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Malaria in Refugees from Tanzania — King County, Washington, 2007

Recent immigrants and refugees constitute a substantial proportion of malaria cases in the United States, accounting for nearly one in 10 imported malaria cases involving persons with known resident status in 2006 (1). This report describes three cases of *Plasmodium falciparum* malaria and two cases of Plasmodium ovale malaria that occurred during June 27-October 15, 2007 in King County, Washington. The infections were diagnosed in Burundian refugees who had recently arrived in the United States from two refugee camps in Tanzania. Since 2005, CDC has recommended presumptive malaria treatment with artemisinin-based combination therapy (ACT) (e.g., artemether-lumefantrine) for refugees from sub-Saharan Africa before their departure for the United States (2). Rising levels of resistance to the previous mainstays of treatment, chloroquine and sulfadoxine-pyrimethamine, prompted CDC to make this recommendation. Implementation has been delayed in some countries, including Tanzania, where predeparture administration of presumptive ACT for refugees started in July 2007. The cases in this report highlight the need for health-care providers who care for recently arrived Burundian and other refugee populations to be vigilant for malaria, even among refugees previously treated for the disease.

Washington state law requires health-care providers, hospitals, and laboratories to report malaria and certain other conditions to the local health department.* This report summarizes the findings from five cases reported to the local health department by health-care providers and laboratories (Table). After these cases were reported, the patients' medical records were obtained from two local hospitals and reviewed to assist in case investigations. Initial investigations were limited to case investigation forms completed by public health officials based on available medical records.

Case 1. A female aged 3 years was diagnosed with P. falciparum malaria in May 2007 while in Tanzania. At that time, she was placed on a quinine-based regimen (formulation, date of administration, and method of administration unknown) and clinically recovered. During an overseas predeparture exam, a requirement for entry into the United States, she received presumptive malaria treatment, with a course of sulfadoxine-pyrimethamine. She arrived in the United States on June 12, 2007, and became ill on June 25, 2007, with fevers, chills, and cough. On June 27, 2007, she was admitted to the local children's hospital. A blood smear revealed 7% hyperparasitemia (>5% = hyperparasitemia) with P. falciparum. Other laboratory findings included anemia, thrombocytopenia, and elevated aspartate aminotransferase. She received oral atovaquone-proguanil, clinically improved, and was discharged July 2, 2007 after 5 days in the hospital.

Case 2. A female aged 9 years arrived in the United States on July 23, 2007. Before leaving Tanzania, she received presumptive 3-day treatment of twice daily artemetherlumefantrine; the last doses were administered on July 19, 2007. She became ill on August 11, 2007, with fever, headache, malaise, and cough. She was evaluated in the local county hospital emergency department on August 14, 2007. Blood smear (percent parasitemia unknown) and polymerase chain reaction (PCR) test results were positive for *P. ovale*. Other

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^{*}Notifiable conditions. Ch. 246-101, Washington Administrative Code. Available at http://apps.leg.wa.gov/wac/default.aspx?cite=246-101.

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laboratory findings included anemia, elevated alanine and aspartate aminotransferase, and hypoalbuminemia. The patient recovered after outpatient treatment with mefloquine and primaquine.

Case 3. A male aged 6 years arrived in the United States on July 23, 2007. Before leaving Tanzania, he received presumptive 3-day treatment of twice daily artemether-lumefantrine, with last doses given on July 19, 2007. He became ill on August 13, 2007, with fever, headache, and malaise. He was evaluated in the local county hospital emergency department on August 15, 2007. Laboratory evaluation revealed anemia and *P. ovale* on blood smear (percent parasitemia unknown) and by PCR. He was treated with chloroquine and primaquine as an outpatient and recovered.

Case 4. A male aged 6 years arrived in the United States on September 28, 2007. He received presumptive treatment of artemether-lumefantrine before departure from Tanzania. The last doses were administered on September 24, 2007. He became ill on October 1, 2007, with fever, cough, and decreased energy. He was admitted to a local children's hospital on October 15, 2007. A blood smear revealed *P. falciparum* with 6.3% hyperparasitemia. Anemia was the other notable laboratory finding. The patient received quinidine and clindamycin, recovered, and was transitioned to atovaquone-proguanil before discharge. He was discharged on October 19, 2007 after spending 4 days in the hospital.

Case 5. A female aged 2 years arrived in the United States on September 28, 2007. She received artemether-lumefantrine as presumptive treatment before departure from Tanzania, with the last doses administered on September 24, 2007. She became ill on October 8, 2007, with fever, vomiting, and nonbloody diarrhea. She worsened clinically over the following week, eventually developing respiratory distress and lethargy. She was admitted to the intensive care unit of a local children's hospital on October 15, 2007. Her blood smear revealed 7.4% hyperparasitemia with *P. falciparum*. Other laboratory findings included anemia, thrombocytopenia, and elevated alanine and aspartate aminotransferase. The patient was treated with quinidine and clindamycin, recovered, and was transitioned to atovaquone-proguanil before discharge on October 19, 2007. She spent a total of 4 days in the hospital.

Blood smears from cases 2 through 5 were sent to CDC for confirmation of test results. In cases 2 and 3, blood smears were positive for *Plasmodium spp.* (without percent parasitemia noted), and PCR was positive for *P. ovale*. In case 4, the blood smear was notable for a 10% *P. falciparum* hyperparasitemia. In case 5, the blood smear was negative, but PCR was positive for *P. falciparum*.

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Characteristic	Case 1	Case 2	Case 3	Case 4	Case 5
Patient age (yrs)	3	9	6	6	2
Sex	Female	Female	Male	Male	Female
Arrival in United States	June 12, 2007	July 23, 2007	July 23, 2007	September 28, 2007	September 28, 2007
Symptom onset	June 25, 2007	August 11, 2007	August 13, 2007	October 1, 2007	October 8, 2007
Signs/Symptoms	Fever, chills, cough	Fever, headache, malaise, cough	Fever, headache, malaise	Fever, cough	Fever, vomiting, diarrhea, respiratory distress, lethargy
Laboratory findings Blood smear	Plasmodium falciparum	Plasmodium spp.	Plasmodium spp.	P. falciparum	P. falciparum
% Parasitemia	7%	_	_	6.3%*	7.4%†
Polymerase chain reaction (PCR)	N/A	Plasmodium ovale	P. ovale	N/A	P. falciparum
Hematocrit	29%	30%	34%	32%	18%
Platelets	59,000	210,000	160,000	202,000	29,000
Aspartate aminotransferase	68	118	31	_	122
Alanine aminotransferase	43	150	18	—	61
P _a O ₂ §	49	_	_	_	24
Treatment					
Predeparture	sulfadoxine pyrimethamine	artemether-lumefantrine	artemether-lumefantrine	artemether-lumefantrine	artemether-lumefantrine
In the United States	atovaquone-proguanil	mefloquine and primaquine	chloroquine and primaquine	quinidine and clindamycin, followed by atovaquone- proguanil	quinidine and clindamycin, followed by atovaquone proguanil

TABLE. Clinical findings, laboratory results, and treatment of malaria in Burundian refugees from Tanzania — King County, Washington, June 27, 2007–October 15, 2007

* Confirmation at CDC revealed 10% hyperparasitemia.

^TSmear negative, but PCR test positive at CDC.

§ Partial pressure of oxygen in arterial blood.

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Editorial Note: CDC recommends presumptive treatment of P. falciparum malaria in United States-bound refugees at high risk for infection rather than waiting for development of symptoms and risking severe complications or death after arrival in the United States (2). To be considered adequate presumptive therapy, the regimen must be completed no sooner than 3 days before departure (2). This approach reduces the risk for malaria-related morbidity and mortality among these refugees. Refugees are typically a medically underserved population with difficulty accessing care, which can lead to delays in diagnosis and treatment. Even if refugees are able to obtain care, health-care providers in the United States might not be familiar with recommended malaria treatment regimens. For example, the patient in case 1 did not receive adequate treatment for severe infection with P. falciparum. Instead, she received oral atovaquone-proguanil,

which would have been appropriate for uncomplicated malaria. The recommended regimens for severe infection with *P. falciparum* include either intravenous quinidine or artesunate (3). The latter is available from CDC via an investigational new drug protocol. Presumptive predeparture treatment for malaria in a geographically clustered population of refugees, as in a refugee camp, is easier logistically and less costly than treatment of symptomatic cases dispersed throughout the United States after arrival. Presumptive treatment also can reduce the risk for reintroduction of malaria into the United States. Reintroduction is a concern given that the malaria vector, the female *Anopheles* mosquito, is widespread in the United States. A recent malaria outbreak in the Caribbean resulting from reintroduction is an example of this possibility (4).

The International Organization for Migration (IOM) is an intergovernmental agency that screens and treats most refugees bound for the United States. This is done at the request of the United States in an effort to reduce the incidence of infectious disease among refugees after they reach the United States. IOM administers presumptive treatment against *P. falciparum* malaria (and intestinal parasites) to refugees resettling from Tanzania before departure for the United States. In 2005, CDC

recommended ACT as presumptive *P. falciparum* treatment for refugees resettling in the United States from sub-Saharan Africa. However, presumptive *P. falciparum* malaria treatment using sulfadoxine-pyrimethamine was used for Tanzanian refugees until July 7, 2007.

CDC surveillance data indicate that among 1,805 Burundian refugees from Tanzania who resettled to 34 U.S. states during May 4-July 7, 2007, 29 symptomatic cases of malaria were identified in 12 states, including Washington. Twenty-six of these refugees (including the patient in case 1) were infected with P. falciparum alone, and two had mixed infections (P. falciparum and P. ovale or Plasmodium malariae). Speciation was not performed for the remaining case. Twenty-four of the 29 (82%) patients were hospitalized; none died (CDC, unpublished data). These 29 refugees departed for the United States before July 7, 2007, the date when IOM implemented the CDC recommendations that refugees from Tanzania receive presumptive treatment with 6-dose artemether-lumefantrine within 3 days before departure for the United States. Instead, they all received sulfadoxine-pyrimethamine before departure; high rates of resistance to sulfadoxine-pyrimethamine have been reported (5), but the artemether-lumefantrine regimen has been effective in field settings in Africa (6).

Two of the patients in this report who were infected with P. falciparum, the patients in cases 4 and 5, were resettled to the United States after July 7, 2007, the date when IOM instituted the change to artemether-lumefantrine treatment. These two patients received a complete artemetherlumefantrine presumptive treatment course before departure from Tanzania, yet both were diagnosed with P. falciparum after arrival in the United States. Possible explanations include incomplete treatment or nonadherence to the medication regimen (only 3 of 6 doses were directly observed in these two patients, and in the patients in cases 2 and 3), poor medication absorption, reinfection after treatment, or treatment during a time in the parasite's lifecycle when it would be unaffected by this regimen. In response to such continuing cases, IOM now directly observes all 6 doses of artemether-lumefantrine treatment and provides milk with each dose to improve absorption.

Current IOM policy targets infection with *P. falciparum* only. However, cases 2 and 3 in this series involved relapses of *P. ovale* after arrival in the United States. Infection with *P. ovale* (or *Plasmodium vivax*) generally results in less severe disease than infection with *P. falciparum*. Hypnozoites of *P. ovale* or *P. vivax* can remain dormant in the liver for months or years before causing relapse, and primaquine is the only agent available that can eliminate malaria parasites at this stage of their life cycle (7,8). However, predeparture presumptive treatment with primaquine to prevent relapse of *P. ovale* or *P. vivax* currently is not recommended because the cost, logistics of implementing a 14-day medication course, and risk for severe hemolytic anemia in glucose-6-phosphate dehydrogenase (G6PD)–deficient patients outweigh the potential benefit of avoiding a small number of non-*P. falciparum* malaria cases.

Up to 10,000 Burundian refugees from Tanzania will have been resettled in the United States during 2007–2008 (9). Health-care providers in the United States caring for refugee populations resettling from malarial regions should remain aware of the possibility of malaria in these groups, regardless of prior treatment.

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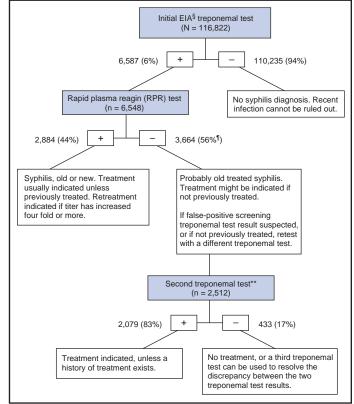
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Syphilis Testing Algorithms Using Treponemal Tests for Initial Screening — Four Laboratories, New York City, 2005–2006

In the United States, testing for syphilis traditionally has consisted of initial screening with an inexpensive nontreponemal test, then retesting reactive specimens with a more specific, and more expensive, treponemal test. When both test results are reactive, they indicate present or past infection. However, for economic reasons, some high-volume clinical laboratories have begun using automated treponemal tests, such as automated enzyme immunoassays (EIAs) or immunochemoluminescence tests, and have reversed the testing sequence: first screening with a treponemal test and then retesting reactive results with a nontreponemal test. This approach has introduced complexities in test interpretation that did not exist with the traditional sequence. Specifically, screening with a treponemal test sometimes identifies persons who are reactive to the treponemal test but nonreactive to the nontreponemal test. No formal recommendations exist regarding how such results derived from this new testing sequence should be interpreted, or how patients with such results should be managed. To begin an assessment of how clinical laboratories are addressing this concern, CDC reviewed the testing algorithms used and the test interpretations provided in four laboratories in New York City. Substantial variation was found in the testing strategies used, which might lead to confusion about appropriate patient management. A total of 3,664 (3%) of 116,822 specimens had test results (i.e., reactive treponemal test result and nonreactive nontreponemal test result) that would not have been identified by the traditional testing algorithms, which end testing if the nontreponemal test result is nonreactive. If they have not been previously treated, patients with reactive results from treponemal tests and nonreactive results from nontreponemal tests should be treated for late latent syphilis.

Four New York City laboratories that routinely conduct syphilis testing using EIA treponemal screening tests were able to provide their testing algorithms, test volume, and test results for a convenience sample of specimens. Each laboratory used a slightly different testing algorithm and tested approximately 26,000–130,000 specimens for syphilis per year. CDC reviewed test results from a convenience sample of 116,822 specimens tested at these four laboratories during October 1, 2005–December 1, 2006.

In all four laboratories, no further testing was done on specimens that were nonreactive with the treponemal screening EIA. In all four laboratories, specimens considered reactive by EIA test were next tested with a rapid plasma reagin (RPR) test. However, the approach to follow-up testing then differed. At two laboratories, specimens that were reactive with EIA and nonreactive with RPR were retested using a different treponemal test: *Treponema pallidum* particle agglutination (TP-PA) or fluorescent treponemal antibody (FTA-ABS). At a third laboratory, specimens that were reactive to both the EIA test and the RPR test were retested using a different treponemal test (i.e., FTA-ABS or TP-PA). At the fourth laboratory, no further testing was done after the EIA and RPR tests. FIGURE. Composite results of syphilis testing algorithms using treponemal tests for initial screening and likely interpretations* — four laboratories, New York City, October 1, 2005–December 1, 2006[†]



^{*} One laboratory provided limited interpretation of the test results; the other three summarized the results without interpretation. No formal recommendations exist regarding the interpretation of results derived from testing algorithms using treponemal tests as the initial test.

[†] Using a convenience sample of 116,822 specimens. The four laboratories used different testing algorithms. Data shown are a composite of results from all four laboratories.

I Reactive with EIA treponemal test but nonreactive with RPR test.
** Using *Treponema pallidum* particle agglutination or fluorescent treponemal antibody tests.

Of the 116,822 specimens included in the convenience sample, 6,587 (6%) were initially reactive to the EIA test (Figure). When 6,548 of the EIA-reactive specimens were tested with an RPR test, 2,884 (44%) were reactive and 3,664 (56%) were nonreactive to the RPR test. Further testing with FTA-ABS or TP-PA tests on 2,512 of the specimens reactive to the EIA test but nonreactive to the RPR test found 2,079 (83%) specimens reactive to the second treponemal tests (i.e., FTA-ABS or TP-PA). In addition, the one laboratory that performed TP-PA testing on specimens that were reactive to both the EIA and RPR tests found 78 of 80 (98%) specimens were reactive to the TP-PA test.

[§] Enzyme immunoassay.

One laboratory provided limited interpretation of the various permutations of syphilis test results. The other three laboratories gave providers an objective summary of the test results (e.g., EIA reactive, RPR reactive, or EIA reactive and RPR nonreactive) with no interpretation. No additional information was available from the four laboratories regarding patient treatment.

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Editorial Note: In the four New York City laboratories studied, reversing the traditional order of screening and confirmatory tests for syphilis resulted in 3,664 (3%) of 116,822 specimens with test results (i.e., reactive treponemal test result and nonreactive nontreponemal test result) that would not have been identified by the traditional testing algorithm. The importance of these test results is unclear because no specific prognostic information exists to guide patient evaluation and treatment.

Treponemal tests detect antibodies specific to *T. pallidum*. In addition to *T. pallidum pallidum*, which causes syphilis, other treponemal subspecies (e.g., *pertenue*, which causes yaws, and *carateum*, which causes pinta) also can produce reactive results to treponemal tests, but these subspecies are rare in the United States (1). A reactive treponemal test result indicates that treponemal infection has occurred at some point in the past but cannot distinguish between treated and untreated infections. As such, treponemal tests, such as the *T. pallidum* EIA test, TP-PA test, and FTA-ABS test, can produce reactive results for life, even after adequate treatment for syphilis.

Nontreponemal tests, such as the RPR test and venereal disease research laboratory (VDRL) test, detect antibodies to cardiolipin and are not specific for treponemal infection. Nontreponemal tests are more likely than treponemal tests to produce nonreactive results after treatment; therefore, reactive results from nontreponemal tests are more reliable indicators of untreated infection. Quantitative nontreponemal tests also are used to monitor responses to treatment or to indicate new infections. False-positive nontreponemal tests occur in 1%-2% of the U.S. population, and have been associated with multiple conditions, including pregnancy, human immunodeficiency virus (HIV) infection, intravenous drug use, tuberculosis, rickettsial infection, spirochetal infection other than syphilis, bacterial endocarditis, and disorders of immunoglobulin production (2,3). Nontreponemal test results might be falsely negative in longstanding latent infection (4). Both treponemal and nontreponemal tests can produce nonreactive results when the infection has been acquired recently; approximately 20% of test results are negative when patients have primary syphilis (4).

The four New York City laboratories in this report used various algorithms to evaluate specimens that were reactive to treponemal tests and nonreactive to nontreponemal tests. The different algorithms might lead to confusion in the interpretation of test results and, in turn, in the management and treatment of patients. Test results that would not have been identified by the traditional algorithm were obtained for 3% of the specimens tested for syphilis; thus, such results might be expected to occur several thousand times per year in New York City alone.

When results are reactive to both treponemal and RPR tests, persons should be considered to have untreated syphilis unless it is ruled out by treatment history. Persons who were treated in the past are considered to have a new syphilis infection if quantitative testing on an RPR test or another nontreponemal test reveals a four fold or greater increase in titer (health departments maintain registries of past positive tests). When results are reactive to the treponemal test but nonreactive to the RPR test, persons with a history of previous treatment will require no further management. For persons without a history of treatment, a second, different treponemal test is nonreactive, the clinician may decide that no further evaluation or treatment is indicated, or may choose to perform a third treponemal test to help resolve the discrepancy.

If the second treponemal test is reactive, clinicians should discuss the possibility of infection and offer treatment to patients who have not been previously treated. Unless history or results of a physical examination suggest a recent infection, such patients are unlikely to be infectious and should be treated for late latent infections, even though they do not meet the surveillance case definition (7). Treatment can prevent severe (i.e., tertiary) complications that can result from untreated syphilis, although the probability of such complications occurring without treatment, while unknown, likely is small (6) Treatment also allows patients to report that they have been treated for syphilis if they ever receive similar results from future treponemal screening tests. Public health departments determine their own priorities for partner notification and other prevention activities; however, because late infections are unlikely to be infectious, they would likely be considered low priority for health department intervention activities.

Reversal of the traditional syphilis screening sequence has been driven by economics. For high-volume laboratories, an automated treponemal test can be less expensive than using an RPR test for the initial screening. An important consequence of this reversal is the identification of a combination of reactive and nonreactive test results that would not otherwise have been identified. The clinical interpretation of these results is complicated by the lack of standardized follow-up testing algorithms among the four laboratories, and by the lack of an evidence base with which to judge the merits of each algorithm. Consequently, use of a reversed sequence of syphilis testing might result in overdiagnosis and overtreatment of syphilis in some clinical settings.

The recommendations in this report might not be appropriate in countries with different patterns of seroreactivity, systems of health care, and epidemiology of disease. Furthermore, additional analyses are needed that further elucidate the use and total costs of these alternative screening approaches for syphilis, given the anticipated increase in use of treponemal tests for screening in the United States.

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Infection Control Requirements for Dialysis Facilities and Clarification Regarding Guidance on Parenteral Medication Vials

In April 2008, the Centers for Medicare and Medicaid Services (CMS) published in the *Federal Register* its final rule on *Conditions for Coverage for End-Stage Renal Disease (ESRD) Facilities (1).* The rule establishes new conditions dialysis facilities must meet to be certified under the Medicare program and is intended to update CMS standards for delivery of quality care to dialysis patients. CDC's 2001 *Recommendations for Preventing Transmission of Infections among Chronic Hemodialysis Patients (2)* have been incorporated by reference into the new CMS conditions for coverage. Thus, effective October 14, 2008, all ESRD facilities are expected to follow

the CDC recommendations as a condition for receiving Medicare payment for outpatient dialysis services.

In recent years, outbreak investigations in dialysis and other health-care settings have demonstrated that mishandling of parenteral medication vials can contribute to the risk for hepatitis C virus (HCV) infection and bacterial and other infections (3-7). In 2002, a CDC communication to CMS suggested that reentry into single-use parenteral medication vials (i.e., to administer medication to more than one patient), when performed on a limited basis and under strict conditions in hemodialysis settings, likely would result in low risk for bacterial infection (8). However, the 2002 communication did not address risks for bloodborne viral infections (e.g., HCV and hepatitis B virus infection). This report is intended to clarify and restate CDC's recommendation on parenteral medication to include bloodborne viral infections. The recommendations in this report supersede the 2002 CDC communication to CMS.

To prevent transmission of both bacteria and bloodborne viruses in hemodialysis settings, CDC recommends that all single-use injectable medications and solutions be dedicated for use on a single patient and be entered one time only. Medications packaged as multidose should be assigned to a single patient whenever possible. All parenteral medications should be prepared in a clean area separate from potentially contaminated items and surfaces. In hemodialysis settings where environmental surfaces and medical supplies are subjected to frequent blood contamination, medication preparation should occur in a clean area removed from the patient treatment area. Proper infection control practices must be followed during the preparation and administration of injected medications (9). This is consistent with official CDC recommendations for infection control precautions in hemodialysis (2) and other health-care settings (9).

Health departments and other public health partners should be aware of the new CMS conditions for ESRD facilities. All dialysis providers are advised to follow official CDC recommendations regarding Standard Precautions and infection control in dialysis settings (2,9). Specifically, CDC has recommended the following: "Intravenous medication vials labeled for single use, including erythropoietin, should not be punctured more than once. Once a needle has entered a vial labeled for single use, the sterility of the product can no longer be guaranteed" (2). Additional guidance on safe injection practices can be found in the *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007 (9)*.

Dialysis providers also should be aware of their responsibility to report clusters of infections or other adverse events to the appropriate local or state public health authority. Failure to report illness clusters to public health authorities can result in delays in recognition of disease outbreaks (*10*) and implementation of control measures. Additional information regarding the new CMS *Conditions for Coverage for End-Stage Renal Disease Facilities* is available at http://www.cms.hhs.gov/cfcsandcops/13_esrd.asp.

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<u>Notice to Readers</u>

Preventive Medicine Residency Application Deadline — October 1, 2008

CDC's Preventive Medicine Residency (PMR) program is accepting applications from physicians with public health and applied epidemiology experience. Application materials must be postmarked by October 1, 2008 for the 12-month program that begins in mid-June 2009.

The PMR prepares physicians for leadership roles in public health at federal, state, and local levels through instruction and supervised practical experiences focused on translating epidemiology to public health practice, management, and policy and program development. Residents spend the practicum year at CDC or in a state or local health department.

PMR alumni occupy leadership positions at CDC, at state and local health departments, in academia, and in privatesector agencies. Completion of the residency, which is accredited by the Accreditation Council for Graduate Medical Education for 12 months of practicum training, qualifies graduates to apply for certification by the American Board of Preventive Medicine in Public Health and General Preventive Medicine.

Additional information regarding the residency, eligibility criteria, and application process is available at http://www. cdc.gov/epo/dapht/pmr/pmr.htm or by calling 404-498-6140.

Erratum: Vol. 57, No. SS-6

In the *MMWR Surveillance Summary* (Vol. 57, No. SS-6), "Epilepsy Surveillance Among Adults — 19 States, Behavioral Risk Factor Surveillance System," 2005, an error occurred on page 1 in the fourth sentence of the second paragraph of the Results/Interpretation. The sentence should read, "Among adults with active epilepsy with recent seizures, 16.1% reported not currently taking their epilepsy medication, and 65.1% reported having had more than one seizure in the past **3 months**."

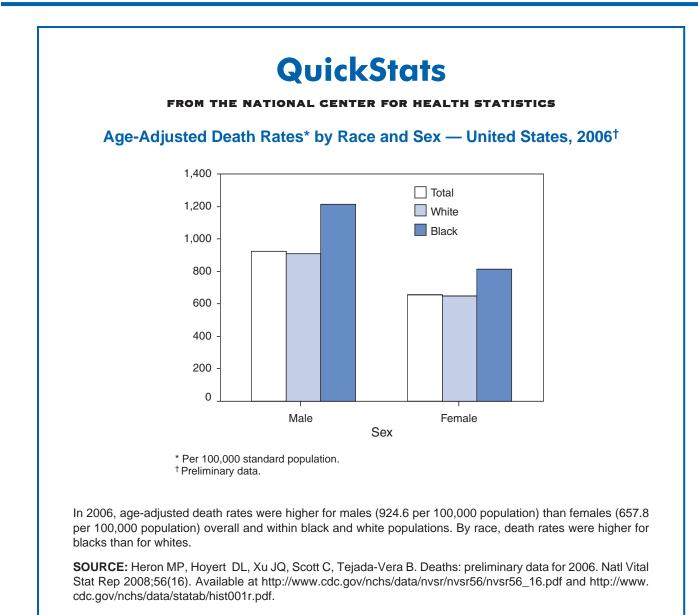


TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 9, 2008 (32nd Week)*

	Current	Cum	5-year weekly	Total o	ases rep	orted for	previou	s years	
Disease	week	2008	average [†]	2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Anthrax	_		_	1	1	_	_	_	· · · · · · · · · · · · · · · · · · ·
Botulism:									
foodborne	_	6	1	32	20	19	16	20	
infant	1	48	2	85	97	85	87	76	FL (1)
other (wound & unspecified)	_	9	1	27	48	31	30	33	
Brucellosis	1	46	3	131	121	120	114	104	CA (1)
Chancroid	_	24	õ	23	33	17	30	54	
Cholera	_	_	Ō	7	9	8	6	2	
Cyclosporiasis§	6	87	4	92	137	543	160	75	MD (1), FL (5)
Diphtheria	_			_		_		1	
Domestic arboviral diseases ^{§,¶} :									
California serogroup		10	6	55	67	80	112	108	
eastern equine		1	1	4	8	21	6	14	
Powassan	_		0	7	1	1	1		
St. Louis		5	1	9	10	13	12	41	
western equine			_				12		
Ehrlichiosis/Anaplasmosis ^{§,**} :	_	_	_	_	_	_	_	_	
Ehrlichia chaffeensis	25	312	20	828	578	506	338	321	
	20	312	20	020	576	506	- 330	321	OH (3), MN (4), MO (2), MD (2), VA (2), GA (1), TN (11)
Ehrlichia ewingii									MNI (0)
Anaplasma phagocytophilum	9 4	134	20	834	646	786	537	362	MN (9)
undetermined	4	33	5	337	231	112	59	44	MO (1), TN (3)
Haemophilus influenzae, ^{††}									
invasive disease (age <5 yrs):		10	0	00		0	40		
serotype b	_	16	0	22	29	9	19	32	
nonserotype b		103	2	199	175	135	135	117	
unknown serotype	3	136	4	180	179	217	177	227	NY (1), PA (1), TN (1)
Hansen disease [§]		39	2	101	66	87	105	95	
Hantavirus pulmonary syndrome§		7	0	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	4	89	7	292	288	221	200	178	TN (2), CA (2)
Hepatitis C viral, acute	4	474	16	849	766	652	720	1,102	OH (1), CO (1), WA (1), CA (1)
HIV infection, pediatric (age <13 yrs) ^{§§}	_	_	4	_		380	436	504	
Influenza-associated pediatric mortality ^{§.¶¶}	—	87	0	77	43	45		N	
Listeriosis	5	322	22	808	884	896	753	696	NY (1), MD (1), VA (1), FL (1), CA (1)
Measles***	_	123	1	43	55	66	37	56	
Meningococcal disease, invasive ^{†††} :									
A, C, Y, & W-135	2	182	4	325	318	297	_	_	IN (2)
serogroup B	2	109	2	167	193	156	_	_	IN (2)
other serogroup	—	22	0	35	32	27	_	—	
unknown serogroup	3	415	8	550	651	765	_	_	NY (1), MO (1), NC (1)
Mumps	1	259	14	800	6,584	314	258	231	CA (1)
Novel influenza A virus infections	—	_	0	1	N	N	N	N	
Plague	—	1	0	7	17	8	3	1	
Poliomyelitis, paralytic	—	_	—	_		1			
Poliovirus infection, nonparalytic§	—	_			N	N	N	N	
Psittacosis§	—	6	0	12	21	16	12	12	
Q fever ^{§,§§§} total:	—	63	3	171	169	136	70	71	
acute	—	58	—	—	—	—	—	_	
chronic	_	5	—	—	_	—	—	_	
Rabies, human	—	_	0	1	3	2	7	2	
Rubella ¹¹¹	1	9	0	12	11	11	10	7	AZ (1)
Rubella, congenital syndrome	_	_	—	—	1	1	—	1	
SARS-CoV ^{§,****}	_	—	_	_	_	_	_	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.

[†] 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.

[¶] 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. ewingii).

^{††} Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

S 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. Eighty-five cases occurring during the 2007–08 influenza season have been reported.

No measles cases were reported for the current week.

^{†††} 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 The one rubella case reported for the current week was unknown.

**** 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 August 9, 2008 (32nd Week)*

	Current	Cum	5-year weekly	Total	cases rep	orted for	previous	s years	
Disease	week	2008	averaget	2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Smallpox [§]	_	_	_	_	_	_	_	_	
Streptococcal toxic-shock syndrome [§]		94	1	132	125	129	132	161	
Syphilis, congenital (age <1 yr)	—	113	7	430	349	329	353	413	
Tetanus	1	6	1	28	41	27	34	20	FL (1)
Toxic-shock syndrome (staphylococcal)§	1	40	2	92	101	90	95	133	PA (1)
Trichinellosis		5	0	5	15	16	5	6	
Tularemia	2	55	4	137	95	154	134	129	ND (1), AR (1)
Typhoid fever	_	208	9	434	353	324	322	356	
Vancomycin-intermediate Staphylococcus aur	eus§ —	6	0	28	6	2	_	N	
Vancomycin-resistant Staphylococcus aureus	_	_	_	2	1	3	1	N	
Vibriosis (noncholera Vibrio species infections) [§] 14	174	10	447	N	N	N	N	MD (1), VA (1), FL (4), TN (1), CA (7)
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.

[†] 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.

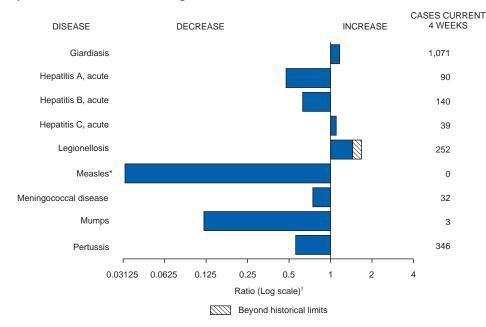


FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 9, 2008, with historical data

* No measles cases were reported for the current 4-week period yielding a ratio for week 32 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

 Notifiable Disease Data Team and 122 Cities Mortality Data Team

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 Michael S. Wodajo

 Lenee Blanton
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(32nd Week)*			Chlamyd	lia†			Coccid	ioidomy	cosis			Crvr	otosporio	iosis	
		Pre	vious	iiu			Pre	vious	00313			Pre	vious	10313	
Reporting area	Current week	<u>52 v</u> Med	veeks Max	Cum 2008	Cum 2007	Current week	52 v Med	weeks Max	Cum 2008	Cum 2007	Current week	52 v Med	veeks Max	Cum 2008	Cum 2007
United States	9,944	21,171	28,892	633,996	665,187	99	125	341	3,988	4,610	90	93	975	2,541	3,001
New England Connecticut Maine [§] Massachusetts New Hampshire Rhode Island [§] Vermont [§]	704 274 295 32 64 39	673 198 49 320 39 55 16	1,516 1,093 67 660 73 98 44	21,343 5,989 1,465 10,587 1,222 1,699 381	21,261 6,296 1,571 9,623 1,250 1,903 618	N N N N	0 0 0 0 0 0	1 0 0 1 0 0	1 N N 1 N	2 N N 2 N	2 2 — —	5 0 2 1 0 1	20 18 5 11 4 3 4	151 18 16 48 37 4 28	171 42 23 55 29 5 17
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	2,015 228 467 769 551	2,768 408 564 1,012 805	5,066 523 2,177 3,134 1,048	89,291 11,591 16,621 35,146 25,933	86,145 13,077 15,611 30,862 26,595	N N N	0 0 0 0	0 0 0 0	N N N N		20 — 9 — 11	13 0 5 2 6	120 8 20 8 95	362 10 121 51 180	520 20 81 45 374
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	1,177 6 236 538 113 284	3,531 1,014 385 775 843 369	4,453 1,711 656 1,225 1,530 615	104,435 28,456 12,285 27,051 25,853 10,790	109,263 31,750 12,851 23,196 29,426 12,040	1 N 1 N	1 0 0 0 0	3 0 2 1 0	30 N 22 8 N	20 N 15 5 N	24 4 1 17 2	23 2 3 5 6 8	134 13 41 11 60 60	681 53 99 132 181 216	642 78 37 96 137 294
W.N. Central lowa Kansas Minnesota Missouri Nebraska [§] North Dakota South Dakota	495 — 1 353 94 — 47	1,225 159 163 263 470 94 34 54	1,700 238 529 373 572 250 65 81	38,602 5,057 5,504 7,514 14,726 3,083 1,028 1,690	38,248 5,306 4,958 8,145 14,054 3,244 1,029 1,512	N N N N N N N N N N N N N N N N N	0 0 0 0 0 0 0	77 0 77 1 0 0 0	X X X X X	6 N N 6 N N N N	15 1 5 6 3 —	18 4 5 3 0 1	125 61 15 34 14 24 51 16	435 105 32 108 94 61 3 32	487 178 41 71 63 46 2 86
S. Atlantic Delaware District of Columbia Florida Georgia Maryland [§] North Carolina South Carolina [§] Virginia [§] West Virginia	2,524 40 117 1,271 1 398 	3,884 65 131 1,311 612 466 183 463 524 58	7,609 150 216 1,556 1,338 683 4,783 3,057 1,062 96	112,640 2,244 4,458 42,146 7,530 13,668 5,901 16,007 18,813 1,873	130,948 2,185 3,624 33,632 26,173 12,867 18,044 17,096 15,401 1,926		0 0 0 0 0 0 0 0 0 0 0	1 0 1 0 1 0 0 0 0 0	Z Z Z Z Z	3 	12 	17 0 8 4 0 1 1 0	65 4 2 35 14 4 18 15 6 5	432 9 3 206 122 8 16 24 34 10	512 5 1 233 117 17 50 45 39 5
E.S. Central Alabama [§] Kentucky Mississippi Tennessee [§]	714 	1,528 472 231 358 510	2,394 605 361 1,048 782	47,599 12,750 6,885 11,422 16,542	50,322 15,528 4,507 13,474 16,813	N N N	0 0 0 0	0 0 0 0	N N N N		5 4 1 	4 1 1 0 1	64 14 40 11 18	81 35 17 7 22	151 33 67 27 24
W.S. Central Arkansas [§] Louisiana Oklahoma Texas [§]	382 290 92 —	2,728 258 391 222 1,829	4,426 455 729 416 3,923	86,821 8,729 12,443 6,348 59,301	73,992 5,436 12,101 7,889 48,566	N N N	0 0 0 0	1 0 1 0	1 N 1 N	1 N 1 N	1 1 	5 1 0 1 3	37 8 4 11 28	113 15 11 26 61	151 18 33 41 59
Mountain Arizona Colorado Idaho [§] Montana [§] Nevada [§] New Mexico [§] Utah Wyoming [§]	264 138 60 16 36 14 —	1,365 449 278 60 50 183 143 122 0	1,836 679 488 259 363 416 561 209 34	33,830 11,249 5,429 2,263 1,842 5,603 3,967 3,466 11	45,208 15,061 10,729 2,258 1,702 5,892 5,624 3,187 755	78 77 N N 1 	89 85 0 0 1 0 0 0	170 168 0 0 7 3 7 1	2,681 2,623 N N 37 16 4 1	2,944 2,852 N N 38 16 36 2	11 6 2 	10 1 2 1 0 2 1 0	567 8 26 71 7 6 8 484 8	241 42 52 37 29 8 46 19 8	291 26 54 16 30 8 66 70 21
Pacific Alaska California Hawaii Oregon [§] Washington	1,669 75 1,594 — —	3,334 94 2,849 109 180 0	4,676 129 4,115 151 402 498	99,435 2,810 87,694 3,273 5,545 113	109,800 3,043 85,691 3,528 5,836 11,702	20 N 20 N N N	31 0 31 0 0	217 0 217 0 0 0	1,275 N 1,275 N N N	1,634 N 1,634 N N N	 	2 0 0 2 0	20 1 0 4 16 0	45 2 1 42 	76 3 4 69
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	 272	0 117 19	22 612 42	73 103 4,400 678	73 	N N	0 0 0 0	0 0 0 0	N 	N 	N 	0 0 0 0	0 0 0 0	N N	N N

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. Chlamydia refers to genital infections caused by *Chlamydia trachomatis*. § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

(Szna week)			Giardiasi	s				onorrhe	a		Нае		s influen s, all ser	z <i>ae</i> , invas otypes†	ive
	0		vious	0	0	0		evious	0	0	0		vious	0	0
Reporting area	Current week	Med	<u>eeks</u> Max	Cum 2008	Cum 2007	Current week	Med	weeks Max	Cum 2008	Cum 2007	Current week	Med	veeks Max	Cum 2008	Cum 2007
United States	316	301	1,158	8,958	9,585	2,837	6,171	8,913	178,011	213,404	17	48	173	1,635	1,602
New England Connecticut Maine [§] Massachusetts New Hampshire Rhode Island [§] Vermont [§]	5 _4 _1 	24 6 4 10 2 1 3	58 18 10 26 4 15 9	697 178 86 254 63 46 70	755 192 93 336 14 31 89	100 68 21 1 9	96 46 2 41 2 7	227 199 7 127 6 13 5	2,998 1,333 54 1,316 68 209 18	3,373 1,271 77 1,635 95 256 39		3 0 2 0 0 0	12 9 3 5 1 2 3	105 23 9 49 8 9 7	119 29 8 59 14 7 2
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	53 — 36 2 15	58 6 23 16 15	9 131 15 111 29 29	1,632 132 630 448 422	1,679 234 571 502 372	516 80 107 165 164	631 111 130 170 231	1,028 174 545 522 394	20,086 3,213 3,735 6,158 6,980	22,087 3,700 3,749 6,621 8,017	5 	10 1 3 2 4	31 7 22 6 9	328 46 95 57 130	315 48 88 62 117
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	79 — 8 30 43	46 12 0 11 16 10	96 34 0 21 36 26	1,396 308 N 302 499 287	1,574 511 N 372 423 268	391 2 74 207 33 75	1,309 358 155 299 322 116	1,626 589 296 657 685 214	36,590 9,264 4,986 10,027 9,320 2,993	44,338 11,761 5,397 9,537 13,536 4,107	 	8 2 1 0 2 1	28 7 20 3 6 4	257 74 52 14 96 21	241 79 33 21 69 39
W.N. Central lowa Kansas Minnesota Missouri Nebraska [§] North Dakota South Dakota	25 2 2 16 5 —	29 6 3 0 9 4 0 2	621 24 11 575 23 8 36 8	1,062 172 71 343 284 117 14 61	618 135 80 6 264 73 10 50	138 — — 97 32 — 9	325 30 41 159 26 2 5	435 53 130 92 216 47 7 11	9,832 841 1,334 1,722 4,844 854 57 180	12,199 1,210 1,415 2,074 6,348 929 68 155	1 — 1 —	3 0 0 1 0 0 0	24 1 4 21 6 3 2 0	127 2 14 34 51 18 8 —	89 1 35 31 12 1
S. Atlantic Delaware District of Columbia Florida Georgia Maryland [§] North Carolina South Carolina [§] Virginia [§] West Virginia	65 - 34 21 5 N - 5	53 1 24 11 0 3 8 0	102 6 5 47 29 18 0 7 39 8	1,379 25 24 699 321 28 N 67 187 28	1,658 24 40 713 361 148 N 53 299 20	915 14 402 1 119 	1,318 21 48 472 216 121 98 188 150 15	3,072 44 104 564 561 237 1,949 833 486 34	38,347 695 1,647 14,274 2,808 3,711 2,638 5,862 6,275 437	49,446 867 1,444 13,930 10,591 3,975 7,950 6,418 3,700 571	7 	11 0 3 1 1 1 0	29 2 10 9 7 6 3	369 6 5 120 93 7 49 34 41 14	408 5 2 110 77 62 43 36 57 16
E.S. Central Alabama [§] Kentucky Mississippi Tennessee [§]	11 5 N N 6	9 5 0 4	23 11 0 0 16	251 144 N N 107	293 148 N N 145	265 — 73 — 192	556 190 89 131 166	945 287 161 401 294	17,248 5,069 2,698 4,216 5,265	19,456 6,732 1,688 5,069 5,967	2 — — 2	2 0 0 0 2	8 2 1 2 6	85 15 2 11 57	92 21 6 7 58
W.S. Central Arkansas [§] Louisiana Oklahoma Texas [§]	3 3 — N	7 3 1 3 0	41 11 14 35 0	160 73 23 64 N	206 76 60 70 N	125 87 38 —	1,010 84 189 85 646	1,355 167 297 171 1,102	29,873 2,860 5,510 2,397 19,106	30,793 2,537 7,072 3,007 18,177	 	2 0 1 0	29 3 2 21 3	77 6 5 60 6	70 7 4 53 6
Mountain Arizona Colorado Idaho [§] Montana [§] Nevada [§] New Mexico [§] Utah Wyoming [§]	19 3 12 3 — 1 —	31 3 11 3 2 3 2 6 1	68 11 26 19 9 6 5 32 3	772 69 305 94 45 66 47 132 14	891 107 279 93 56 86 71 174 25	76 26 44 2 4 	230 74 58 4 1 43 26 11 0	330 130 91 19 48 130 104 36 4	6,014 1,696 1,747 99 60 1,389 725 298	8,436 3,146 2,083 163 50 1,435 1,018 496 45	2 2 — — — — — — —	5 2 1 0 0 1 1 0	14 11 4 1 1 4 6 1	203 90 38 12 2 11 23 27 —	173 65 44 - 9 28 20 3
Pacific Alaska California Hawaii Oregon [§] Washington	56 2 37 1 3 13	56 2 36 1 9 9	185 5 91 5 19 87	1,609 46 1,075 22 261 205	1,911 39 1,327 49 250 246	311 10 301 —	605 10 542 11 23 0	809 24 683 22 63 97	17,023 308 15,662 344 692 17	23,276 326 19,529 406 697 2,318	 	2 0 0 0 1 0	7 4 3 2 4 3	84 13 20 12 36 3	95 7 37 6 43 2
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	 	0 0 2 0	0 31 0	 58 	 185 	 	0 1 _5 _3	1 12 24 12	3 183 128	3 76 188 28	 N	0 0 0	0 1 0 0	 N	 N

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 *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).

(32nd week)*				Hepat	itis (viral, a	acute), by ty	pe †					_			
		Prev	A				Brow	B ious					egionello: vious	sis	
	Current	52 w		Cum	Cum	Current		eeks	Cum	Cum	Current		veeks	Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	19	52	171	1,526	1,701	21	74	259	2,020	2,612	61	55	117	1,452	1,293
New England Connecticut	_	2 0	7 3	64 14	72 9	_	1 0	7 7	39 14	77 26	_	3 0	14 4	65 15	82 18
Maine [§]	—	0	1	4	2	—	0	2	9	3	—	0	2	3	3
Massachusetts New Hampshire	_	1 0	5 2	27 6	37 10	_	0 0	3 1	8 4	32 4	_	0 0	3 3	11 13	25 4
Rhode Island [§] Vermont [§]	_	0 0	2 1	11 2	9 5	_	0 0	2 1	3 1	11 1	_	0 0	5 2	18 5	26 6
Mid. Atlantic	2	6	18	2 168	267	4	10	18	276	333	28	15	2 44	450	404
New Jersey	_	1	6	34	79	_	3	7	82	97	_	1	13	35	52
New York (Upstate) New York City	_	1 2	6 7	39 55	43 92	1	2 2	7 6	43 50	49 73	17	4 2	16 10	145 42	108 93
Pennsylvania	2	1	6	40	53	3	3	7	101	114	11	6	30	228	151
E.N. Central Illinois	1	6 2	16 10	198 59	199 79	2	7 1	18 6	216 49	289 95	14	12 1	35 16	352 19	271 60
Indiana	_	0	4	12	5	_	0	8	23	27	1	1	7	27	27
Michigan Ohio	1	2 1	7 4	79 27	51 42	2	2 2	6 7	72 66	71 79	1 12	3 5	13 18	99 178	88 85
Wisconsin	—	0	3	21	22	—	0	1	6	17	_	1	7	29	11
W.N. Central Iowa	_	5 1	29 7	189 82	107 30	_	2 0	9 2	61 8	74 15	_	2 0	8 2	66 8	64 9
Kansas	_	0	3	9	4	—	0	2	5	6	_	0	1	1	6
Minnesota Missouri	_	0 0	23 3	26 31	46 13	_	0 1	5 4	4 38	13 26	_	0 1	4 4	8 32	14 27
Nebraska [§] North Dakota	_	1	5	39	9	—	0	1	5	9	—	0	4	16	5
South Dakota	_	0 0	2 1	2	5	_	0 0	1 1	1	5	_	0 0	2 1	1	3
S. Atlantic	8	8	15	200	293	7	16	60	484	634	16	7	28	217	220
Delaware District of Columbia	_	0 0	1 0	6	3	_	0 0	3 0	7	11	_	0 0	2 1	6 6	6 8
Florida	_	3 1	8	86 25	84 48	3 2	6 3	12 8	202 79	219 91	5	3 0	10 3	88 14	80 23
Georgia Maryland [§]	_	0	3	7	49	2	0	6	10	66	9	1	6	41	40
North Carolina South Carolina [§]	7	0 0	9 4	42 7	35 13	_	0 1	17 6	52 39	79 44	2	0 0	7 2	14 7	27 10
Virginia [§]	1	1 0	5	24	56 5	1	2 0	16 30	66 29	93 31	_	1 0	6 3	31 10	23 3
West Virginia E.S. Central	1	1	2 9	3 49		_	7	13	29	223	_	2	3 10	76	60
Alabama§	_	0	4	8	15	—	2	5	56	76	—	0	2	10	7
Kentucky Mississippi	1	0 0	3 2	17 4	11 7	_	2 0	5 3	55 20	42 22	_	1 0	4 1	38 1	29
Tennessee§	—	1	6	20	33	—	2	8	73	83	—	1	5	27	24
W.S. Central Arkansas [§]	_	5 0	55 1	156 4	128 8	3	15 1	131 3	404 23	536 47	_	2 0	23 2	39 7	65 6
Louisiana	_	0	3	4	18	_	1	4	27	66	_	0	1	1	4
Oklahoma Texas§	_	0 5	7 53	7 141	3 99	3	2 10	37 107	63 291	27 396	_	0 1	3 18	3 28	4 51
Mountain	1	4	9	127	153	1	3	10	118	141	1	2	5	46	56
Arizona Colorado	1	2 0	8 3	65 24	107 19	_	1 0	4 3	31 19	61 22	1	1 0	5 2	16 3	15 13
Idaho [§] Montana [§]	—	0	3	15	2	—	0	2	5	8	—	0	1 1	2 3	4
Nevada§	_	0	2	5	8	1	1	3	29	32	_	0	2	6	3 6
New Mexico [§] Utah	_	0 0	3 2	14 2	5 4	_	0 0	2 5	8 23	9 5	_	0 0	1 3	3 13	7 5
Wyoming [§]	_	Ő	1	2	2	—	Ő	1	3	4	_	Ő	0	_	3
Pacific Alaska	6	12 0	51 1	375 2	416 2	4	9 0	30 2	218 8	305 4	2	4 0	18 1	141 1	71
California	6	9	42	308	367	1	6	19	150	225	2	3	14	110	54
Hawaii Oregon§	_	0 1	1 3	6 24	5 17	_	0 1	2 3	4 27	8 37	_	0 0	1 2	4 11	1 6
Washington	_	1	7	35	25	3	1	9	29	31	—	Ő	3	15	10
American Samoa C.N.M.I.	_	0	0	_	_	_	0	0	_	14	N	0	0	N	N
Guam	_	0	0	_	_	_	0	1	_	2	_	0	0	_	_
Puerto Rico U.S. Virgin Islands	_	0 0	4 0	12	48	2	1 0	5 0	24	46	_	0 0	1 0	1	4

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 acute hepatitis C, viral are available in Table I. * Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

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(32nd Week)*		L	yme disea	ase			Ν	/lalaria			Men		cal disea serogrou	se, invasi Ips	ve†
			/ious					vious				Pre	vious		
Reporting area	Current week	52 w Med	veeks Max	Cum 2008	Cum 2007	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	52 v Med	veeks Max	Cum 2008	Cum 2007
United States	574	362	1,375	11,075	17,106	9	21	136	509	725	7	19	53	728	726
New England	59	55	246	1,452	5,677	_	1	35	29	35	_	0	3	18	35
Connecticut Maine [§]	42	0 2	87 66	197	2,440 110	_	0 0	27 2	8	1 4	_	0 0	1 1	1 4	6 5
Massachusetts New Hampshire	4	16 11	113 79	486 626	2,349 685	_	0	2 1	14 3	21 7	_	0 0	3 0	13	17 3
Rhode Island [§] Vermont [§]	 13	0	77 26	143	2 91	_	0 0	8 1	4	2	_	0 0	1 1	_	1 3
Mid. Atlantic	357	ے 170	755	7,406	6,697	3	5	18	4	204	1	2	6		88
New Jersey	—	37	131	1,329	2,260	_	0	7	_	40		0	2	10	12
New York (Upstate) New York City	285	61 1	453 27	2,561 14	1,620 263	3	1 3	8 9	18 72	35 110	1	0 0	3 2	23 19	25 18
Pennsylvania	72	56	353	3,502	2,554		1	4	21	19	_	1	5	33	33
E.N. Central Illinois	10	8 0	78 8	223 30	1,648 122	_	2 1	7 6	80 35	87 43	4	3 1	10 4	127 37	110 45
Indiana Michigan	7	0 1	7 5	15 42	29 31	_	0 0	2 2	4 10	7 10	4	0 0	4 2	21 20	17 17
Ohio	2	0	4	18	17	_	0	3	21	16	_	1	4	32	25
Wisconsin W.N. Central	1 80	5 3	57 740	118 447	1,449 297	2	0 1	3 9	10 36	11 23	1	0 2	4 8	17 66	6 45
Iowa		1	5	24	100	—	Ó	1	2	2	_	0	3	13	10
Kansas Minnesota	79	0 0	1 731	1 399	8 175	1 1	0 0	1 8	4 18	2 11	_	0 0	1 7	1 19	3 12
Missouri Nebraska [§]	1	0 0	3 1	15 5	7 5	_	0 0	4 2	6 6	3 4	1	0 0	3 2	22 9	13 2
North Dakota	—	0	9	1	2	—	0	2	_	_	_	0	1	1	2
South Dakota S. Atlantic	 59	0 54	1 172	2 1,291	 2,639	1	0 4	0 13	 113	1 158	1	0 3	1 7	1 106	3 115
Delaware	4	12	37	507	478	_	0	1	1	3	—	0	1	1	1
District of Columbia Florida	3 5	2 1	8 4	94 37	84 11	_	0 1	1 5	1 28	2 31	_	0 1	0 3	40	42
Georgia Maryland [§]	20	0 19	4 136	8 273	8 1,494	_	0 1	3 4	26 9	28 41	_	0 0	3 2	14 4	14 18
North Carolina	—	0	8	7	30	1	0	7	18	16	1	0	4	11	14
South Carolina [§] Virginia [§]	27	0 12	4 68	12 333	16 479	_	0 1	1 7	6 24	5 31	_	0 0	3 2	17 16	11 14
West Virginia	_	0	9	20	39	—	0	0	—	1	_	0	1	3	1
E.S. Central Alabama [§]	_	1 0	5 3	30 9	34 9	_	0 0	3 1	11 3	21 3	_	1 0	6 2	37 5	36 7
Kentucky Mississippi	_	0	1	2 1	3	_	0 0	1 1	3 1	4 1	_	0 0	2 2	7 9	7 10
Tennessee§	—	Ő	3	18	22	_	Ő	2	4	13	—	0	3	16	12
W.S. Central Arkansas [§]	1	1 0	11 1	46 1	45	_	1 0	64 1	28	60	_	2 0	13 1	67 6	76 8
Louisiana	_	0	1	1	2	_	0	1	2	13	_	0	3	14	23
Oklahoma Texas§	1	0 1	1 10	44	43	_	0 1	4 60	26	5 42	_	0 1	5 7	10 37	14 31
Mountain	1	0	3	22	25	_	1	5	15	40	_	1	4	38	49
Colorado	_	0 0	1	2 3		_	0 0	2	5 3	8 14	_	0 0	2 2	5 9	11 18
Idaho [§] Montana [§]	1	0	2 2	6 3	7 1	_	0	1 0	_	2 3	_	0 0	2 1	3 4	4 1
Nevada [§] New Mexico [§]	_	0	2	4 3	7 5	_	0 0	3 1	4 1	2 2	_	0 0	2 1	6 6	3
Utah	_	0	1	_	2	_	0	1	2	9	_	0	2	3	8
Wyoming [§] Pacific		0 4	1	1	2		0	0		 97	_	0 4	1	2	170
Alaska	7	0	9 2	158 3	44 3	3	3 0	10 2	86 3	2	_	0	17 2	184 3	172 1
California Hawaii	7 N	3 0	7 0	129 N	37 N	1	2 0	8 1	64 2	65 2	_	3 0	17 2	132 3	126 5
Oregon [§] Washington	_	0 0	4 7	22 4	4	2	0 0	2 3	4 13	12 16	_	1 0	3 5	25 21	24 16
American Samoa	N	0	0	4 N	N		0	0			_	0	0	<u> </u>	
C.N.M.I. Guam	_		0	_	_	_		1	1	1	_			_	_
Puerto Rico	Ν	0	0	N	Ν	_	0	1	1	3	_	0	1	2	6
U.S. Virgin Islands	N	0	0	N	N	_	0	0	_	_	_	0	0	_	

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(32nd Week)*			Pertussi				Pab	ies. anim				ooku Mo	untain an	otted feve	
		Prev		5				vious	Idi			<u> </u>	vious		=
D	Current	52 w	eeks	Cum	Cum	Current	52 w	/eeks	Cum	Cum	Current	52 v	veeks	Cum	Cum
Reporting area United States	week 93	Med 147	Max 849	2008 4,314	2007 5,828	week 50	Med 80	Max 187	2008 2,339	2007 3,669	week 38	Med 29	Max 195	2008 924	2007 1,167
New England		20	49	379	915	2	7	20	2,333	336		23	135	2	7
Connecticut	_	0	5	_	55	_	3	17	107	141		0	0	—	—
Maine [†] Massachusetts	_	0 16	5 33	14 315	48 736	N	1 0	5 0	31 N	51 N	N	0 0	0 1	N 1	N 7
New Hampshire Rhode Island [†]	_	1 0	5 25	22 21	43 6	N	1 0	3 0	24 N	34 N	_	0 0	1 0	1	_
Vermont [†]	_	0	6	7	27	2	2	6	45	110	_	0	0	_	_
Mid. Atlantic New Jersey	24	20 0	43 9	498 4	767 133	18	19 0	32 0	611	627	_	1 0	5 2	37 2	53
New York (Upstate)	17	6	24	224	369	18	9	20	297	311	_	0	3	13	18 6
New York City Pennsylvania	7	2 8	7 23	41 229	80 185	_	0 9	2 23	11 303	32 284	_	0 0	2 2	11 11	20 9
E.N. Central	7	19	190	753	1,040	10	5	53	114	170	_	1	7	48	36
Illinois Indiana	_	3 0	8 12	84 28	117 40	5	1 0	15 1	42 3	51 7	_	0 0	6 1	30 3	22 4
Michigan	2	4	16	113	176	5	1	32	44	76	—	0	1	2	3
Ohio Wisconsin	5	7 2	176 9	488 40	450 257	N	1 0	11 0	25 N	36 N	_	0 0	4 1	13	6 1
W.N. Central Iowa	9	11 1	142 5	387 35	386 116	3	4 0	12 3	96 13	176 20	4	4 0	27 2	230 1	237 13
Kansas	1	1	5	28	68	_	0	7	_	86	—	0	2	_	9
Minnesota Missouri	3 1	1 3	131 18	129 136	59 58	2	0 0	7 5	34 25	17 27	4	0 3	4 25	214	1 201
Nebraska† North Dakota	4	1 0	12 5	50 1	30 3	1	0 0	0 8	 17	 12	_	0 0	3 0	12	9
South Dakota	_	0	2	8	52	_	0	2	7	14	_	0	1	3	4
S. Atlantic Delaware	10	14 0	50 2	407 7	602 7	9	35 0	94 0	1,015	1,397	14	8 0	109 3	297 16	547 10
District of Columbia	1	0	1	3	8	—	0	0		_		0	2	6	2
Florida Georgia	9	3 0	17 3	147 21	149 29	_	0 6	77 37	85 214	128 171	3 2	0 0	4 6	11 30	7 50
Maryland [†] North Carolina	_	1 0	6 38	20 77	71 200	9	0 9	18 16	42 292	249 310	4 2	0 0	6 96	21 127	38 335
South Carolina [†]	_	2	22	63	52	—	0	0	_	46	_	0	4	17	38
Virginia⁺ West Virginia	_	2 0	8 12	65 4	74 12	_	11 1	27 11	321 61	451 42	3	0	9 3	66 3	65 2
E.S. Central	3	6 1	31 6	152 21	270 56	2	2 0	7 0	77	103	4	4 1	19 10	151 39	175 50
Alabama [†] Kentucky	_	1	5	31	14	2	0	4	27	14	_	0	1	1	4
Mississippi Tennessee [†]	3	2 1	25 4	60 40	137 63	_	0 1	1 6	2 48	 89	4	0 2	3 17	4 107	11 110
W.S. Central	7	19	198	629	669	1	6	40	68	674	15	2	153	138	84
Arkansas† Louisiana	_	1 0	11 3	40 9	133 14	1	1 0	6 2	42	23 4	14	0 0	15 1	30 2	27 4
Oklahoma Texas [†]	7	0 17	26 179	19 561	4 518	_	0 0	32 34	25 1	45 602	1	0 1	132 8	86 20	34 19
Mountain	, 11	19	37	501	685	_	1	34 8	38	42	1	0	° 2	20 17	25
Arizona	3	3	10	127	155	Ν	0	0	N	N	1	0	2	7	5
Colorado Idaho†	5	4 0	13 4	95 20	186 31	_	0 0	0 4	_	_	_	0 0	2 1	1 1	1 3
Montana [†] Nevada [†]	3	1 0	11 7	64 21	34 29	_	0 0	3 2	4 3	13 7	_	0 0	1 0	3	1
New Mexico [†]	—	1	5	28	53	_	0	3	21	8	—	0	1	2	4
Utah Wyoming [†]	_	6 0	27 2	150 7	180 17	_	0 0	2 4	2 8	6 8	_	0 0	0 2	3	11
Pacific	22	21	303	597	494	5	4	12	113	144		0	1	4	3
Alaska California	6	1 8	29 129	75 233	36 282	3	0 3	4 12	12 96	36 102	N	0 0	0 1	N 2	N 1
Hawaii Oregon†	3	0 3	2 14	5 100	17 59	2	0 0	0 1	5	6	N	0 0	0 1	N 2	N 2
Washington	13	5	169	184	100		0	0	_	_	N	0	0	Ň	Ň
American Samoa C.N.M.I.	_	0	0	_	_	N	0	0	N	N	N	0	0	N	N
Guam	_	0	0	—	_	_	0	0	_	_	Ν	0	0	Ν	N
Puerto Rico U.S. Virgin Islands	_	0 0	0 0	_	_	2 N	1 0	5 0	40 N	34 N	N N	0 0	0 0	N N	N N

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(32nd Week)*		s	almonello	osis		Shiga t	oxin-pro	ducina /	E. coli (ST	FC)†			Shigellos	sis	
		-	/ious	5515			-	/ious		20)			vious	515	
Reporting area	Current week	52 w Med	veeks Max	Cum 2008	Cum 2007	Current week	52 v Med	veeks Max	Cum 2008	Cum 2007	Current week	52 v Med	weeks Max	Cum 2008	Cum 2007
United States	713	870	2,110	22,874	25,026	78	84	247	2,482	2,451	254	403	1,227	10,896	9,614
New England Connecticut Maine [§] Massachusetts New Hampshire Rhode Island [§] Vermont [§]	2 2 — —	22 0 2 15 3 1 1	305 276 14 58 7 13 7	1,039 276 92 494 74 52 51	1,612 431 69 888 111 59 54	2 1 - - 1	3 0 2 1 0 0	25 22 4 7 5 3 3	111 22 8 46 19 7 9	195 71 19 82 11 5 7		3 0 2 0 0 0	25 23 4 7 1 9	106 23 11 61 1 8 2	171 44 13 102 4 6 2
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	55 — 31 3 21	97 15 25 23 32	212 48 73 48 83	2,764 400 765 676 923	3,471 765 815 763 1,128	11 	8 1 4 1 2	192 6 188 5 9	440 15 322 33 70	272 68 90 28 86	14 	29 6 7 9 2	83 34 35 35 65	1,319 370 408 454 87	424 86 75 144 119
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	58 — 18 12 27 1	90 24 8 17 26 14	172 62 52 43 65 37	2,680 649 341 523 792 375	3,677 1,347 383 554 799 594	9 - 9 -	11 1 2 2 3	38 11 12 15 17 16	354 38 37 92 108 79	341 64 42 52 77 106	86 15 68 3	74 20 10 2 21 11	145 37 83 7 104 44	2,155 485 466 59 786 359	1,483 345 48 48 618 424
W.N. Central Iowa Kansas Minnesota Missouri Nebraska [§] North Dakota South Dakota	32 4 7 18 3 —	51 9 7 13 14 5 1 2	137 15 31 73 29 13 35 11	1,569 241 228 450 394 147 28 81	1,607 295 239 390 422 139 18 104	15 2 	13 2 0 2 3 2 0 1	48 16 3 22 12 8 20 5	435 106 19 111 97 71 2 29	385 86 32 120 72 48 6 21	2 — — 2 — —	21 3 4 8 0 0 1	39 11 25 33 3 15 9	541 89 11 173 156 2 34 76	1,297 52 18 151 953 14 3 106
S. Atlantic Delaware District of Columbia Florida Georgia Maryland [§] North Carolina South Carolina [§] Virginia [§] West Virginia	245 1 133 56 17 23 5 10	258 3 109 37 10 18 21 18 4	442 9 4 181 86 44 228 52 49 25	5,579 85 31 2,612 966 325 525 479 463 93	5,935 89 34 2,290 974 484 773 532 655 104	18 2 1 9 6	12 0 3 1 1 0 3 0	32 2 1 18 7 6 14 3 10 3	397 8 7 103 49 47 47 21 95 20	384 10 	26 — 16 1 4 1 3 1	71 0 21 26 1 0 8 4 0	149 2 3 75 49 6 12 32 14 61	1,922 8 573 733 34 64 391 103 8	2,853 7 11 1,550 1,003 63 49 70 93 7
E.S. Central Alabama [§] Kentucky Mississippi Tennessee [§]	60 12 11 25 12	63 16 10 18 16	144 50 21 57 34	1,657 444 264 536 413	1,759 477 319 478 485	5 4 1	6 1 1 0 2	21 17 12 2 12	159 41 46 5 67	155 50 48 4 53	20 3 1 2 14	48 12 7 14 14	178 43 35 112 32	1,221 281 201 255 484	1,000 374 215 293 118
W.S. Central Arkansas [§] Louisiana Oklahoma Texas [§]	93 33 — 60	122 13 9 14 64	894 50 44 72 794	2,868 411 175 378 1,904	2,233 358 466 243 1,166	 	4 1 0 3	25 4 1 14 11	117 26 — 18 73	156 26 8 14 108	32 18 14	60 4 5 3 47	748 27 17 32 702	2,338 332 149 68 1,789	1,156 58 337 65 696
Mountain Arizona Colorado Idaho [§] Montana [§] Nevada [§] New Mexico [§] Utah Wyoming [§]	50 24 14 2 4 5 1	59 20 11 3 2 4 7 4 7 4	107 41 43 13 10 14 31 17 5	1,825 572 454 100 62 138 325 152 22	1,522 509 343 78 58 158 162 166 48	6 4 1 	9 1 2 0 0 1 1 0	34 8 12 8 3 3 6 9 2	255 43 77 51 21 16 26 17 4	330 67 88 75 — 18 27 43 12	23 12 5 1 - 5 -	18 9 2 0 3 1 1 0	40 30 6 1 13 6 5 2	488 229 64 7 4 131 38 12 3	484 252 70 9 15 23 71 16 28
Pacific Alaska California Hawaii Oregon [§] Washington	118 3 100 2 13	109 1 76 5 6 12	399 5 286 15 17 103	2,893 31 2,116 154 241 351	3,210 55 2,406 167 206 376	12 5 — 7	9 0 5 0 1 2	40 1 34 5 11 13	214 5 119 10 26 54	233 1 127 24 33 48	51 49 2	30 0 26 1 1 2	72 0 61 3 5 20	806 — 699 25 37 45	746 8 565 61 45 67
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	 2	0 	1 2 44 0	1 	 11 531 	 	0 0 0 0	0 	 2	 	 	0 0 0 0	1 3 0	1 14 	3 10 19

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	Stre	ptococcal	disease,	invasive, g	oup A	Streptococ	cus pneumo	o <i>niae</i> , invasi Age <5 y		nondrug resistant [†]	_
	Current	Prev 52 w	eeks	Cum	Cum	Curre	nt 5	revious 2 weeks	Cum	Cum	
Reporting area	week	Med	Max	2008	2007	wee			2008	2007	
United States	44	90	259	3,616	3,748	6	36	166	1,013	1,139	
New England Connecticut	_	6 0	31 26	270 83	292 90	_	2 0	14 11	48	91 12	
Maine [§]	—	0	3	20	21	_	0	1	1	1	
Massachusetts	—	3 0	8 2	125	142	_	1 0	5 1	37 7	60 8	
New Hampshire Rhode Island [§]	_	0	2 8	18 14	22 2	_	0	1	2	8	
Vermont [§]	—	Ō	2	10	15	_	0	1	1	2	
Mid. Atlantic	12	17	43	762	720	_	4	19	131	207	
New Jersey	_	3	11	128	132	—	1	6	27	41	
New York (Upstate) New York City	5	6 3	17 10	254 133	221 179	_	2 1	14 12	68 36	75 91	
Pennsylvania	7	5	16	247	188	Ν	0	0	N	N	
E.N. Central	6	19	63	789	748	1	6	23	216	202	
Illinois	_	5	16	196	230	_	1	6	46	48	
Indiana	3 1	2 3	11	102	86	1	0 1	14	25	12	
Michigan Ohio	1	3 5	10 14	124 208	156 174	_	1	5 5	51 36	56 44	
Wisconsin	1	2	42	159	102	_	1	9	58	42	
W.N. Central	2	5	39	285	245	1	2	16	87	58	
Iowa	_	0	0	—	—	_	0	0	—	_	
Kansas Minnesota	_	0 0	6 35	38 130	26 116	_	0 0	3 13	13 33	35	
Missouri	_	2	10	64	65	1	1	2	26	15	
Nebraska§	2	0	3	27	20	_	0	3	6	7	
North Dakota South Dakota	_	0 0	5 2	10 16	11 7	_	0 0	2 1	4 5	1	
S. Atlantic Delaware	17	19 0	34 2	622 6	875 8	1	5 0	13 0	128	196	
District of Columbia	_	Õ	2	15	16	_	Õ	1	1	2	
Florida	6	6	11	177	199	1	1	4	40	40	
Georgia Maryland§	4 4	5 0	12 6	158 13	169 153	_	1 0	5 4	21 2	43 48	
North Carolina	2	2	10	98	119	Ν	Ő	Ö	Ň	N	
South Carolina [§]	_	1	5	40	80	—	1	4	35	25	
Virginia [§] West Virginia	1	3 0	12 3	92 23	111 20	_	0 0	6 1	24 5	32 6	
E.S. Central	1	4	9	117	156	_	2	11	65	62	
Alabama [§]	N	4	9	N	N	N	2	0	N	N	
Kentucky	_	1	3	26	32	N	0	0	N	N	
Mississippi Tennessee§	N 1	0 3	0 7	N 91	N 124		0 2	3 9	16 49	5 57	
W.S. Central Arkansas [§]	5	8 0	85 2	300 4	217 17	1	5 0	66 2	162 4	159 9	
Louisiana	_	0	1	3	14	_	Ő	2	2	28	
Oklahoma		2	19	76	51	_	1	7	48	34	
Texas [§]	5	6	65	217	135	1	3	58	108	88	
Mountain Arizona	1	10 4	22 9	371 140	401 150	2	5 2	12 8	166 83	153 73	
Colorado	_	2	8	103	103	1	1	4	46	31	
Idaho ^s		0	2	11	9	_	0	1	3	2	
Montana [§] Nevada [§]	N 1	0 0	0 2	N 7	N 2	N	0 0	1 0	4 N	1 N	
New Mexico [§]	_	2	7	66	68		0	3	14	27	
Utah	—	1	5	39	64	—	0	3	15	19	
Wyoming [§]	—	0	2	5	5	—	0	1	1	—	
Pacific	—	3	10	100	94	N	0	2	10 N	11 N	
Alaska California	_	0 0	5 0	29	18	N N	0 0	0 0	N N	N N	
Hawaii	_	2	10	71	76	_	0	2	10	11	
	N	0	0	N	N	N	0	0	N	N	
Washington	N	0	0	N	N	N	0	0	N	N	
American Samoa C.N.M.I.	—	0	12	30	4	N	0	0	N	<u>N</u>	
Guam	_	0	3	_	7	_	0	0	_	_	
Puerto Rico	Ν	0	0	Ν	N	N	0	0	Ν	N	
U.S. Virgin Islands	_	0	0	—	—	N	0	0	N	N	

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).

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*		Sti	reptococc All ages		<i>oniae</i> , inva	isive diseas		sistant [†] <5 year	e		Svi	ohilis pr	imary an	d seconda	arv
		Prev		,				ious	3				vious	0 300010	ai y
	Current	52 w	eeks	Cum	Cum	Current	52 w	eeks	Cum	Cum	Current	52 v	veeks	Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	14	51	264	1,641	1,701	2	9	43	279	328	125	232	351	6,877	6,434
New England Connecticut	_	1 0	41 37	30	86 51	_	0 0	8 7	5	12 4	6 1	6 0	14 6	189 17	156 21
Maine [§]	_	0	2	13	9	_	0	1	1	1	—	0	2	8	4
Massachusetts New Hampshire	_	0 0	0 0	_	_	_	0 0	0 0	_	2	4 1	4 0	11 2	138 11	88 20
Rhode Island [§]	_	0	3	7	15	_	0	1	2	3	_	0	5	13	21
Vermont§		0	2	10	11	_	0	1	2	2	_	0	5	2	2
Mid. Atlantic New Jersey	1	3 0	10 0	148	96	_	0 0	2 0	17	22	27 7	32 5	45 10	1,036 128	953 123
New York (Upstate)	_	1	4	39	31	_	0	2	6	8	1	3	13	88	83
New York City Pennsylvania	1	0 1	5 8	48 61	65	_	0 0	0 2	11	14	16 3	17 5	30 12	646 174	582 165
E.N. Central	2	13	50	450	455	_	2	14	74	74	9	18	31	581	529
Illinois Indiana	1	2 3	15 28	57 140	88 99	_	0 0	6 11	14 17	25 15	2	7 2	19 6	162 81	280 29
Michigan	_	0	20	140	99 1	_	0	1	2	10	2	2	17	131	29 70
Ohio Wisconsin	1	7 0	15 0	243	267	_	1 0	4 0	41	33	3 2	5 1	13 4	175 32	109 41
Wisconsin W.N. Central		3	106	113	114		0	9	8	25	2	8	15	233	201
lowa	_	0	0	—	_	_	0	0	—	_	_	0	2	11	12
Kansas Minnesota	_	1 0	5 105	51	61 1	_	0	1 9	3	4 17	_	0 1	5 5	19 57	12 42
Missouri	_	1	8	62	43	_	0	1	2		_	5	10	139	128
Nebraska [§] North Dakota	_	0 0	0 0	_	2	_	0 0	0 0	_	_	_	0 0	2 1	7	4
South Dakota	—	0 0	2	_	7	—	õ	1	3	4	—	õ	3	—	3
S. Atlantic	11	20	41	688	725	2	4	10	129	156	41	51	215	1,463	1,398
Delaware District of Columbia	_	0 0	1 3	3 12	5 12	_	0 0	0 0	_	2 1	3	0 2	4 11	10 73	7 115
Florida	11	11	26	386	407	2	2	6	82	81	13	19	34	556	459
Georgia Maryland§	_	7 0	19 0	223	253 1	_	1 0	6 0	41	64	6	10 6	175 14	242 199	236 183
North Carolina	N	0	0	Ν	Ν	Ν	0	0	Ν	Ν	2	5	18	163	205
South Carolina [§] Virginia [§]	N	0 0	0 0	N	N	N	0 0	0 0	N	N	3 14	1 5	5 17	54 165	59 128
West Virginia	_	1	7	64	47	—	0	2	6	8	—	0	1	1	6
E.S. Central Alabama [§]	N	5 0	14 0	166 N	140 N	N	1 0	4 0	33 N	21 N	12	20 8	31 15	626 245	516 219
Kentucky	_	1	4	47	17	_	0	2	9	2	_	1	7	50	37
Mississippi Tennessee§	_	0 3	5 12	1 118	36 87	_	0 1	0 3	24	 19	 12	3 8	15 14	91 240	66 194
W.S. Central	_	1	5	26	54	_	0	2	8	7	16	41	62	1,260	1,050
Arkansas§	_	0	2	9	1	_	0	1	3	2	—	2	19	97	70
Louisiana Oklahoma	N	0 0	5 0	17 N	53 N	N	0 0	2 0	5 N	5 N	16	11 1	22 5	300 46	280 38
Texas [§]	—	0	0	—	—	—	0	0	—	—	—	26	49	817	662
Mountain	—	1	6	20	31	—	0	2	4	9	1	8 4	29	227	263
Arizona Colorado	_	0 0	0 0	_	_	_	0 0	0 0	_	_	1	2	21 7	78 72	137 28
Idaho [§] Montana [§]	N	0	0 0	N	N	N	0 0	0 0	N	N	—	0 0	1 3	2	1 1
Nevada§	N	0	0	N	N	N	0	0	Ν	Ν	_	2	6	52	59
New Mexico [§] Utah	_	0 0	1 6	1 18	 19	_	0 0	0 2	4	8	_	1 0	3 2	23	27 9
Wyoming§	_	0	1	1	12	_	0	1		1	_	0	1	_	1
Pacific		0	0			<u></u>	0	1	1	2	13	41	70	1,262	1,368
Alaska California	N N	0 0	0 0	N N	N N	N N	0 0	0 0	N N	N N	6	0 38	1 59	1 1,128	6 1,266
Hawaii	_	0	0				0	1	1	2	_	0	2	[′] 11	5
Oregon [§] Washington	N N	0 0	0 0	N N	N N	N N	0 0	0 0	N N	N N	7	0 3	2 13	9 113	11 80
American Samoa	Ν	0	0	Ν	Ν	Ν	0	0	Ν	Ν	_	0	0	_	4
C.N.M.I. Guam	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
Puerto Rico	_	0	0	—	—	—	0	0	—	—	_	3	10	93	93
U.S. Virgin Islands	_	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. * 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).

	(32nd Week)*										st Nile vir	us disease				
Current 52 week Cun Current 52 week Cun Current 52 week Cun Current 52 week Cun Current 52 week S2 week				•	(enpox)					ve					asive§	
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New England 4 1 6 8 334 1776 - 0 2 - 1 - 0 2 1 1 2 1 1 2 1 1 2 1	Reporting area															
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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. 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 California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I. Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-propertient and provide the three interviewer 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. Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deatins	All causes, by age (years)								All causes, by age (years)						
Reporting Area	All Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	P&I [†] Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&l [†] Total
New England	440	298	91	32	11	8	35	S. Atlantic	950	<u>200</u> 571	246	66	32	34	53
Boston, MA	134	86	30	11	4	3	13	Atlanta, GA	73	45	20	2	5	1	
Bridgeport, CT	15	9	5	1	_	—	_	Baltimore, MD	153	80	47	11	11	4	13
Cambridge, MA	10	7	3	_	_	—	1	Charlotte, NC	117	80	21	10	5	1	7
Fall River, MA Hartford, CT	23 43	16 31	4 9	3 1	1	1	1 6	Jacksonville, FL Miami, FL	U 91	U 57	U 22	U 5	U 3	U 4	U 6
Lowell, MA	43	12	3		1	_		Norfolk, VA	44	33	3	3	2	3	1
Lynn, MA	12	7	3	1	1	_	_	Richmond, VA	63	37	17	5	2	2	2
New Bedford, MA	18	14	3	1	_	—	2	Savannah, GA	54	34	15	3	_	2	—
New Haven, CT	U	U	U	U	U	U	U	St. Petersburg, FL	49	34	10	3		2	3
Providence, RI	56	40	11	3	2	_	4	Tampa, FL	194	120	51	15	3	5	16
Somerville, MA Springfield, MA	1 32	23	4	1 5	_	_	3	Washington, D.C. Wilmington, DE	104 8	44 7	39 1	9	1	10	4 1
Waterbury, CT	26	14	9	1	_	2	3								
Worcester, MA	54	39	7	4	2	2	2	E.S. Central	810	527	216	34	18	15	59
Mid. Atlantic	1,986	1,340	448	141	23	33	92	Birmingham, AL Chattanooga, TN	176 85	117 54	44 26	8 3	4 1	3 1	10 5
Albany, NY	49	37	0	4	1	2	3	Knoxville, TN	80	51	20		2	5	6
Allentown, PA	15	14	1			_	2	Lexington, KY	63	45	13	3	1	1	5
Buffalo, NY	70	49	15	5	1	—	4	Memphis, TN	134	89	34	5	3	3	14
Camden, NJ	38	21	7	4	3	3	_	Mobile, AL	65	40	19	6		_	5
Elizabeth, NJ	17	13	3	1	_	—		Montgomery, AL	59	42	11	5	1		3
Erie, PA Jersey City, NJ	39 28	30 14	8 3	1 7	3	1	3 2	Nashville, TN	148	89	47	4	6	2	11
New York City, NY	994	691	221	61	7	13	43	W.S. Central	1,318	784	340	116	50	27	66
Newark, NJ	39	16	13	6	_	4	_	Austin, TX	82	54	16	7	3	2	4
Paterson, NJ	16	5	8	_	2	1	2	Baton Rouge, LA	U 38	U 28	U 9	U	U	U 1	U 4
Philadelphia, PA	268	152	74	30	3	9	11	Corpus Christi, TX Dallas, TX	38 187	28 109	9 44	18	11	5	4 9
Pittsburgh, PA§	33	19	13	1	_	—	2	El Paso, TX	83	61	17	3	2		3
Reading, PA	24 108	12	11	1	_	_	9	Fort Worth, TX	170	93	52	16	3	6	8
Rochester, NY Schenectady, NY	23	88 20	16 1	4 2	_	_	9	Houston, TX	349	175	105	45	17	6	13
Scranton, PA	24	19	2	3	_	_	1	Little Rock, AR	U	U	U	U	U	U	U
Syracuse, NY	143	98	36	8	1	_	7	New Orleans, LA ¹	U 202	U 130	U 51	U	U 5	U 6	U 11
Trenton, NJ	19	14	4	_	1	—	_	San Antonio, TX Shreveport, LA	202	46	17	10 9	5 4	- 0	5
Utica, NY	20	16	2	2	_	—	1	Tulsa, OK	131	88	29	8	5	1	9
Yonkers, NY	19	12	5	1	1	_	1	Mountain	956	628	200	76	26	26	52
E.N. Central	1,904	1,215	472	146	31	38	97	Albuquerque, NM	111	65	31	7	4	4	2
Akron, OH Canton, OH	54 27	35 19	13 7	4 1	1	1	2	Boise, ID	49	37	6	5	1	_	6
Chicago, IL	264	144	84	26	6	2	15	Colorado Springs, CO	40	30	8	_	1	1	1
Cincinnati, OH	83	42	23	8	3	7	2	Denver, CO	92	60	18	8	_	6	2
Cleveland, OH	221	152	52	12	3	2	8	Las Vegas, NV	259	159 19	61 7	24 4	8	7	19
Columbus, OH	193	117	48	21	4	3	13	Ogden, UT Phoenix, AZ	30 81	49	7 19	4 9	2	2	1 6
Dayton, OH	89	66	16	5	2	_	8	Pueblo, CO	26	19	4	3	_		_
Detroit, MI Evansville, IN	168 49	98 37	47 10	17 2	4	2	3 7	Salt Lake City, UT	128	91	19	9	5	4	7
Fort Wayne, IN	49	52	19	3	_	3	4	Tucson, AZ	140	99	27	7	5	2	8
Gary, IN	15	6	6	2	_	1	_	Pacific	1,263	846	270	86	28	33	123
Grand Rapids, MI	47	33	6	5	1	2	4	Berkeley, CA	11	8	2	_	_	1	1
Indianapolis, IN	198	119	45	21	5	8	12	Fresno, CA	U	U	U	U	U	U	U
Lansing, MI	47	39	5	2	1		2	Glendale, CA Honolulu, HI	24	21	3	3		1	5 7
Milwaukee, WI Peoria, IL	79 49	45 37	25 10	6	_	3 2	2	Long Beach, CA	76 63	52 43	19 15	2	1 1	2	8
Rockford, IL	64	41	20	3	_		2	Los Angeles, CA	252	162	50	20	8	12	34
South Bend, IN	52	38	10	2	_	2	_	Pasadena, CA	13	8	5	_	_	_	_
Toledo, OH	85	61	19	4	1	—	4	Portland, OR	101	73	17	7	3	1	10
Youngstown, OH	43	34	7	2	_	—	3	Sacramento, CA	U	U	U	U	U	U	U
W.N. Central	502	313	104	40	22	23	29	San Diego, CA San Francisco, CA	144 115	99 66	26 32	16 8	2 3	1 6	11 17
Des Moines, IA	23	14	4	3	1	1	4	San Jose, CA	180	125	32 41	8 9	2	3	16
Duluth, MN	20	16	4		_	—	1	Santa Cruz, CA	25	123	7		1		10
Kansas City, KS	11	6	4	1			1	Seattle, WA	106	74	20	7	3	2	7
Kansas City, MO Lincoln, NE	85 40	51 32	21 7	6 1	5	2	6 2	Spokane, WA	57	36	13	3	1	4	4
Minneapolis, MN	40 56	32	7	9	1	9	2	Tacoma, WA	96	62	20	11	3	—	2
Omaha, NE	77	56	16	4		1	2	Total	10,129**	6,522	2,387	737	241	237	606
St. Louis, MO	93	40	26	10	12	5	5								
St. Paul, MN	37	26	6	2	1	2	2								
Wichita, KS	60	42	9	4	2	3	3								

U: Unavailable. —:No reported cases. * Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included. [†] Pneumonia and influenza. [§] Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks. [§] Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted. ** Total includes unknown ages.

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