11
Utan Wyoming§	_	0	5	3	6	_	0	2	2	5	_	0	2	_	2
Decific		0	2		2		0	1	4		4	40	61	200	474
Alaska	_	0	0	_	_	_	0	0	_	_	4	42	1	290	4/4
California	N	0	0	N	N	—	0	Ō	_	_	4	38	58	253	446
Hawaii		0	0			—	0	1	1	—	—	0	2	6	1
Washington	N N	0	0	N	N N	_	0	0	_	_	_	0 3	13	4 35	3 22
American Samoa	N	0	0	N	N		0	1				0	.0		
C.N.M.I.		_				_			_	_	_			_	_
Guam		0	0			—	0	0	—	—	_	0	0		-
Puerto Rico	N	0	0	N	N	_	0	0	—	—	1	2	10	22	21

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: M † Incidence data for reporting years 2007 and 2008 are provisional. † Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720). § Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Max: Maximum.

						West Nile virus disease <sup>†</sup>										
		Neuroinvasive Nonneuroinvasive <sup>§</sup>														
	Previous		evious		-	•	Pre	vious				Pre	vious	•	-	
Poporting area	Current	52 W	Max	Cum	2007	Current	52 w	/eeks	Cum	2007	Current	52 v	Max	Cum	2007	
Inited States	609	596	1 295	5 9/2	0.800	WEEK	1	1/11	2000	2007	WCCK	2	200	2000	2007	
Now England	17	10	1,205	120	9,009 154	_	0	141	_	1	_	2	299	_	'	
Connecticut		0	47	120	104	_	0	2	_	_	_	0	1	_	_	
Maine <sup>1</sup>	—	0	0	—	_	_	0	0	_	_	_	0	0	_	_	
Massachusetts	_	0	0	49	70	_	0	2	_	_	_	0	2	_	_	
Rhode Island <sup>1</sup>	_	0	0	40		_	0	0	_	_	_	0	1	_	_	
Vermont <sup>®</sup>	17	6	38	72	83	_	0	0	_	_	_	0	0	—	_	
Mid. Atlantic	60	64	154	507	1,462	_	0	3	_	_	_	0	3	—	_	
New Jersey	N	0	0	N	N	_	0	1	_	_	_	0	0	_	_	
New York City		Ő	0			_	Ő	3	_	_	_	ŏ	3	_		
Pennsylvania	60	64	154	507	1,462	—	0	1	—	—	—	0	1	—	_	
E.N. Central	92	157	358	1,388	3,185	—	0	18	—	—	—	0	12	—	1	
Illinois Indiana	N	3	11	46 N	44 N	_	0	13	_	_	_	0	8	_	_	
Michigan	28	67	154	608	1,251	_	Õ	5	_	_	_	Õ	ō	_	_	
Ohio	64	69	208	734	1,521	_	0	4	_	—	_	0	3	—	1	
WISCONSIN		9	114		309	_	0	<u>ک</u>	_	_	_	1	117	_	_	
lowa	э N	23 0	0	288 N	469 N	_	0	41	_	_	_	0	3	_	_	
Kansas	_	6	28	119	248	_	Õ	3	_	_	_	Õ	7	_	_	
Minnesota		0	0	155	174	_	0	9	—	—	-	0	12	—	_	
Nebraska <sup>1</sup>	4 N	0	/8 0	155 N	174 N	_	0	9 5	_	_	_	0	15	_	_	
North Dakota	_	Ō	60	1	24	_	Ō	11	_	_	_	Ō	49	_		
South Dakota	1	0	14	13	23	_	0	9	_	_	_	0	32	_	_	
S. Atlantic	90	92 1	214	937	1,329	_	0	12	_	_	_	0	6	_	_	
District of Columbia	_	Ó	8			_	0	0	_	_	_	Ő	0	_	_	
Florida	34	26	87	492	305	_	0	1	_	_	_	0	0	—		
Marvland <sup>1</sup>	N	0	0	N	N	_	0	2	_	_	_	0	5 2	_	_	
North Carolina		0	0	_	_	_	0	1	_	_	_	0	1	_	_	
South Carolina <sup>1</sup>	46	15	55 85	191 67	379 306	_	0	2	_	_	_	0	1	_	_	
West Virginia	10	19	66	182	330	_	0	0	_	_	_	0	0	_	_	
E.S. Central	29	12	82	267	135	_	0	11	_	1	_	0	14	_	_	
Alabama <sup>¶</sup>	29	12	82	266	133	_	0	2	_	_	_	0	1	—		
Mississippi	IN	0	0	IN 1	2	_	0	7	_	_	_	0	12	_	_	
Tennessee	N	Ō	0	Ň	Ň	_	Ō	1	_	1	_	Ō	2	_		
W.S. Central	354	172	838	2,018	2,297	_	0	34	_	_	_	0	18	_	_	
Arkansas <sup>1</sup>	15	13	46	142	146	_	0	5	_	_	_	0	2	_	_	
Oklahoma	_	Ó	0			_	Ő	11	_	_	_	0	7	_	_	
Texas <sup>1</sup>	339	159	821	1,867	2,111	_	0	18	_	—	—	0	10	_		
Mountain	50	35	130	313	759	_	0	36	_	—	_	1	143	_	_	
Colorado	31	13	62	127	290	_	0	8 17	_	_	_	0	10 65	_	_	
Idaho <sup>1</sup>	N	0	0	N	Ň	_	Õ	3	_	_	_	Õ	22	_	_	
Montana <sup>1</sup>	18	6	40	69	90	_	0	10	—	—	-	0	30	—	_	
New Mexico <sup>1</sup>	1	4	37	39	100	_	0	8	_	_	_	0	6	_	_	
Utah	_	8	72	77	275	_	0	8	_	_	_	0	8	—	_	
Wyoming <sup>1</sup>	_	0	9	1	3	_	0	4	_	_	_	0	33	—	_	
Alaska	1	0	4	5 5	19 19	_	0	18 0	_	_	_	0	23	_	_	
California	_	Ő	0	_		_	õ	17	_	_	_	õ	21	_	_	
Hawaii	N	0	0	N	N	_	0	0	_	—	_	0	0	_	_	
Washington	N	0	0	N	N	_	0	0	_	_	_	0	4 0	_	_	
American Samoa	N	0	0	Ν	Ν	_	0	0	_	_	_	0	0	_		
C.N.M.I.	—					_			—	—	_		_	_		
Guam Puerto Bico	_	3 10	19 37	11 55	75 154	_	0	0	_	_	_	0	0	_	_	
U.S. Virgin Islands	_	0	0	_	_	_	õ	Õ	_	_	_	õ	õ	_	_	

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	All causes, by age (years)								All causes, by age (years)						
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&l⁺ Total	Reporting Area	All Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	P&I <sup>†</sup> Total
New England	594	413	128	41	5	7	81	S. Atlantic	1,337	825	336	105	29	41	97
Boston, MA	132	82	31	12	2	5	16	Atlanta, GA	154	89	41	17	3	4	_
Bridgeport, CT	41	29	12	_	_	_	5	Baltimore, MD	196	118	48	1/	/	6	21
Cambridge, MA	19	15	3	1	_	_	5		144	109	37	12	2	4	19
Hartford CT	68	21	10	3	_	1	13	Miami El	80	51	18	6	4	2	0
	24	20	3	1	_	_	6		47	20	10	2	1	2	9
Lynn MA		9	_	_	_	_	2	Bichmond VA	66	40	21	1	2	2	4
New Bedford, MA	28	17	7	4	_	_	2	Savannah. GA	78	48	23	4	1	2	10
New Haven, CT	38	24	10	3	1	_	7	St. Petersburg, FL	72	44	16	6	2	4	5
Providence, RI	64	46	13	3	2	_	6	Tampa, FL	217	152	41	12	4	8	17
Somerville, MA	2	1	1	—	_	_	_	Washington, D.C.	93	50	27	9	_	6	_
Springfield, MA	37	31	6	—	_	_	6	Wilmington, DE	11	7	2	2	_	—	_
Waterbury, CT	27	17	7	3	—	_	2	E S Central	979	642	229	66	22	20	82
Worcester, MA	74	51	15	7	_	1	6	Birmingham, Al	167	106	43	9	4	5	12
Mid. Atlantic	2.361	1.654	506	120	36	44	150	Chattanooga, TN	92	64	20	6	1	1	8
Albany, NY	58	43	14	1	_	_	3	Knoxville. TN	120	85	22	11	2	_	12
Allentown, PA	16	14	2	_	_	_	_	Lexington, KY	101	70	24	6	1	_	4
Buffalo, NY	95	62	25	6	_	2	13	Memphis, TN	175	101	51	12	6	5	16
Camden, NJ	32	27	4	1	_	_	2	Mobile, AL	110	65	28	10	5	2	7
Elizabeth, NJ	28	15	10	3	—	_	2	Montgomery, AL	51	34	13	3	—	1	9
Erie, PA	54	42	11	—	1	—	1	Nashville, TN	163	117	28	9	3	6	14
Jersey City, NJ	11	10	1				_1	W.S. Central	1.692	1.066	421	103	54	48	147
New York City, NY	1,261	885	273	64	22	16	55	Austin, TX	115	80	26	3	3	3	18
Newark, NJ	96	44	34	9	2		5	Baton Rouge, LA	45	10	20	10	5	_	
Paterson, NJ	170	14	2	10	Ļ	5	2	Corpus Christi, TX	53	35	13	2	1	2	3
Prilladelprila, PA	170	20	30 10	12	э	4	6	Dallas, TX	211	111	60	18	9	13	17
Reading PA	44	20	8	2	_	2	3	El Paso, TX	115	76	30	5	2	2	7
Rochester NV	177	134	28	8	3	4	27	Fort Worth, TX	156	111	33	6	3	3	7
Schenectady, NY	30	26	4	_	_		3	Houston, TX	388	232	103	25	17	11	25
Scranton, PA	43	38	5	_	_	_	5	Little Rock, AR	79	45	22	5	4	3	7
Syracuse, NY	106	72	25	6	1	2	12	New Orleans, LA <sup>1</sup>	U	U	0	0	U	U	U
Trenton, NJ	38	24	9	3	_	2	2	San Antonio, I X	260	183	53	13	3	8	26
Utica, NY	13	12	1	—	_	_	_		105	133	17	2 1/	4	2	27
Yonkers, NY	25	19	5	—	1	—	1	Tuisa, OK	195	155	44	14	5		21
E.N. Central	2.248	1.509	505	124	55	55	220	Mountain	1,224	815	258	81	27	36	112
Akron, OH	47	27	15	3	1	1	1	Albuquerque, NM	120	83	28	1	1	1	9
Canton, OH	45	33	10	1	_	1	4	Boise, ID Colorado Springo CO	38	33 70	5 14				э 7
Chicago, IL	349	219	79	28	16	7	36	Donvor CO	105	63	25	2	3	2	12
Cincinnati, OH	87	52	22	5	4	4	13		317	214	70	21	7	5	26
Cleveland, OH	261	194	51	12	_	4	18	Ogden, UT	27	17	7	2		1	- 20
Columbus, OH	226	158	50	10	7	1	17	Phoenix, AZ	204	122	48	14	5	8	19
Dayton, OH	141	102	32	4		3	15	Pueblo, CO	47	38	6	3	_	_	7
Evenoville IN	10/	98	00 14	19	0	0	7	Salt Lake City, UT	105	59	22	11	3	10	6
Evalisville, IN Fort Wayne, IN	23	50	20	3	1	_	8	Tucson, AZ	162	108	33	14	5	2	17
Gary IN	13	7	6		_	_	1	Pacific	1 984	1 4 1 4	396	103	40	31	225
Grand Rapids, MI	66	47	11	2	2	4	11	Berkeley, CA	14	11	2			1	3
Indianapolis. IN	217	138	47	13	8	11	28	Fresno, CA	140	99	25	7	4	5	16
Lansing, MI	54	40	10	1	2	1	3	Glendale, CA	37	31	4	1	1	_	9
Milwaukee, WI	101	64	22	7	3	5	6	Honolulu, HI	105	80	20	4	1	_	6
Peoria, IL	50	39	7	2	_	2	9	Long Beach, CA	92	57	22	6	5	2	8
Rockford, IL	72	52	14	1	1	4	4	Los Angeles, CA	291	205	61	13	10	2	49
South Bend, IN	37	23	8	4	2	—	5	Pasadena, CA	37	26	6	3		2	4
Toledo, OH	84	58	18	7	1		7	Portland, OR	144	97	37	4	3	3	18
Youngstown, OH	/5	62	11	1	_	1	10	Sacramento, CA	229	159	45	16	7	2	27
W.N. Central	818	575	164	41	18	18	92	San Diego, CA	181	130	36	/	1		26
Des Moines, IA	81	63	11	4	1	2	9	San Jose CA	127 047	102	31	15	2	2	10
Duluth, MN	35	28	4	3	_	—	5	Santa Cruz CA	247	20	44 1	15	3		19
Kansas City, KS	25	22	2	—	1	—	2	Seattle WA	111	29	17	12	_	2	2 2
Kansas City, MO	143	98	34	7	3	1	18	Spokane WA	70	53	12	3	1	1	7
Lincoln, NE	37	29	5	1		2	6	Tacoma, WA	125	87	30	6	2	_	8
Minneapolis, MN	85	46	28	5	1	5	10		120	0,	0.0		<u>_</u>		
Omaha, NE	102	78	11	6	4	3	14	Total	13,237**	8,913	2,943	784	286	300	1,206
St. Louis, MO	130	79	31	8	7	3	10								
St. Faul, IVIN	100	54	14	2	-		10								
wichita, NO	109	/0	∠4	Э	1	1	12	1							

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  $\geq$ 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. <sup>†</sup> Pneumonia and influenza.

<sup>1</sup>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. <sup>1</sup>Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted. \*\*Total includes unknown ages.

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