

Weekly

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# Malaria — Great Exuma, Bahamas, May–June 2006

Malaria in humans is caused by four distinct protozoan species of the genus Plasmodium (P. falciparum, P. vivax, P. ovale, and *P. malariae*). These parasites are transmitted by the bite of an infective female Anopheles mosquito (1). In the Caribbean region, malaria has been eliminated from all islands except Hispaniola, the island consisting of Haiti and the Dominican Republic. Elimination of malaria elsewhere resulted from a combination of integrated control measures, socioeconomic development, and close public health surveillance. However, even Caribbean islands where malaria is no longer endemic remain at constant risk for reintroduction of the disease because of their tropical climate, presence of competent malaria vectors, and proximity to other countries where malaria is endemic. This susceptibility was underscored by the recent outbreak of malaria on the island of Great Exuma in the Bahamas; during May-June 2006, a total of 19 malaria cases were identified. Four of the cases, in travelers from North America and Europe, are described in this report; such cases of imported malaria can signal the presence of a malaria problem in the country visited and thus assist local health authorities in their investigations. On September 19, after 3 months with no report of new cases, CDC rescinded its previous recommendation that U.S.-based travelers take preventive doses of the antimalarial drug chloroquine before, during, and after travel to Great Exuma.\*

**Case 1.** On May 24, 2006, a man aged 33 years from the United States received a diagnosis of malaria in a hospital emergency department in Virginia. The patient had intermittent fever, sweats, abdominal discomfort, nausea, and vomiting, which had begun during a May 4–7 visit to Great Exuma, where the patient had stayed in a resort hotel. The patient had no history of exposure to malaria. Blood smears on May 24 indicated *P. falciparum*. After outpatient treatment with chlo-

roquine, changed later to quinine and doxycycline, the patient recovered uneventfully.

**Case 2.** On June 6, a woman aged 29 years from Germany received a diagnosis of *P. falciparum* malaria in a hospital in Germany. She had experienced fever, headache, nausea, and vomiting since May 30, near the end of a May 18–31 visit to Great Exuma. After her return to Germany, the woman was treated initially with antibiotics for suspected sinusitis. However, her illness persisted, and she was hospitalized on June 6 with high fever and neck stiffness. Diagnostic tests included magnetic resonance imaging of her head, a lumbar puncture to exclude meningitis, and a blood smear that revealed *P. falciparum*. She was treated with artemether-lumefantrine and recovered.

**Case 3.** On June 16, a man aged 20 years from Canada had *P. falciparum* malaria diagnosed. The man had been born in the Bahamas and had visited friends and relatives there during April 19–June 11, spending most of his time in Georgetown, the most populous city on Great Exuma. On June 14, the man experienced fever and chills and went to an emergency department for evaluation after learning that his cousin had been treated recently for malaria on Great Exuma. The diagnosis of *P. falciparum* malaria was confirmed by blood smear on June 16. He was treated on an outpatient basis with chloroquine followed by atovaquone-proguanil and recovered uneventfully.

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DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION

<sup>\*</sup>Available at http://www.cdc.gov/travel/other/2006/malaria\_bahamas.htm.

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**Case 4.** A man aged 66 years from the United States, who lived on a boat, received a diagnosis of *P. falciparum* malaria on June 19. The man, who had not recently visited any area that was endemic for malaria, stayed in Great Exuma from late April to late May. In early May, he began experiencing fever, chills, sweats, headaches, and fatigue but did not seek medical care; he left Great Exuma to sail to other Bahamian islands. On June 18, on his return to Great Exuma, the patient learned of the outbreak and went the next day to the district medical clinic, where he received a diagnosis of *P. falciparum* malaria. He was treated with chloroquine and primaquine and recovered uneventfully.

After report of the first case in Virginia, the Bahamian Ministry of Health (MOH) initiated epidemiologic and entomologic investigations with the technical assistance of the Pan American Health Organization. MOH also heightened mosquito-control activities that were already being conducted on Great Exuma in conjunction with the Bahamian Department of Environmental Health Services.

Active case detection was conducted on Great Exuma during June 6-30; however, no case of malaria was diagnosed later than the June 19 diagnosis in case 4. Persons examined at primary-care clinics who had a history of fever and a temperature of  $\geq$ 99.0°F ( $\geq$ 37.2°C) and contacts of persons who received diagnoses of malaria were screened using thick and thin blood smears stained with Wright's stain. On Great Exuma, 15 persons were determined infected with P. falciparum. Ages ranged from 16 to 66 years (median: 36 years); 84% were males. Most of these patients were residents of the Bahamas, clustered around the areas of Georgetown and Bahama Sound, and living in close proximity to a community of immigrants from Haiti; most said they had not recently traveled to Haiti or any other area endemic for malaria. All patients were initially treated with chloroquine and doxycyline; the latter was subsequently replaced by primaquine to eliminate gametocytes and thus prevent further transmission. All 15 patients recovered.

A parasite prevalence survey was conducted on Great Exuma in a community of immigrants from Haiti, from which anecdotal reports of illness had been received. Of 159 persons who consented to testing, 29 adults were determined infected with *P. falciparum*. This finding prompted mass treatment with chloroquine and primaquine of 203 persons within that community.

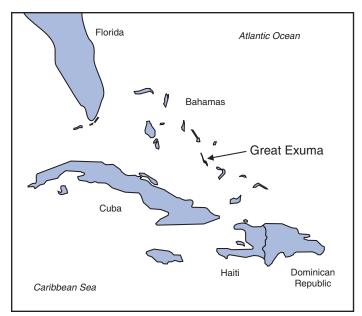
Entomologic surveys were conducted in multiple sites near bodies of fresh water identified by ground and air surveys in Great Exuma. Human bait and CDC light-trap collections yielded large populations of mosquitoes, of which only five were adult *Anopheles albimanus*. Surveys of potential breeding sites indicated few areas favorable for breeding of *An. albimanus* larvae, with five confirmed *An. albimanus* larvae collected from three breeding sites. Mosquito-control interventions were intensified beginning May 30. These measures included spraying 1) at all potential breeding sites, 2) within a quarter-mile radius of patients with confirmed cases, and 3) within a halfmile radius of patients detected through contact tracing, initially with a water-based pyrethroid insecticide, and later with malathion 96.5%. In addition, all bodies of fresh water on Great Exuma, neighboring Little Exuma, and surrounding cays (reefs) were treated with temephos to eliminate larvae.

As of September 19, no additional cases of malaria had been identified on Great Exuma or any other island in the Bahamas, despite intense epidemiologic surveillance. Mosquitocontrol measures were being continued throughout the Bahamas.

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**Editorial Note:** The Bahamas is an archipelagic nation in the northern Caribbean Sea, consisting of approximately 700 islands and 2,400 cays stretching between Florida and Haiti (Figure). Persons from Hispaniola and other countries have emigrated to the Bahamas, where malaria is not endemic and

# FIGURE. Nineteen cases of malaria, including four among travelers, were reported as acquired on the island of Great Exuma in the Bahamas during May–June 2006



only one imported case was reported in 2005. However, because of frequent travel and relocation among countries, health-care providers in the Bahamas and other countries where malaria is not endemic should remain alert to the risk for this disease, especially in travelers and immigrants. Introduced malaria is much less common than imported malaria but of greater epidemiologic significance. Imported malaria usually occurs when travelers acquire the infection while visiting areas where malaria is endemic. Introduced malaria typically occurs when infected travelers return home and transmit the infection to local Anopheles mosquitoes, which subsequently transmit it to local residents. Left unchecked, this process can result in reestablishment of endemic malaria in countries that have previously eliminated the disease because these areas have climatic conditions favorable to transmission and Anopheles species that are receptive to malaria parasites. In the United States, 1,320 cases of imported malaria were reported in 2004 (1), and 63 episodes of introduced malaria were detected from 1957 to 2003, the year when the latest episode occurred in Florida (2-4).

Available evidence indicates that during May–June 2006, Great Exuma experienced an outbreak of introduced malaria that was successfully contained and terminated. The observations that all cases were caused by P. falciparum and a substantial proportion of patients were immigrants from Haiti suggest that malaria was introduced by those immigrants. All patients treated with chloroquine responded to the treatment, which is a further suggestion that the parasites originated from Haiti, where P. falciparum has remained sensitive to chloroquine. P. falciparum causes 99% of malaria cases in Haiti and the Dominican Republic (MD Milord, Ministry of Public Health and Population, Haiti, and JM Puello, National Center for Control of Tropical Diseases, Dominican Republic, personal communication, 2006), which share the only Caribbean island still endemic for malaria. Conversely, P. vivax causes 94% of cases in Mexico and Central America (5).

The successful containment of this malaria outbreak is attributable to several factors. The first identified case, detected in a foreign tourist returning from the Bahamas, was promptly reported to the Bahamian MOH, which responded with several complementary interventions, including identification and treatment of patients and asymptomatic parasite carriers and institution of mosquito-control measures. Fewer than 30 days elapsed between diagnosis of the first identified case in Virginia and diagnosis of the last case on Great Exuma. Since June 19, no additional cases have been noted, despite intensive ongoing surveillance among febrile patients.

In view of these findings, CDC has rescinded recommendations made on June 16, 2006, that travelers take preventive doses of chloroquine before, during, and after travel to Great Exuma. As of September 19, CDC no longer recommends that travelers to Great Exuma take antimalarial prophylaxis.

This malaria outbreak illustrates the importance of vigilance by health-care providers and rapid response by public health authorities for successful containment (2) and also might provide incentive for measures to eliminate malaria from all Caribbean islands, including Hispaniola. Recently, the International Task Force for Disease Eradication recommended that Haiti and the Dominican Republic work jointly to eliminate from Hispaniola both malaria and lymphatic filariasis, two vectorborne parasitic diseases that have been eliminated from all other Caribbean islands (6). Agreements reached in July 2006 between the ministries of health of Haiti and the Dominican Republic represent a first step toward achieving this goal.

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# Inadvertent Misadministration of Meningococcal Conjugate Vaccine — United States, June–August 2005

During June–August 2005, CDC and the Food and Drug Administration (FDA) were notified of seven clusters of inadvertent subcutaneous (SC) misadministration of the new meningococcal conjugate vaccine (MCV4, Menactra) (Sanofi Pasteur, Inc., Swiftwater, Pennsylvania), which is licensed for intramuscular (IM) administration only. A total of 101 persons in seven states were reported to have received MCV4 by the SC route. Of these, 100 were contacted by their healthcare providers and advised of the administration error. CDC conducted an investigation to determine whether SC administration of MCV4 resulted in a protective immunologic response. This report describes the results of that investigation, which indicated that, despite the misadministration, persons vaccinated by the SC route were sufficiently protected and that revaccination was not necessary.

In 1978, the meningococcal polysaccharide vaccine (MPSV4, Menomune) (Sanofi Pasteur) was licensed in the United States for administration by the SC route. The newer MCV4 is a tetravalent meningococcal conjugate vaccine that was licensed in January 2005 on the basis of immunogenic noninferiority to MPSV4 and demonstrated safety (1). Both vaccines protect against *Neisseria meningitidis* serogroups A, C, Y, and W-135. Because immunogenicity and safety of MCV4 were assessed for IM administration only, the vaccine is licensed for IM use only. The immunogenicity and safety of MCV4 after SC administration were not evaluated.

CDC contacted the providers who inadvertently misadministered the vaccine to inform them of the investigation. Providers contacted the vaccinees to advise them of the error and invite them to participate in the investigation. Twelve nonserious adverse events\* were reported among 54 persons from whom providers solicited such information. Eleven events were local reactions, including injection-site rash, tenderness, swelling, induration, or pain, and one was a fever of 1 day's duration. The frequency and nature of adverse events among these persons are similar to those reported after IM vaccination in MCV4 licensure trials (1).

Providers collected single serum samples from 21 to 105 days after vaccination from 38 SC vaccinees who agreed to participate (response rate: 38%). Serology results from a group of 372 subjects available from the manufacturer's prelicensure MCV4 clinical trial database, with serum samples collected 21 to 42 days after IM vaccination, were used as age-matched controls for comparison with the SC vaccinees. Age-matched comparison of rSBA response was conducted because of the effect of age on serologic response to MCV4. Immune responses for each vaccine serogroup (A, C, Y, and W-135) were measured by serum bactericidal assay using baby rabbit complement (rSBA). Serologic testing of the SC vaccinees was performed by the same laboratory using the same methods used to test the IM vaccinees from the MCV4 clinical trial. Geometric mean titers (GMTs) of SC vaccinees were compared with those of age-matched IM vaccinees from the MCV4 clinical trials. Titers of individual vaccinees were evaluated for each vaccine serogroup to determine whether the vaccinees developed a protective response as a result of the SC vaccination; rSBA titers >8 were considered protective (2,3).

For each of the four vaccine serogroups, the proportion of SC vaccinees with rSBA titers  $\geq 8$  was  $\geq 97\%$  and did not dif-

<sup>\*</sup> As defined in 21 CFR 1240.62 (Postmarketing reporting of adverse experiences), available at http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch. cfm?FR=600.80.

fer significantly (by Fisher exact test) from the proportion of IM vaccinees with rSBA titers  $\geq 8$  (Table). Two patients vaccinated by the SC route had rSBA titers <8 (one participant for serogroup C only and one for serogroup W-135 only). GMTs were significantly lower for SC vaccinees compared with agematched IM vaccinees for serogroups A, C, and Y (odds ratios = 1.78 [95% confidence interval (CI) = 1.21–2.62]; 2.27 [CI = 1.33–3.89]; and 1.66 [CI = 1.03–2.67], respectively); however, no significant difference was observed between GMTs for serogroup W-135 (odds ratio = 0.71 [CI = 0.45–1.14]). On the basis of the protective rSBA titer results for nearly all of SC vaccinees participating in this investigation, revaccination was not recommended.

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**Editorial Note:** The most likely reason for the inadvertent misadministration of MCV4 described in this report was that the older meningococcal vaccine, MPSV4, in use for nearly 30 years, is licensed for SC administration, whereas MCV4 is licensed only for IM administration. This reason was cited by health-care providers participating in the investigation.

Although the overall serologic response for SC vaccinees was lower than that of IM vaccinees as determined by GMTs, nearly all persons vaccinated by the SC route developed rSBA titers  $\geq 8$ , which was considered protective on the basis of recent population-based studies of meningococcal C conjugate vaccine efficacy in the United Kingdom (2,3). Therefore, CDC determined that this particular group of persons vaccinated by the SC route was sufficiently protected and that revaccination was not necessary.

CDC cautions health-care providers to be aware that the licensed route of vaccine administration can vary among similar

TABLE. Number and percentage of patients with rSBA\* titers  $\geq$ 8 who were vaccinated with meningococcal conjugate vaccine via intramuscular (IM) and subcutaneous (SC) routes, by serogroup — United States, 2005

by beregrea			0,2000		
		group = 372)†		; group n = 38)	Fisher exact 2-tailed
Serogroup	No.	(%)	No.	(%)	test result
A	372	(100.0)	38	(100.0)	Undefined
С	372	(100.0)	37	(97.4)	0.09
W-135	372	(100.0)	37	(97.4)	0.09
Y	372	(100.0)	38	(100.0)	Undefined

\* Serum bactericidal assay with baby rabbit complement (rSBA). A titer ≥8 is considered to be protective on the basis of population studies on meningococcal C conjugate vaccine efficacy in the United Kingdom (*3,4*).
 † Serology results from a group of 372 subjects (available via the clinical trial database for the new meningococcal conjugate vaccine [MCV4,

Analysis of the new meningococcal conjugate vaccine [MCV4, Menactra] [Sanofi Pasteur, Inc., Swiftwater, Pennsylvania]) were used as age-matched controls for comparison with the SC vaccinees. vaccines and recommends that providers carefully review and follow the route of administration indicated on the vaccine label and package insert before administering vaccines. This is especially important after introduction of a new vaccine product.

#### Acknowledgments

The findings in this report are based, in part, on contributions by the California Dept of Health Svcs; Illinois Dept of Health; Michigan Dept of Health; Pennsylvania Dept of Health; Kentucky Dept of Health; Vermont Dept of Health; MD Decker, MD, P Hosbach, PhD, G Gilmet, PhD, E Bassily, PhD, D Gordon, PhD, Sanofi Pasteur, Swiftwater, Pennsylvania; and W Atkinson, MD, National Center for Immunization and Respiratory Diseases (proposed), CDC.

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# Effects of Measles-Control Activities — African Region, 1999–2005

In 1999, of approximately 871,000 deaths from measles worldwide, 61% occurred in sub-Saharan Africa (1). In 2001, countries in the World Health Organization (WHO) African Region began an accelerated measles-control program to reduce by half by 2005 the number of deaths that were caused by measles in 1999 (2). The African Region accelerated measles-control program was based on four strategies: improving routine vaccinations; providing a second opportunity for measles vaccination through a routine, 2-dose vaccination schedule or through supplementary immunization activities (SIAs)\*; improving measles case management; and establishing case-based surveillance with laboratory confirmation for

<sup>\*</sup> Initial, nationwide catch-up SIAs target all children of a particular age group (in this region, children aged 9 months–14 years), with the goal of eliminating susceptibility to measles in the general population. Periodic follow-up SIAs then target all children born since the last SIA; follow-up SIAs are generally conducted nationwide every 3–5 years and target children aged 9–59 months, with the goal of eliminating any measles susceptibility that has developed in recent birth cohorts and protecting children who did not respond to their first measles vaccination.

all suspected measles cases. Seven countries in the region had already completed catch-up SIAs by 2000, before the regional program began; in 2001, additional countries in the region began implementing catch-up, and later, follow-up SIAs,<sup>†</sup> and steps were taken to improve routine vaccination coverage with measles vaccine and other vaccines in the Expanded Programme on Immunization schedule. This report summarizes the nationwide SIAs and other measles-control activities conducted in the WHO African Region during 1999–2004, analyzes the trends in reported measles cases since 1990, and compares the annual number of measles cases reported in 2005 with those reported in 1999.<sup>§</sup>

### **Immunization Activities**

WHO and UNICEF publish annual country-specific estimates of routine measles vaccination coverage; these estimates are based on reviews of vaccination coverage surveys, national reports, administrative coverage data, and consultation with regional and local experts (3). According to these estimates, coverage with 1 dose of measles vaccine in the African Region among children aged 12–23 months increased from 52% in 1999 to 67% in 2004. In 2004, 37 of the region's 46 countries were estimated to have coverage rates >60%, and 17 countries were estimated to have coverage rates >80% (4).

By 2000, seven countries in the African Region had completed national catch-up SIAs, and during December 2001– December 2004, 25 additional countries completed national catch-up SIAs. Ten of these 32 completed national follow-up SIAs. Measles vaccination coverage rates during these SIAs were >90%, except for the catch-up SIAs in Republic of the Congo (78%), Eritrea (82%), Ethiopia (87%), and Gabon (80%) and the follow-up SIAs in Lesotho (75%), Swaziland (81%), and Zimbabwe (85%). By December 2004, a total of 207.9 million children in 32 countries had been targeted by catch-up SIAs, which is 69% of the population of children aged <15 years in the African Region. During the same period, 16.1 million children aged 9–59 months in 10 countries were targeted by follow-up SIAs, which represents 14% of the population of children aged <5 years in the African Region.

### **Measles Surveillance**

Since the 1980s, the annual number of country-specific measles cases has been reported by the country's ministry of health each year to WHO's Regional Office for Africa. Before implementing catch-up SIAs, all countries reported measles cases to WHO through routine infectious disease information systems that provided aggregated data. The cases reported through this surveillance system were not laboratory confirmed; they were reported on the basis of clinical suspicion.

After conducting their catch-up SIAs, countries began implementing a case-based surveillance system with laboratory confirmation of suspected measles cases. In this system, each case is reported using an individual case-report form, and a blood specimen is obtained for measles immunoglobulin M (IgM) testing at a national laboratory. When a cluster of three or more cases from a health-facility catchment area has been confirmed, subsequent cases from that area are considered confirmed by epidemiologic linkage, and blood samples are not collected. The quality indicators used for the case-based surveillance system include the proportion of reported cases with a blood specimen (goal: 80% of cases not confirmed by epidemiologic linkage) and the proportion of districts reporting at least one suspected case with a blood specimen per year (goal: 80%). For Niger and Tanzania, the total number of cases with a blood specimen was <80% of the aggregate case total, so aggregate case totals were used for analysis. For all other countries, blood specimens were obtained for >90% of reported cases.

## Analysis of Surveillance Data

Countries were grouped according to the year in which they conducted their catch-up SIAs; number of reported cases by country group and year during 1990–2005 were calculated (Figure). Of the Group A<sup>¶</sup> countries, six completed catch-up SIAs by December 1999, and the seventh completed its catchup activities by the end of 2000; these countries had a measleselimination goal rather than a mortality-reduction goal (5). Group B\*\* consisted of 25 countries that completed nationwide catch-up SIAs during December 2001–December 2004. Group C<sup>††</sup> consisted of eight countries that did not begin catch-up SIAs before March 2005 (except for SIAs in the

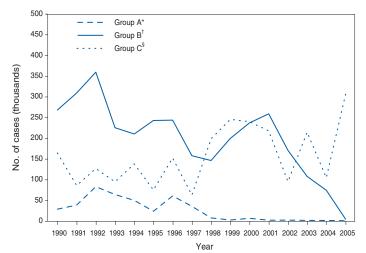
<sup>&</sup>lt;sup>†</sup> These activities were supported by the Measles Initiative. Founded in 2001, the Measles Initiative is a partnership formed to reduce measles mortality and is led by the American Red Cross, the United Nations Foundation, CDC, WHO, UNICEF, and the Canadian International Development Agency. The initiative supported implementation of high-quality measles SIAs during 2000–2004 for approximately 40 African countries. Additional information is available at http://www.measlesinitiative.org.

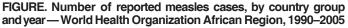
<sup>&</sup>lt;sup>§</sup> By convention, Algeria and the island nations of the Comoros, Mauritius, Sao Tome and Principe, and the Seychelles are not routinely included in analyses of data from the WHO African Region.

<sup>&</sup>lt;sup>9</sup> Botswana, Lesotho, Malawi, Namibia, South Africa, Swaziland, and Zimbabwe.

<sup>\*\*</sup> Angola, Benin, Burkina Faso, Burundi, Cameroon, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Madagascar, Mali, Mauritania, Niger, Republic of the Congo, Rwanda, Senegal, Sierra Leone, Togo, Uganda, Tanzania, and Zambia.

<sup>&</sup>lt;sup>††</sup> Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Guinea-Bissau, Mozambique, and Nigeria.





**SOURCE:** World Health Organization, Regional Office for Africa.

- \* Includes Botswana, Lesotho, Malawi, Namibia, South Africa, Swaziland, and Zimbabwe; initial supplementary immunization activities (SIAs) were \_conducted during 1996–2000.
- <sup>1</sup> Includes Angola, Benin, Burkina Faso, Burundi, Cameroon, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Madagascar, Mali, Mauritania, Niger, Republic of the Congo, Rwanda, Senegal, Sierra Leone, Togo, Uganda, United Republic of Tanzania, and Zambia; initial SIAs were conducted during 2001–2004.
- <sup>§</sup> Includes Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Guinea-Bissau, Mozambique, and Nigeria; countries did not begin catch-up SIAs before March 2005 (except for SIAs in the Democratic Republic of the Congo conducted in 2002 and 2004, which collectively targeted approximately half of the country's population aged <15 years).</p>

Democratic Republic of the Congo conducted in 2002 and 2004, which collectively targeted approximately half of the country's population aged <15 years).

The number of reported measles cases in Group A and Group B countries, which have all completed their SIAs, began decreasing steadily as SIAs were conducted (Figure). No decline was evident in the Group C countries; not all areas have been covered by SIAs, and yearly fluctuations in the number of measles cases have been observed.

In countries that completed SIAs, the total number of suspected measles cases decreased 93%, from 202,972 in 1999 to 14,284 (Table); 1999 was chosen as the year for comparison because it is the baseline year for the measles mortalityreduction goal, and the initial catch-up SIAs in all countries other than the Group A countries were conducted after 1999. The number of cases in 1999 was obtained from aggregated reports of cases that were diagnosed on the basis of clinical signs and symptoms; few of these cases have laboratory confirmation, and they include other diseases consistent with the clinical case definition of measles (e.g., rubella). In 2005, after establishment of case-based surveillance, cases were confirmed by a laboratory or through epidemiologic linkage; confirmed case totals were available for all countries except Gabon, Liberia, Mauritania, and Sierra Leone. In 2005, aggregate data also were used for Niger because case-based surveillance was not fully operational in the country. Tanzania reported 713 possible cases through the case-based system, but because blood samples were obtained from <80% of cases, aggregate data were used in the calculations. Countries with no report for 1999 (Gabon) or 2005 (Madagascar) were excluded from the calculations.

To maintain consistency in the case definition, clinically suspected measles cases reported in 2005 (i.e., which include cases not counted later after they had negative IgM serology results) were used in the calculations. The 93% decrease during 1999–2005 in suspected cases demonstrated substantial progress in countries that have implemented accelerated measles-control activities.

To minimize the effect of using a single year as a baseline for a disease with cyclic epidemics, reports of suspected cases in 2005 also were compared with the average number of cases that occurred during 3 years (1998–2000). When the 3-year average was used as a baseline (N = 200,683 cases), reported cases also decreased 93%.

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Editorial Note: The results of this report indicate a consistent and marked decrease in the number of measles cases reported from the WHO African Region country groups that completed nationwide measles catch-up SIAs during 1996-2004. These countries have experienced a >90% reduction in clinical measles cases in 2005 compared with 1999. In contrast, the number of reported cases continued to vary widely by year in the group of countries that had not completed nationwide catch-up SIAs. Although countries do not report measles deaths to WHO, an analysis of country-level data from 13 countries in the African Region that completed nationwide catch-up SIAs during late 2001 to early 2002 documented that the percentage reduction in reported deaths from measles was similar to that for reported cases of measles (6). The use and analysis of surveillance data in this report suggest that case-based measles surveillance with laboratory confirmation in the African Region is providing useful information for monitoring program effects.

The increase from 2,988 cases in 1999 to 3,626 cases in 2005 from countries in Group A (Table) is largely a result of the increase in cases reported from South Africa. For example,

	Year of	Population	No. o	f reported measles	cases
	catch-up	aged <15 yrs		20	05
Country	SIAs	(in millions)	1999*	Clinical <sup>†</sup>	Confirmed <sup>§</sup>
Group A <sup>¶</sup>					
Botswana	1997, 1998	0.7	439	565	21
Lesotho	1999, 2000	0.7	944	218	1
Malawi	1998	6.1	152	182	24
Namibia	1997	0.8	296	235	2
South Africa	1996, 1997	15.5	385	1,944	609
Swaziland	1997, 1998	0.4	0	79	0
Zimbabwe	1998	5.2	772	403	11
Group A subtotal	_	29.4	2,988	3,626	667
Group B**		-	,	-,	
Angola	2003	7.4	350	397	200
Benin	2001, 2002	3.7	2,573	207	165
Burkina Faso	2003	6.2	5,516	429	231
Burundi	2003	3.4	2,928	79	0
Cameroon	2003	6.7	10,894	1,299	581
Eritrea	2003	2.0	320	1,359	32
Ethiopia	2003, 2004	34.5	5,329	159	321
Gabon	2004	0.6	NA <sup>††</sup>	O§§	0§§
Gambia	2003	0.6	856	18	0
Ghana	2001, 2002	8.6	15,987	350	27
Guinea	2003	4.1	18,004	95	1
Kenya	2002	14.7	8,601	1,061	97
Liberia	2003	1.5	1,679	8§§	888
Madagascar	2004	8.2	35,196	NA	NA
Mali	2001	6.5	2,506	90	24
Mauritania	2004	1.3	5,263	127 <sup>§§</sup>	127 <sup>§§</sup>
Niger	2004	6.8	36,156	2,183 <sup>¶¶</sup>	2,183 <sup>¶¶</sup>
Republic of the Congo	2004	1.9	313	125	0
Rwanda	2003	3.9	4,359	259	96
Senegal	2003	5.0	3,668	129	0
Sierra Leone	2003	2.4	NA	29 <sup>§§</sup>	29 <sup>§§</sup>
Tanzania	2001, 2002	16.3	5,887	713	23***
Togo	2001	2.7	2,540	122	28
Uganda	2003	14.5	42,737	926	6
Zambia	2003	5.3	23,518	494	28
Group B subtotal		168.8	199,984	10,658	4,178
Total			202,972	14,284	4,845

# TABLE. Number of reported measles cases, by country group and year of nationwide catch-up supplementary immunization activities (SIAs) — World Health Organization African Region, 1999 and 2005

SOURCES: United Nations. World population prospects: the 2004 revision, New York, NY: United Nations; 2005; and World Health Organization, Regional Office for Africa.

\* Data are from aggregate reporting.

<sup>†</sup> Numbers of clinically suspected cases reported through the case-based system.

§ Numbers of cases confirmed by epidemiologic linkage or laboratory testing.

<sup>¶</sup> Countries that adopted the goal of eliminating measles and conducted SIAs during 1996–2000.

\*\* Countries that conducted SIAs during 2001-2004.

<sup>††</sup> Not available.

§§ Case numbers from aggregate reports (no data reported through the case-based system).

Case-based surveillance was not operational in Niger in 2005.

\*\*\* Case numbers from aggregate reports were used because blood samples were taken from only 73% of suspected cases.

in 2000, South Africa reported 117 confirmed measles cases (5), compared with 609 in 2005. During 2003–2005, South Africa experienced a large, nationwide measles outbreak involving 1,676 confirmed cases, the result of measles importation from Mozambique and failure to vaccinate enough of the population to prevent endemic measles transmission.

The data in this report are subject to at least two limitations. First, data from a single year were used to estimate changes in a disease that has cyclic epidemics. However, when the average number of reported cases that occurred during 1998–2000 (compared with 2005) was used instead of data from 1999 only (compared with 2005), the percentage reduction was similar. Second, the system used for reporting cases changed in most countries; in 1999, the countries used aggregated reporting of clinically diagnosed cases, but in 2005, most reported laboratory-confirmed cases. Therefore, numbers of suspected cases reported in 2005 were used to estimate the decrease in cases during 1999–2005, which might have led to an even greater decrease. In addition, although the case definition for suspected measles remained the same, the change from the aggregate (in 1999) to the case-based system (in 2005) of reporting might have resulted in underreporting (because of the additional tasks of individual case reports and blood samples) or overreporting (because of increased awareness of measles surveillance after SIAs).

By December 2005, approximately 87% of the population aged <15 years (267.2 million children) in the countries in the African Region had been targeted by catch-up SIAs. In 2006, nationwide catch-up SIAs are focusing on the areas that have not yet been covered, including 29 million children in southern Nigeria and 7 million children in the Democratic Republic of the Congo. Successful control of measles in the African Region will depend on conducting high-quality campaigns (i.e., campaigns that achieve ≥95% coverage) in these areas. At the same time, countries should continue to improve their routine immunization services, maintain high coverage with follow-up SIAs every 3–5 years, improve measles case management, and monitor their success by using case-based surveillance with laboratory confirmation to control measles and reach the global goal of reducing measles mortality.

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# Update: Influenza Activity — United States and Worldwide, May 21–September 9, 2006

During May 21–September 9, 2006, influenza A(H3), influenza A(H1), and influenza B viruses cocirculated worldwide and were identified sporadically in North America. This report summarizes influenza activity in the United States and worldwide since the last *MMWR* update (1).

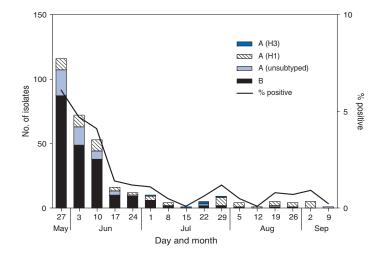
#### **United States**

In the United States, CDC uses seven systems for national influenza surveillance (2), four of which operate year-round: 1) the World Health Organization (WHO) and the National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratory systems; 2) the U.S. Influenza Sentinel Provider Surveillance System; 3) the 122 Cities Mortality Reporting System; and 4) a national surveillance system that records pediatric deaths associated with laboratory-confirmed influenza. Data from these four systems are included in this report.

During May 21–September 9,\* WHO and NREVSS collaborating laboratories in the United States tested 14,751 respiratory specimens; 318 (2%) were positive for influenza (Figure). Of the positive results, 208 (65%) were influenza B viruses, 58 (18%) were influenza A (H1) viruses, five (2%) were influenza A (H3) viruses, and 47 (15%) were influenza

\* Data as of September 15, 2006.

FIGURE. Number\* and percentage of respiratory specimens testing positive for influenza reported by World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories, by type and week — United States, May 21–September 9, 2006<sup>†</sup>



\*N = 14,751. <sup>†</sup>As of September 15, 2006.

A viruses that were not subtyped. The majority (92%) of these isolates were tested from mid-May through late June, when 3.6% of specimens tested were positive for influenza. Since July 1, of specimens tested, 0.6% were positive for influenza.

During May 21–September 9, the weekly percentage of patient visits to sentinel providers for influenza-like illness (ILI)<sup>†</sup> remained below the national baseline<sup>§</sup> of 2.5% and ranged from 0.6% to 0.9%. The percentage of deaths attributable to pneumonia and influenza as reported by the 122 Cities Mortality Reporting System remained below the epidemic threshold.<sup>¶</sup> One influenza-related pediatric death occurred and was reported to CDC during this period.

#### Worldwide

During May 21–September 9, influenza A (H3), influenza A (H1), and influenza B viruses cocirculated worldwide. Influenza A (H1) viruses predominated overall in Asia; however, in early summer, influenza B viruses predominated in Japan. In Africa, South Africa reported predominantly A (H3) viruses, and Madagascar reported a limited number of A (H3) and A (H1) viruses. In Europe and North America, small numbers of influenza A and influenza B viruses were reported. In Oceania, influenza A viruses predominated, with both influenza A (H1) and influenza A (H3) viruses circulating; influenza B viruses circulated at lower levels. In South America, influenza A (H1) viruses were most commonly reported, but influenza A (H3) and influenza B viruses also were identified.

## Characterization of Influenza Virus Isolates

The WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza located at CDC analyzes influenza virus isolates received from laboratories worldwide. Of 23 influenza A (H1) viruses that were collected during May 21–September 9 (three from Asia, 18 from Latin America, and two from the United States) and analyzed at CDC, 17 (74%) were antigenically similar to A/New Caledonia/20/99, the H1N1 component of the 2006–07 influenza vaccine. Six (26%) of the influenza A (H1) viruses had reduced titers to antisera produced against A/New Caledonia. Of the 19 influenza A (H3) viruses (one from Europe, 12 from Latin America, three from Asia, two from Oceania, and one from the United States) that were characterized, 18 (95%) were antigenically similar to A/Wisconsin/67/2005, the H3N2 component of the 2006–07 influenza vaccine, whereas one (5%) had reduced titers to A/Wisconsin/67/2005.

Influenza B viruses currently circulating worldwide can be divided into two antigenically distinct lineages represented by B/Yamagata/16/88 and B/Victoria/2/87. The B component of the 2006–07 influenza vaccine belongs to the B/Victoria lineage. Of the 26 influenza B isolates collected during May 21–September 9 and characterized at CDC, 23 belonged to the B/Victoria lineage (one from Europe, five from Latin America, six from Asia, and 11 from the United States). Ten (43%) of the B/Victoria-lineage viruses were similar to B/Ohio/01/2005, the B component of the 2006–07 influenza vaccine, whereas 13 (57%) had reduced titers to B/Ohio.

# Human Infections with Avian Influenza A (H5N1) Viruses

During December 1, 2003–September 8, 2006, a total of 244 human cases of avian influenza A (H5N1) infection were reported to WHO from 10 countries (*3*); 23 of these cases were reported since May 21, 2006. A total of 143 (59%) of the 244 cases were fatal. All human cases were reported from Asia (Azerbaijan, Cambodia, China, Indonesia, Iraq, Thailand, Turkey, and Vietnam) and Africa (Djibouti and Egypt), with the most recent cases reported from China, Indonesia, and Thailand. To date, no human case of avian influenza A (H5N1) virus infection has been identified in the United States.

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<sup>&</sup>lt;sup>†</sup> Defined as a temperature of ≥100.0°F (≥37.8°C), oral or equivalent, and cough and/or sore throat in the absence of a known cause other than influenza.

<sup>&</sup>lt;sup>§</sup>The national baseline was calculated as the mean percentage of patient visits for ILI during noninfluenza weeks for the preceding three influenza seasons, plus 2 standard deviations. Noninfluenza weeks are those in which <10% of laboratory specimens are positive for influenza. Wide variability in regional data precludes calculating region-specific baselines; therefore, applying the national baseline to regional data is inappropriate. National and regional percentages of patient visits for ILI are weighted on the basis of state population.

The seasonal baseline is projected using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from pneumonia and influenza during the preceding 5 years. The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

**Editorial Note:** During May 21–September 9, 2006, influenza A (H1), influenza A (H3), and influenza B viruses cocirculated worldwide. The influenza virus type and subtype that will predominate and the severity of influenza-related disease activity for the 2006–07 influenza season are difficult to predict.

Vaccination is the best method for preventing influenza. Influenza vaccine is recommended for persons at increased risk for influenza-related complications and severe disease (e.g., persons aged  $\geq$ 50 years, children aged 6–59 months, pregnant women, and persons aged 6 months–49 years with cer-

tain medical conditions) and for health-care workers and household contacts of persons at increased risk (4). In addition to the groups for whom influenza vaccination is recommended, influenza vaccine can be administered to anyone who wants to reduce the likelihood of becoming ill with influenza.

For the 2006–07 influenza season, the four manufacturers licensed to produce influenza vaccine for the United States (Sanofi Pasteur, Inc.; Novartis; GlaxoSmithKline, Inc.; and MedImmune Vaccines, Inc.) expect to produce more than 100 million doses of influenza vaccine. Because vaccine supplies for 2006 are projected to be plentiful and no delays are expected, influenza vaccination can proceed for all persons, whether healthy or at high risk, either individually or through mass campaigns, as soon as vaccine is available. The optimal time for influenza vaccination is during October–November; however, vaccine should be offered throughout the influenza season, even after influenza activity has been documented in the community.

As a supplement to influenza vaccination, antiviral drugs aid in the control and prevention of influenza. However, high levels of resistance to the antiviral adamantanes (i.e., amantadine and rimantadine) have been identified among circulating influenza A (H3) viruses; therefore, CDC continues to recommend against use of the adamantane class of antivirals for the treatment and prophylaxis of influenza in the United States until susceptibility to adamantanes has been reestablished among circulating influenza A isolates (5,6).

The ongoing widespread epizootic of highly pathogenic avian influenza A (H5N1) in Asia, Africa, and Europe remains a major public health concern. As of September 9, 2006, influenza A (H5N1) had been reported in migratory birds or poultry flocks in Africa, Asia, and Europe, with human cases reported from 10 countries in Africa and Asia. No evidence of sustained person-to-person transmission has been identified, although limited person-to-person transmission has occurred (7). No cases of infection with highly pathogenic influenza A (H5N1) have been identified in humans, poultry, or migratory birds in the United States. In collaboration with local and state health departments, CDC continues to recommend enhanced surveillance for possible influenza A (H5N1) infection among travelers with severe unexplained respiratory illness returning from countries affected by influenza A (H5N1) (8).

Influenza surveillance reports for the United States are posted online weekly during October–May at http://www.cdc.gov/ flu/weekly/fluactivity.htm. Additional information about influenza viruses, influenza surveillance, the influenza vaccine, and avian influenza is available at http://www.cdc.gov/flu.

#### Acknowledgments

This report is based, in part, on data contributed by state and territorial health departments and state public health laboratories; WHO collaborating laboratories; National Respiratory and Enteric Virus Surveillance System laboratories; the U.S. Influenza Sentinel Provider Surveillance System; the 122 Cities Mortality Reporting System; WHO National Influenza Centers, Communicable Diseases, Surveillance and Response, WHO, Geneva, Switzerland; A Hay, PhD, WHO Collaborating Centre for Reference and Research on Influenza, National Institute for Medical Research, London, England; I Gust, MD, I Barr, PhD, WHO Collaborating Center for Reference and Research on Influenza, Parkville, Australia; and M Tashiro, MD, WHO Collaborating Center for Reference and Research on Influenza, National Institute of Infectious Diseases, Tokyo, Japan.

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TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending September 16, 2006 (37th Week)\*

	Current	Cum	5-year weekly	Total o	ases rep	orted for	previou	s years	
Disease	week	2006		2005	2004	2003	2002	2001	States reporting cases during current week (No.)
Anthrax	_	1	0	_	_	_	2	23	•••••
Botulism:			-				_		
foodborne	_	3	1	19	16	20	28	39	
infant	_	82	2	90	87	76	69	97	
other (wound & unspecified)	_	40	1	33	30	33	21	19	
Brucellosis	2	72	2	122	114	104	125	136	NE (1), TX (1)
Chancroid	1	21	1	17	30	54	67	38	TX (1)
Cholera	_	5	0	8	5	2	2	3	(.)
Cyclosporiasis§	1	88	2	734	171	75	156	147	FL (1)
Diphtheria	_	_	0	_	_	1	1	2	. = (.)
Domestic arboviral diseases <sup>§,1</sup> :									
California serogroup	_	23	8	78	112	108	164	128	
eastern equine	_	4	Ō	21	6	14	10	9	
Powassan	_	1	_	1	1	_	1	Ň	
St. Louis	_	2	2	10	12	41	28	79	
western equine	_	_	_					_	
Ehrlichiosis <sup>§</sup> :									
human granulocytic	5	245	12	790	537	362	511	261	NY (5)
human monocytic	3	247		522	338	321	216	142	MO (1), VA (1), NC (1)
human (other & unspecified)	3	111	1	122	59	44	23	6	NY (1), MD (1), TN (1)
Haemophilus influenzae,**	Ŭ			122	00		20	Ŭ	
invasive disease (age <5 yrs):									
serotype b	_	5	0	9	19	32	34	_	
nonserotype b	1	63	2	135	135	117	144	_	CA (1)
unknown serotype	5	150	2	217	177	227	153	_	NY (1), AL (1), CO (1), UT (1), AK (1)
Hansen disease§	3	47	1	88	105	95	96	79	CA (3)
Hantavirus pulmonary syndrome§	_	21	0	29	24	26	19	8	
Hemolytic uremic syndrome, postdiarrheal§	7	141	6	221	200	178	216	202	TN (1), ID (1), UT (4), CA (1)
Hepatitis C viral, acute	7	542	34	771	713	1,102	1,835	3,976	NY (1), MI (1), NC (2), TN (2), CO (1)
HIV infection, pediatric (age <13 yrs) <sup>§,††</sup>	_	52	5	380	436	504	420	543	
Influenza-associated pediatric mortality <sup>§,§§,¶¶</sup>	_	41	Ő	49		N	N	N	
Listeriosis	12	429	19	892	753	696	665	613	ME (1), NY (3), OH (1), NE (1), GA (1), FL (1),
	12	120	10	OOL	100	000	000	010	UT (1), CA (3)
Measles	1***	43	1	66	37	56	44	116	WA (1)
Meningococcal disease, <sup>†††</sup> invasive:									(.)
A, C, Y, & W-135	2	161	3	297	_	_	_	_	OH (1), NC (1)
serogroup B	1	105	1	157	_	_	_	_	WA (1)
other serogroup	_	14	0	27	_	_	_	_	(.)
Mumps	27	5,666	4	314	258	231	270	266	MI (1), MO (1), KS (13), MD (1), FL (1), TN (1),
indiripo		0,000		0	200	20.	2.0	200	CO (1), AZ (1), CA (7)
Plague	_	8	0	8	3	1	2	2	
Poliomyelitis, paralytic	_	_	õ	1	_	_	_	_	
Psittacosis§	_	17	Ō	19	12	12	18	25	
Q fever <sup>§</sup>	2	103	2	139	70	71	61	26	TN (1), OR (1)
Rabies, human	_	1	0	2	7	2	3	1	
Rubella	_	6	Õ	11	10	7	18	23	
Rubella, congenital syndrome	_	1	_	1	_	1	1	3	
SARS-CoV <sup>S,SS</sup>	_		_		_	8	Ň	Ň	
Smallpox <sup>§</sup>	_	_	_	_	_	_	_	_	
Streptococcal toxic-shock syndrome <sup>§</sup>	2	76	1	129	132	161	118	77	VT (1), CO (1)
Streptococcus pneumoniae,§	-			0	.02				
invasive disease (age <5 yrs)	3	747	7	1,257	1,162	845	513	498	OK (2), AZ (1)
Syphilis, congenital (age <1 yr)	2	180	8	361	353	413	412	441	MI (1), LA (1)
Tetanus	_	16	0	27	34	20	25	37	
Toxic-shock syndrome (other than streptococca	al)§ 2	67	2	96	95	133	109	127	NC (2)
Trichinellosis	, <u> </u>	11	0	19	5	6	103	22	
Tularemia <sup>§</sup>	_	58	3	154	134	129	90	129	
Typhoid fever	4	193	10	324	322	356	321	368	MD (1), FL (1), CA (2)
Vancomycin-intermediate Staphylococcus aure		2	0	2	522	330 N	521 N	508 N	
		2	0	2	1	N	N	N	
Vancomycin-resistant Staphylococcus aureus§									

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

<sup>r</sup> Incidence data for reporting years 2005 and 2006 are provisional, whereas data for 2001, 2002, 2003, and 2004 are finalized.

<sup>†</sup> Calculated by summing the incidence counts for the current week, the two weeks preceding the current week, and the two 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.

Includes both neuroinvasive and non-neuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (proposed) (ArboNET Surveillance).

\*\* 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 (proposed)). Implementation of HIV reporting influences the number of cases reported. Data for HIV/AIDS are available in Table IV quarterly.

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases (proposed).

A total of 46 cases were reported since the beginning of the 2005-06 flu season (October 2, 2005 [week 40]).

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

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

(37th Week)*			Chlamyd	lia†			Coccid	lioidomy	cosis			Cry	otosporio	liosis	
			vious					ious	0				vious	0	
Reporting area	Current week	Med	veeks Max	Cum 2006	Cum 2005	Current week	Med	eeks Max	Cum 2006	Cum 2005	Current week	Med	veeks Max	Cum 2006	Cum 2005
United States	12,409	18,896	35,170	665,246	680,488	91	149	1,643	5,962	2,925	130	69	594	2,816	4,551
New England Connecticut	551 200	631 165	1,550 1,214	22,544 6,361	22,979 6,930	N	0 0	0 0	N	N	6	4 0	35 21	202 21	223 42
Maine <sup>§</sup>	42	43	74	1,570	1,547	N	0	0	N	N	1	0	3	25	21
Massachusetts New Hampshire	276 18	299 36	447 53	10,371 1,333	10,109 1,316	_	0 0	0 0	_	_	2	2 1	15 4	88 27	105 23
Rhode Island Vermont <sup>§</sup>	 15	62 19	95 43	2,131 778	2,386 691	N	0 0	0 0	N	N	3	0 0	6 5	7 34	5 27
Mid. Atlantic	1,435	2,372	3,696	83,476	82,803	_	0	0	_	_	14	10	444	352	1,803
New Jersey New York (Upstate)	556	363 499	500 1,727	12,280 16,702	13,713 16,455	N N	0 0	0 0	N N	N N	10	0 3	4 441	9 115	45 1,486
New York City Pennsylvania	432 447	767 740	1,570 1,075	26,899 27,595	26,357 26,278	N N	0 0	0 0	N N	N N	4	2 5	10 21	48 180	100 172
E.N. Central	1,671	3,123	12,578	110,916	114,223	1	1	3 0	35	8	17	16	158	668	1,016
Illinois Indiana	541 325	968 399	1,687 552	36,079 13,936	35,402 14,241	N	0 0	0	N	N	_	2 1	13 13	72 42	122 51
Michigan Ohio	694 6	631 716	9,888 1,446	23,624 23,517	18,875 31,411	1	0 0	3 1	31 4	8	1 16	2 5	7 92	83 243	77 396
Wisconsin	105	399	531	13,760	14,294	Ν	0	0	Ň	Ν		5	37	228	370
W.N. Central Iowa	669 140	1,151 155	1,457 225	41,073 5,730	41,931 5,058	N	0 0	12 0	N	4 N	19 8	11 1	55 23	495 127	455 99
Kansas Minnesota	_	157 230	269 344	5,324 7,352	5,208 8,790	Ν	0 0	0 12	N	N 3	3	1 2	7 22	54 126	31 87
Missouri	321	439	567	15,924	16,091	_	0	0	_	1	8	2	9	84	200
Nebraska <sup>§</sup> North Dakota	134 22	94 32	176 58	3,765 1,100	3,690 1,134	N N	0 0	1 0	N N	N N	_	1 0	16 4	56 7	15
South Dakota	52	51	117	1,878	1,960	N	0	0	Ν	N	_	1	6	41	23
S. Atlantic Delaware	2,444 92	3,452 70	4,925 92	126,192 2,525	126,851 2,351	N	0 0	1 0	3 N	1 N	46	14 0	54 3	586 7	430 3
District of Columbia Florida	32 780	53 927	103 1,113	1,725 34,148	2,712 30,907	N	0 0	0	N	 N	1 32	0 6	3 28	12 280	9 185
Georgia	17	635	2,142	20,512	22,502		0	Ō	_	_	5	3	9	127	96
Maryland <sup>§</sup> North Carolina	221 543	341 562	486 1,772	12,355 23,503	13,129 23,518	N	0 0	1 0	3 N	1 N	5	0 1	4 10	12 60	23 47
South Carolina <sup>§</sup> Virginia <sup>§</sup>	338 401	286 425	1,306 840	12,574 16,605	12,983 16,881	N N	0 0	0 0	N N	N N	2 1	1 1	13 8	52 32	15 41
West Virginia	20	58	226	2,245	1,868	N	Ő	Ő	N	N	_	Ö	3	4	11
E.S. Central Alabama <sup>§</sup>	844 59	1,418 385	1,943 756	51,940 14,430	49,542 10,963	N	0 0	0 0	N	N	4	3 1	20 6	108 42	132 18
Kentucky	237	155 384	402 801	6,374	6,514	N	0	0	N	N	_2	1 0	19 1	29 8	84
Mississippi Tennessee <sup>§</sup>	548	494	602	13,230 17,906	15,373 16,692	N	0	0	N	N	2	1	5	29	30
W.S. Central Arkansas	2,025 333	2,138 158	3,605 240	75,925 5,682	79,718 6,127	_	0 0	1 0	_	_	3 1	4 0	24 2	117 15	142 4
Louisiana	50	254	761	9,692	12,926		0	1	_	Ν	_	0	14	9	51
Oklahoma Texas <sup>§</sup>	275 1,367	221 1,396	2,159 1,774	8,250 52,301	7,975 52,690	N N	0 0	0 0	N N	N N	2	1 2	2 19	25 68	33 54
Mountain	324 157	1,031 369	1,839 642	34,494 12,534	44,824 15,397	71 71	116 113	452 448	4,219 4,151	1,891	21	2	37 2	236 17	104 9
Colorado	62	168	482	4,282	10,776	N	0	0	N	1,817 N	4	1	7	49	33
Idaho <sup>§</sup> Montana	5	51 44	159 195	1,960 1,726	1,793 1,615	N N	0 0	0 0	N N	N N	2 7	0 0	5 26	19 89	13 15
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	77 166	432 339	2,955 6,629	5,119 6,189	_	0 0	4 3	21 10	46 14	_	0 0	1 3	3 12	11 10
Utah	100	93	136	3,467	3,153	_	1	3	35	11	3	0	3	13	11
Wyoming Pacific	2,446	27 3,298	55 5,079	941 118,686	782 117,617	— 19	0 41	2 1,179	2 1,705	3 1,021	5	0 2	11 52	34 52	2 246
Alaska California	84 1,841	85 2,568	152 4,231	2,993 93,408	2,978 91,500	19	0 41	0	1,705	1,021	_	0	2 14	4	1 140
Hawaii	_	103	135	3,558	3,903	N	0	0	Ń	Ń	_	0	1	3	1
Oregon <sup>§</sup> Washington	141 380	177 350	315 604	6,224 12,503	6,147 13,089	N N	0 0	0 0	N N	N N	_	1 0	6 38	45	59 45
American Samoa C.N.M.I.	U U	0 0	46 0	U U	U U	U U	0 0	0 0	U U	U U	U U	0 0	0 0	U U	U U
Guam	_	17	37	_	581	_	0	0	_	_	_	0	0	_	_
Puerto Rico U.S. Virgin Islands	_	77 5	161 16	2,945 178	2,941 191	<u>N</u>	0 0	0 0	N	N	N	0 0	0 0	N	N

Max: Maximum.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 16, 2006, and September 17, 2005 (3

Cum: Cumulative year-to-date counts. Med: Median.

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-\* Incidence data for reporting years 2005 and 2006 are provisional. \* Chlamydia refers to genital infections caused by *Chlamydia trachomatis*. \* Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

2005 (37th Week)*			Giardiasi	s			G	onorrhe	a		Hae	•	<i>is influen</i> es, all sei	<i>zae</i> , invas rotypes	sive
			vious	-			Prev	/ious	-			Pre	vious		
Reporting area	Current week	52 w Med	eeks Max	Cum 2006	Cum 2005	Current week	52 w Med	veeks Max	Cum 2006	Cum 2005	Current week	52 v Med	veeks Max	Cum 2006	Cum 2005
United States	291	311	1,029	10,948	13,023	4,745	6,493	14,136	228,930	232,702	24	38	142	1,455	1,656
New England Connecticut	34 24	24 0	75 37	884 208	1,164 242	106 53	104 40	288 241	3,839 1,497	4,233 1,842	_	3 0	19 9	123 37	126 38
Maine <sup>†</sup>	5	2	13	111	155	1	2	6	87	95	—	0	4	16	8
Massachusetts New Hampshire	_	10 0	29 9	357 22	530 45	50 2	46 4	86 9	1,736 142	1,824 117	_	1 0	7 2	52 6	62 6
Rhode Island Vermont <sup>†</sup>	5	0 3	25 9	72 114	70 122	_	8 1	19 3	331 46	316 39	_	0 0	7 2	4 8	7 5
<b>Mid. Atlantic</b> New Jersey	48	53 7	254 17	1,866 206	2,331 318	417	611 103	1,014 150	21,133 3,204	23,688 4.061	2	7 2	30 4	282 45	312 60
New York (Upstate)	31	24	227	800	790	169	123	455	4,366	4,643	1	2	27	97	92
New York City Pennsylvania	3 14	9 15	32 29	344 516	626 597	91 157	161 214	357 393	5,789 7,774	7,113 7,871	1	1 3	4 8	30 110	57 103
E.N. Central Illinois	38	48 9	110 25	1,602 271	2,327 552	815 246	1,278 376	7,047 709	45,016 13,827	46,029 13,878	3	5 1	14 6	200 47	295 100
Indiana	Ν	0	0	N	N	160	165	237	6,236	5,707	_	1	7	52	53
Michigan Ohio	6 32	13 16	24 32	444 560	569 528	349 4	252 351	5,880 661	9,476 10,850	7,573 14,811	3	0 1	3 6	17 61	17 92
Wisconsin	— 13	10	40 260	327 1,270	678	56 214	129 362	172	4,627	4,060		0 2	4 15	23 97	33
W.N. Central lowa	3	29 5	14	197	1,441 194	35	33	436 46	12,987 1,199	13,302 1,128	4	0	1	1	82
Kansas Minnesota	_	4 2	11 238	143 477	136 610	_	47 62	124 105	1,480 1,886	1,860 2,438	1	0 0	3 9	14 49	9 36
Missouri Nebraska†	9 1	9 2	32 8	320 74	315 90	128 36	190 23	251 56	7,100 978	6,710 841	2 1	0 0	6 2	23 6	25 11
North Dakota South Dakota	_	0 1	7 7	11 48	11 85		2	7 13	69 275	68 257	_	0	3 0	4	1
S. Atlantic	40	49	95	1,680	1,916	1,231	1,491	2,334	55,797	54,914	6	10	26	390	396
Delaware District of Columbia	3	1	4 5	26 50	41 37	39 20	26 35	44 66	1,041 1,138	602 1,477	_	0 0	1 1	1 3	7
Florida Georgia	26 1	18 11	39 43	731 350	670 513	402 12	433 305	552 1,014	16,257 9,687	14,098 10,347	_2	3 2	9 12	128 76	97 84
Maryland <sup>†</sup> North Carolina	3 N	4 0	11 0	141 N	143 N	120 282	128 284	186 766	4,673 12,070	4,897 11,146	_2	1 0	5 9	50 44	53 64
South Carolina <sup>†</sup>	2	1 8	7 50	65 300	85 397	158 191	125 130	748 288	5,686	5,805	2	1 1	3 8	25 48	25 43
Virginia <sup>†</sup> West Virginia	5	0	50 5	17	397	7	130	42	4,604 641	6,058 484		0	8 4	48 15	43 23
<b>E.S. Central</b> Alabama <sup>†</sup>	7 1	8 4	40 29	314 161	294 130	345 25	575 183	856 310	21,028 6,721	19,526 6,312	2 1	2 0	7 5	77 20	89 17
Kentucky	Ň	0 0	0	N	N	92	55 145	132 435	2,283 5,143	2,193 4,954		0 0	1 1	3	10
Mississippi Tennessee <sup>†</sup>	6	4	12	153	164	228	145	279	6,881	6,067	1	1	4	51	62
W.S. Central Arkansas	8 2	6 2	31 6	180 79	211 61	961 139	855 78	1,430 142	32,787 2,876	32,531 3,220	_	1 0	15 2	46 7	93 7
Louisiana Oklahoma	6	0 2	4 24	12 89	41 109	34 97	158 77	354 764	5,941 3,115	7,151 3,230	_	0	2 14	3 34	32 49
Texas <sup>†</sup>	N	0	0	N	N	691	548	757	20,855	18,930	_	0	2	2	43 5
<b>Mountain</b> Arizona	40 7	30 3	55 36	1,076 107	1,016 97	165 92	216 86	552 201	7,676 3,105	9,655 3,480	3 1	4 1	8 7	153 72	167 86
Colorado Idaho†	11 2	9 3	33 11	371 116	360 98	52	46 2	90 10	1,462 112	2,275 75	1	1	4	41	35 4
Montana	5	2	11	70	50 76	_	3	20	138	107	_	0	0	_	13
Nevada† New Mexico†		1	6 6	38 42	57		24 29	194 64	985 1,199	2,042 1,138	_	0	4	19	18
Utah Wyoming	11 4	7 1	19 3	304 28	260 18	21	17 2	24 6	591 84	487 51	1	0 0	4 2	15 3	7 4
<b>Pacific</b> Alaska	63	59	202 6	2,076 44	2,323 77	491 17	809	962 23	28,667 412	28,824 416	4	2 0	20 19	87 9	96 6
California	1 46	1 43	105	1,503	1,653	384	11 664	829	23,657	24,027	1	0	9	21	46
Hawaii Oregon†	6	1 7	3 15	36 276	49 305	13	19 28	29 58	647 942	734 1,074	2	0 1	1 6	13 42	8 36
Washington	10	6	90	217	239	77	74	142	3,009	2,573	_	0	4	2	—
American Samoa C.N.M.I.	U U	0	0	U U	U U	U U	0	2 0	U U	U	U U	0	0	U U	U U
Guam Puerto Rico	4	0 2	0 20	49	11 179	_	1 5	15 16	188	71 269	_	0 0	2 1	_	6 3
U.S. Virgin Islands	_	0	0	—	_	_	0	5	30	45	—	0	0	—	—

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2005 (37th Week)*	k			Нера	titis (viral,	acute), by t	/ре								
		Deep	Α	•			Dreve	В					gionello	sis	
Penarting area	Current week		/ious /eeks Max	Cum 2006	Cum 2005	Current week	Previ 52 we Med		Cum 2006	Cum 2005	Current week		vious veeks Max	Cum 2006	Cum 2005
Reporting area United States	30	72	245	2,269	2,906	42	83	597	2,729	3,681	51	41	127	1,426	1,387
New England Connecticut Maine <sup>↑</sup> Massachusetts New Hampshire Rhode Island	2 1 1 1	4 1 0 2 0 0	20 3 13 16 4	138 31 6 51 35 8	337 38 2 211 71 10	- - - -	1 0 0 0 0	9 3 2 5 2 4	46 	105 35 10 35 20 1	2 1 	2 0 1 0	12 8 2 6 1	70 19 7 27 1 12	88 22 4 40 6 12
Vermont <sup>†</sup> Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	1 — — 1	0 7 2 1 2 1	2 24 7 14 10 5	7 217 54 60 60 43	5 476 99 72 226 79	2 1 1	0 8 2 1 1 3	1 55 10 43 5 9	275 73 47 46 109	4 476 181 37 99 159	$ \begin{array}{r} 1 \\ 16 \\ -14 \\ -2 \end{array} $	0 13 1 5 1 5	3 43 10 29 9 17	4 472 60 194 27 191	4 474 82 117 76 199
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	6  - 3 3	6 1 0 2 1 1	12 6 5 8 4 5	195 40 20 68 44 23	259 96 13 82 36 32	5  1 4	7 1 0 3 2 0	24 6 17 7 10 4	256 20 39 98 93 6	410 117 28 133 99 33	10  1 	8 1 0 2 4 0	25 4 6 7 19 5	297 21 20 79 158 19	279 42 14 79 119 25
W.N. Central Iowa Kansas Minnesota Missouri Nebraska <sup>†</sup> North Dakota South Dakota	1   	2 0 0 1 0 0 0	30 2 5 29 3 3 2 3 2 3	90 8 24 9 30 12 	68 18 13 3 26 8 —		4 0 0 2 0 0 0	22 3 13 7 1 0 1	113 12 8 16 67 10 —	196 20 23 25 102 21 5		1 0 0 0 0 0 0	15 3 2 11 3 2 1 6	47 9 3 11 15 5 —	59 4 16 23 2 2 10
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>†</sup> North Carolina South Carolina <sup>†</sup> Virginia <sup>†</sup> West Virginia	9 	11 0 4 1 1 0 0 1	34 2 17 7 6 20 2 11 3	377 10 5 146 50 45 62 15 40 4	506 5 2 200 100 49 61 28 58 3	22 — 7 3 2 10 —	23 1 0 8 3 3 0 2 1 0	66 4 19 7 10 23 7 18 18	825 32 5 294 122 120 116 55 38 43	1,010 22 10 347 157 111 112 116 108 27	16 2 8 2 2 2 2 2	8 0 3 0 1 0 1 0	19 2 5 9 4 5 5 1 7 3	295 8 16 123 12 53 28 2 46 7	282 13 8 77 22 84 23 11 32 12
E.S. Central Alabama <sup>†</sup> Kentucky Mississippi Tennessee <sup>†</sup>	 	2 0 0 1	13 9 5 1 5	91 12 29 5 45	203 35 21 16 131	5 1 1 3	6 2 1 0 2	14 8 5 3 8	232 75 50 10 97	261 60 50 41 110	1   1	1 0 0 1	9 2 4 1 7	56 7 17 1 31	58 10 19 3 26
<b>W.S. Central</b> Arkansas Louisiana Oklahoma Texas <sup>†</sup>		4 0 0 4	77 9 2 2 73	126 33 7 4 82	321 14 51 4 252	3  _3 	14 1 0 0 12	315 4 3 17 295	479 33 15 29 402	405 49 59 31 266	1 	1 0 0 0	32 3 2 3 26	43 3 4 1 35	27 5 1 3 18
Mountain Arizona Colorado Idaho <sup>†</sup> Montana Nevada <sup>†</sup> New Mexico <sup>†</sup> Utah Wyoming	2 2 — — —	5 2 1 0 0 0 0 0 0	18 16 4 2 3 2 3 2 1	188 105 32 9 7 7 12 11 3	220 112 29 18 7 17 18 18 18 1		4 1 0 0 0 0 0 0 0	39 23 5 2 7 4 3 5 1	124 33 28 10 — 14 15 24 —	375 236 41 9 3 40 14 30 2	4 2 2 	2 1 0 0 0 0 0 0	7 3 2 2 1 2 1 1 0	81 27 16 9 5 3 4 17	71 16 17 3 5 14 2 10 4
Pacific Alaska California Hawaii Oregon <sup>†</sup> Washington	9 6 1 2	21 0 18 0 1 1	163 1 162 2 5 13	847 	516 3 428 20 32 33	5 	9 0 7 0 1 0	61 1 41 1 5 18	379 3 293 4 47 32	443 7 296 6 80 54	1 1 N	2 0 2 0 0	9 1 9 1 0 0	65  65  N	49  47 2 N
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	U U  -	0 0 0 0	0 0 3 0	U U 19	1 U 2 56 —	U U  -	0 0 1 0	0 0 8 0	U U 24	— U 18 35 —	U U  -	0 0 0 0	0 0 1 0	U U 1	U U  -

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2005 (37th Week)*			Lyme dis	ease				Malaria	1		
		Pre	evious				Prev	vious			
Reporting area	Current week	52 v Med	veeks Max	Cum 2006	Cum 2005	Current week	52 w Med	eeks Max	Cum 2006	Cum 2005	
United States							24		844		
New England	249 47	240 37	2,153 780	11,340 1,974	16,457 2,903	11 1	24	125 11	43	1,016 53	
Connecticut	46	10	753	1,403	429	_	0	5	11	11	
Maine <sup>†</sup>	—	2 2	34 41	108 33	202 2,038	_	0 0	1 3	3 19	4 30	
Massachusetts New Hampshire	1	2 5	41 50	369	2,038	1	0	3	9	30 5	
Rhode Island	_	0	5		25	—	0	8		2	
Vermont <sup>†</sup>	_	1	9	61	36	_	0	1	1	1	
Mid. Atlantic New Jersey	176	151 22	1,176 141	6,564 1,295	9,565 3,001	1	5 1	13 3	150 28	278 68	
New York (Upstate)	160	74	1,150	2,872	2,708	1	1	11	26	34	
New York City		1	15	13	322	—	2	7	67	148	
Pennsylvania	16	40	217	2,384	3,534	_	1	3	29	28	
E.N. Central Illinois	1	10 0	111 2	963	1,532 117	1	2 1	7 4	84 32	112 63	
Indiana	_	0	3	15	24	_	0	3	8	3	
Michigan	1	1	6	36	41	-	0	2	15	19	
Ohio Wisconsin	_	1 10	6 106	34 878	43 1,307	1	0 0	3 3	22 7	17 10	
W.N. Central	_	7	91	322	556	1	0	32	, 32	39	
lowa	_	1	8	71	81	_	0	1	1	7	
Kansas Minnosota	—	0 6	2 88	3 231	3	1	0 0	2 30	6 14	4 11	
Minnesota Missouri	_	6 0	88	231	456 11	_	0	30	14 5	11 16	
Nebraska <sup>†</sup>	—	0	2	8	3	_	0	2	4	1	
North Dakota South Dakota	_	0 0	3 1	1	2	_	0 0	1	1	_	
South Dakota	17	29	103	1,261	1,720	1	6	15	238	221	
Delaware	—	29 8	27	360	544	_	0	15	238 5	3	
District of Columbia	4	0	7	37	8	—	0	2	3	8	
Florida Georgia	2	1 0	5 1	26 2	26 5	_	1 1	6 6	43 65	37 41	
Maryland <sup>†</sup>	2	15	60	609	907	_	1	5	51	81	
North Carolina South Carolina†	2 1	0 0	4 3	23 8	40 15	1	0 0	8 2	20 8	22 7	
Virginia†	6	3	25	189	165	_	1	2	41	21	
West Virginia	_	0	44	7	10	_	0	2	2	1	
E.S. Central	—	0	4	17	26	_	0	3	19	22	
Alabama† Kentucky	_	0 0	1 2	5 4	1 3	_	0 0	2 2	8 3	4 7	
Mississippi	_	0	0	_	_	_	0	1	3		
Tennessee <sup>†</sup>	—	0	2	8	22		0	2	5	11	
W.S. Central	_	0	3	10	65	—	2	31	51	89	
Arkansas Louisiana	_	0 0	1 0	_	4 3	_	0 0	1	1	5 2	
Oklahoma	_	0	0	_	—	_	0	6	7	3	
Texas <sup>†</sup>	—	0	3	10	58	—	1	29	42	79	
Mountain	—	0	4	19	15	1	1	9	51	42	
Arizona Colorado	_	0 0	4 1	4 4	3	_	0 0	9 2	17 11	10 20	
Idaho†	—	0	1	2	2	_	0	1	1	—	
Montana Nevada†	_	0 0	0 1	1	3		0 0	1	2 1	2	
New Mexico <sup>†</sup>	_	0	1	1	2	_	0	1	3	3	
Utah	—	0	1	6	2	1	0	2	16	5	
Wyoming	_	0	1	1	3		0	1		2	
<b>Pacific</b> Alaska	8	4 0	23 1	210 2	75 4	5	4 0	13 4	176 21	160 4	
California	8	4	21	197	47	1	4	10	120	119	
Hawaii Orogon <sup>†</sup>	Ν	0	0	N	N 17	-	0	2	4	14	
Oregon† Washington	_	0 0	2 3	8 3	17 7	1 3	0 0	1 5	9 22	9 14	
American Samoa	U	0	0	U	U	U	0	0	U	U	
C.N.M.I.	U	0	0	Ŭ	U	U	0	0	Ŭ	U	
Guam Puerto Rico	N	0 0	0 0	N	N	_	0 0	0 1	_	3	
U.S. Virgin Islands		0	0			_	0	0	_		

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2005 (37th Week)*				Mening	gococcal d	isease, inva	sive								
			All serog	roups				• •	nknown				Pertus	ssis	
	Current		vious veeks	Cum	Cum	Current	Previ 52 we		Cum	Cum	Current		vious /eeks	Cum	Cum
Reporting area	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	10	20	85	803	919	7	13	58	523	563	98	270	2,877	9,062	15,818
New England	_	1	3	35	58	_	0	2	25	20	3	28	83	884	947
Connecticut Maine <sup>†</sup>	_	0 0	2 1	9 4	12 2	_	0 0	2 1	2 3	1 2	1	1 1	5 7	35 42	49 33
Massachusetts New Hampshire	_	0	2 2	15 5	27 10	_	0	2 2	15 5	5 10	_	21 2	43 36	594 122	725 48
Rhode Island	_	0	1	_	2	_	0	0	—	2	2	0	17	_	21
Vermont <sup>†</sup> Mid. Atlantic	_	0 3	1 14	2 118	5 111	_	0 2	0 11	 88	∠ 85	27	1 33	14 137	91 1,248	71 968
New Jersey	_	0	2	11	26	_	0	2	11	26		4	13	142	132
New York (Upstate) New York City	_	1 0	7 6	31 39	31 17	_	0 0	5 6	5 39	11 17	22	14 2	123 8	553 60	364 78
Pennsylvania		1	5	37	37		1	5	33	31	5	11	26	493	394
E.N. Central Illinois	2	3 0	11 4	93 18	117 27	1	1 0	6 4	66 18	97 27	4	41 9	133 35	1,259 228	2,693 628
Indiana Michigan	_	0 0	5 3	20 17	16 24	_	0 0	2 3	9 8	7 15	4	4 7	75 23	157 332	225 209
Ohio	2	1	5	35	31	1	1	4	28	29	_	14	30	410	831
Wisconsin	_	0	2	3	19	—	0	2	3	19	—	5	41	132	800
W.N. Central Iowa	_	1 0	4 2	43 12	62 15	_	0 0	3 1	14 4	27 1	16	29 6	552 63	869 201	2,524 583
Kansas Minnesota	_	0	1 2	1 10	9 11	_	0	1 1	1 3	9 4	12	8 0	28 485	221 137	268 887
Missouri		0	2	13	20	_	0	1	2	10	3	7	42	195	325
Nebraska† North Dakota	_	0 0	2 1	5 1	4	_	0 0	1 1	3 1	3	1	3 0	9 26	72 26	220 80
South Dakota	_	0	1	1	3	_	0	0	—	—	—	0	7	17	161
S. Atlantic Delaware	5	3 0	14 1	142 4	175 4	4	2 0	7 1	56 4	73 4	8	21 0	46 1	695 3	1,039 14
District of Columbia Florida	2	0	1 6	1 56	5 66	2	0	1 5	1 19	4 24	3	0 4	3 9	3 153	7
Georgia	1	Ö	2	11	14	1	0	2	11	14	1	0	3	14	151 39
Maryland <sup>†</sup> North Carolina	1	0	2 11	11 24	18 28	1	0	1 3	3 7	3 6	2	3 0	9 22	91 141	153 64
South Carolina <sup>†</sup>	_	0	2	15	13	_	Ō	1	5	8	_	4	22	109	302
Virginia† West Virginia	_	0 0	4 2	15 5	21 6	_	0 0	3 0	6	8 2	2	3 0	27 9	155 26	271 38
E.S. Central		1	4	30	45	—	1	4	24	34	6	7	16	254	406
Alabama <sup>†</sup> Kentucky	_	0 0	1 2	5 7	5 15	_	0 0	1 2	4 7	3 15	_	1 2	7 5	54 52	63 118
Mississippi Tennessee <sup>†</sup>	_	0 0	1 2	3 15	5 20	_	0 0	1 2	3 10	5 11	3 3	1 2	4 10	35 113	47 178
W.S. Central		1	23	48	89		0	6	20	23	_	18	360	472	1,687
Arkansas Louisiana	_	0 0	3 1	9 3	11 28	_	0 0	2 1	6 1	3 5	_	2 0	21 3	44 6	233 43
Oklahoma	_	0	4	8	13	_	0	0	—	2	_	0	124	18	1
Texas⁺ <b>Mountain</b>	- 1	1	16 5	28 53	37 73	1	0	4	13 25	13 21		15 62	215 230	404 2,016	1,410 3,029
Arizona	1	0	3	16	30	1	Ō	3	16	10	8	10	177	396	758
Colorado Idaho†	_	0	2 2	18 3	15 4	_	0	1 2	2 2	3	5 2	20 2	40 11	621 63	966 160
Montana Nevada†	—	0	1	3	_	_	0	1	1		6	2	9	96	533
New Mexico <sup>†</sup>	_	0 0	2 1	2 2	9 5	_	0 0	0 0	_	2 4	_	0 2	9 6	39 59	41 148
Utah Wyoming	_	0 0	1 2	5 4	10	_	0 0	0 2	4	2	6 1	15 1	39 8	679 63	387 36
Pacific	2	5	29	241	189	1	5	25	205	183	6	45	1,334	1,365	2,525
Alaska California	1	0 3	1 14	2 148	1 124	1	0 3	1 14	2 148	1 124	1	2 26	15 1,136	56 920	87 1,090
Hawaii	_	0	1	6	10	_	0	1	6	5	_	2	5	62	135
Oregon <sup>†</sup> Washington		1 0	7 25	57 28	35 19	_	1 0	4 11	38 11	35 18	4	2 7	8 195	89 238	588 625
American Samoa	U	0	0		_	U	0	0	U	U	U	0	0	U	U
C.N.M.I. Guam	U	0 0	0 0	_	1	U	0 0	0 0	U	U 1	U	0 0	0 0	U	U 2
Puerto Rico	_	0	1	4	6	_	0	1	4	6	_	0	1	1	5
U.S. Virgin Islands	—	0	0	—	—	_	0	0	—	—	—	0	0	_	_

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2005 (37th Week)*		Ra	abies, ani	mal		Roo	ky Mour	ntain spo	tted feve	•		Sa	almonello	osis	
	0	Prev		0	0	0	Prev		0	0	0		vious	0	0
Reporting area	Current week	<u>52 w</u> Med	eeks Max	Cum 2006	Cum 2005	Current week	<u>52 w</u> Med	<u>еекs</u> Max	Cum 2006	Cum 2005	Current week	Med	<u>veeks</u> Max	Cum 2006	Cum 2005
United States	93	109	166	4,127	4,422	40	35	246	1,354	1,180	609	809	2,291	26,735	29,856
New England Connecticut Maine <sup>†</sup> Massachusetts New Hampshire Rhode Island Vermont <sup>†</sup>	7 4 2 1 	12 3 1 4 0 0 1	25 14 6 17 5 4	473 139 72 178 37 1 46	533 140 48 274 11 16 44	N 	0 0 0 0 0	2 0 2 1 2 0	2 N 1 1	7 N 5 1 1	13 — — 3 9	33 0 2 18 2 0 1	331 323 10 53 24 17 5	1,433 323 81 782 139 66 42	1,633 338 130 876 140 73 76
<b>Mid. Atlantic</b> New Jersey New York (Upstate) New York City Pennsylvania	20 N 20 —	20 0 11 0 9	50 0 20 3 35	815 N 400  415	713 N 394 20 299	1  1	1 0 0 1	6 2 1 1 3	40 7 2 6 25	70 21 1 6 42	44  30 2 12	83 14 22 16 29	272 39 233 44 67	2,989 576 809 507 1,097	3,701 741 845 866 1,249
<b>E.N. Central</b> Illinois Indiana Michigan Ohio Wisconsin	3 1  N	2 0 1 0 0	17 7 2 5 9 0	132 41 10 39 42 N	155 42 10 33 70 N	  	0 0 0 0 0	5 1 1 4 1	26 1 5 2 17 1	37 11 5 19 2	23 4 19 	101 26 12 17 23 15	189 45 67 32 56 28	3,526 854 568 672 872 560	4,264 1,428 446 696 966 728
W.N. Central Iowa Kansas Minnesota Missouri Nebraska† North Dakota South Dakota	5 1 	4 0 1 1 1 0 0 0	20 7 5 6 4 0 7 4	222 48 58 35 44 — 16 21	261 64 57 59  25 56	3 —  1 	2 0 0 2 0 0 0 0	13 1 1 10 5 1 0	136 4 1 2 108 21 —	128 5 2 104 7 5	16 1 	43 7 10 13 4 0 2	107 21 16 60 35 12 46 6	1,725 305 251 467 469 134 19 80	1,830 294 268 408 570 143 24 123
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>†</sup> North Carolina South Carolina <sup>†</sup> Virginia <sup>†</sup> West Virginia	46 — — 1 — 16 — 23 6	36 0 0 3 8 8 3 10 1	118 0 99 13 22 10 27 13	1,484 	1,598  201 201 277 362 165 352 40	29 — 1 24 — 2	16 0 0 1 10 1 2 0	94 3 1 3 4 87 6 13 2	799 17 14 19 46 602 22 75 3	603 5 12 81 55 329 48 66 5	278 4 134 58 20 38 15 9 	206 2 1 95 26 12 32 18 20 2	514 9 7 230 87 30 130 51 62 19	7,044 91 43 3,043 1,040 480 1,019 572 678 78	8,058 91 41 3,022 1,280 585 1,071 1,028 824 116
E.S. Central Alabama <sup>†</sup> Kentucky Mississippi Tennessee <sup>†</sup>	3 1 2 —	4 1 0 2	16 7 5 2 9	178 58 20 4 96	114 64 8 5 37	2 — — 2	5 1 0 3	24 6 1 1	216 62 1 2 151	224 62 3 12 147	25 6 3 — 16	54 14 8 12 14	148 70 21 47 31	1,872 638 296 435 503	2,042 477 350 626 589
<b>W.S. Central</b> Arkansas Louisiana Oklahoma Texas <sup>†</sup>	 	14 0 1 13	34 4 0 9 29	546 24  51 471	681 26 — 63 592	2 2 	1 0 0 0	161 32 1 154 3	91 44 1 35 11	84 53 6 7 18	78 45  22 11	85 14 7 7 50	922 43 38 48 839	2,541 590 222 326 1,403	2,816 516 643 278 1,379
Mountain Arizona Colorado Idaho <sup>†</sup> Montana Nevada <sup>†</sup> New Mexico <sup>†</sup> Utah Wyoming	3  2  1	3 2 0 0 0 0 0 0 0 0	16 11 12 2 1 2 1 2	127 95 — 13 1 7 7 4	207 130 16  13 13 8 13 13 14	3 1 2 	0 0 0 0 0 0 0 0 0	6 6 1 3 2 0 2 2 1	37 7 2 10 2 	25 12 4 3 1 - 3 - 2	40 18 12 1 3 — 4 2	50 15 12 3 2 4 5 1	84 67 30 9 16 17 12 15 5	1,748 552 492 125 100 71 160 211 37	1,695 453 429 111 69 132 199 235 67
Pacific Alaska California Hawaii Oregon <sup>†</sup> Washington	6 6  U	4 0 3 0 0 0	10 4 10 0 4 0	150 14 122 — 14 U	160 1 154 5 U	  N	0 0 0 0 0	1 0 1 0 1 0	7 5 2 N	2 	92 1 76 2 13	110 1 88 4 7 7	426 7 292 10 16 124	3,857 55 3,043 153 292 314	3,817 41 2,870 218 306 382
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	U U —	0 0 1 0	0 0 6 0	U U 65	U U 52 —	U U N	0 0 0 0	0 0 0 0	U U N	U U N	U U 12	0 0 6 0	2 0 35 0	U U 152	4 U 30 465 —

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 \* Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

2005 (37th Week)*		a toxin-n	roducina	<i>E. coli</i> (S1			st	igellosis			Strento	coccal d	isease ii	nvasive, g	
	Olig	Prev	-	L. COII (01	20)			ious	,			Prev		1043100, 9	TOUP A
Reporting area	Current week	52 w Med	eeks Max	Cum 2006	Cum 2005	Current week	52 w Med	eeks Max	Cum 2006	Cum 2005	Current week	52 w Med	eeks Max	Cum 2006	Cum 2005
United States	72	56	297	1,922	2,081	192	232	1,013	7,552	10,012	42	87	283	3,673	3,447
New England Connecticut Maine <sup>§</sup> Massachusetts New Hampshire Rhode Island Vermont <sup>§</sup>	3 2 	3 0 2 0 0 0	51 50 8 9 3 2 2	197 50 27 82 19 6 2	163 41 27 63 14 3 15	1   1	4 0 3 0 0 0	51 45 2 11 4 6 1	195 45 3 128 7 9 3	236 41 12 145 10 12 16	1 U  1 	5 0 3 0 0 0	15 3 2 6 9 3 2	173 U 15 101 41 5 11	219 80 12 95 15 8 9
<b>Mid. Atlantic</b> New Jersey New York (Upstate) New York City Pennsylvania	4 	5 0 0 0	107 7 103 4 5	139 3 12 21 5	245 54 89 11 91	3 3 —	15 4 5 4 2	72 24 60 12 24	517 189 171 98 59	934 248 194 320 172	4 2 2 2	15 3 4 1 6	43 8 32 10 13	678 122 240 76 240	702 147 198 140 217
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	16  1 11 4	11 1 1 3 2	44 7 6 6 19 34	426 59 48 59 123 137	425 112 41 71 97 104	4 1 3	20 7 2 3 3 3	38 16 18 10 11 9	651 229 88 113 114 107	816 267 115 176 78 180		14 4 2 3 4 1	43 11 11 12 19 4	651 144 90 177 198 42	731 242 82 172 158 77
W.N. Central lowa Kansas Minnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota	3     1 4   2	8 2 3 2 1 0 0	35 8 19 13 5 15 5	270 92 144 112 42  29	330 70 33 82 75 41 5 24	27 3 1 	33 2 3 12 2 0 4	77 10 20 9 69 14 18 17	1,057 69 94 86 506 81 61 160	1,079 63 143 63 702 75 2 31	2 N 1 1 1	5 0 1 0 1 0 0	57 0 52 5 4 5 3	252 N 46 121 48 22 9 6	214 N 35 79 54 18 9 19
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	20 4 4 6 	7 0 2 1 1 1 0 0	39 2 1 29 6 5 10 2 8 2	301 7 66 64 52 72 6 	280 7  68 34 55 42 7 65 2	57 2 40 4 4 6 1	54 0 27 17 2 1 1 1 0	122 2 66 38 10 21 9 8 2	1,833 7 12 903 589 90 115 67 48 2	1,447 10 9 703 357 60 133 77 97 1	19 1 4 1 2 9 	22 0 6 5 4 0 1 2 0	43 2 16 11 12 26 6 11 6	883 8 10 217 169 163 135 51 107 23	684 5 7 177 144 132 99 29 69 22
E.S. Central Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	8 1 2 	3 0 1 0 0	14 5 8 1 4	145 20 55 — 24	121 23 46 5 47	9  9	13 3 5 1 3	31 14 12 6 11	432 131 161 42 98	955 183 230 68 474	3 N 3	3 0 0 0 3	11 0 5 0 9	158 N 33  125	134 N 26  108
<b>W.S. Central</b> Arkansas Louisiana Oklahoma Texas <sup>§</sup>	2  _2 	1 0 0 1	52 2 1 8 44	23 10 — 13 53	70 9 18 18 25	10 6 2 2	30 1 0 3 27	596 7 286 308	867 72 43 89 663	2,537 46 112 493 1,886	2 1 1	7 0 0 2 4	58 5 1 14 43	289 24 4 78 183	236 15 5 86 130
Mountain Arizona Colorado Idaho <sup>§</sup> Montana Nevada <sup>§</sup> New Mexico <sup>§</sup> Utah Wyoming	7 3 2 5     5 2	5 1 1 0 0 1 0	15 8 7 1 3 2 12 3	206 68 77 50 9 4 83 15	214 20 56 28 13 16 21 53 7	53 29 16 1 - 4 3	22 12 3 0 0 2 1 0	48 29 18 4 1 8 10 4 1	768 425 153 14 6 30 85 49 6	543 282 86 10 5 41 84 32 3	11 6 3 1 — 1 1	11 6 3 0 0 1 1 0	78 57 8 2 0 6 7 7 1	507 273 106 8 — 59 58 3	452 193 140 2  2 67 45 3
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	9 6 3 3	7 0 4 0 2 2	55 1 18 2 47 32	215 	233 9 92 10 64 58	28 1 21 - 1 5	40 0 32 1 1 2	148 2 104 4 31 43	1,232 9 1,007 32 98 86	1,465 11 1,242 26 98 88	          	2 0 2 0 0	9 0 9 0	82 — 82 N N	75 — 75 N N
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	U U —	0 0 0 0	0 0 0 0	U U 	U U 2	U U —	0 0 0 0	2 0 3 2 0	U U 11	5 U 15 5	U U N	0 0 0 0	0 0 0 0	U U N	U U N

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

Cum: Cumulative year-to-date counts.

Max: Maximum.

Med: Median.

<sup>1</sup> Incidence data for reporting years 2005 and 2006 are provisional.
 <sup>1</sup> Incidence *E. coli* O157:H7; Shiga toxin positive, serogroup non-0157; and Shiga toxin positive, not serogrouped.
 <sup>8</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

2005 (37th Week)*	Strepto			e, invasive	disease										
		-	resistant,	all ages		Syph		-	seconda	ry			ella (chic	kenpox)	
	Current		vious veeks	Cum	Cum	Current	Previe 52 we		Cum	Cum	Current		/ious /eeks	Cum	Cum
Reporting area	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	19	51	334	1,832	1,915	110	172	334	6,145	5,942	262	802	3,204	29,698	19,752
New England Connecticut	2 U	1 0	24 7	30 U	168 70	5 3	4 0	17 11	152 33	144 30	5 U	43 0	144 58	1,098 U	3,801 1,091
Mainet	_	0	2	8	N	—	0	2	7	1	_	5	20	151	224
Massachusetts New Hampshire	_	0	6 0	_	75	2	2 0	6 2	91 12	91 11	2	1 6	54 47	94 349	1,731 210
Rhode Island	_	0	11	10	14	—	0	6	7	10	—	0	0	_	_
Vermont <sup>†</sup> Mid. Atlantic	2	0 3	2 15	12 120	9 164	9	0 21	1 35	2 773	1 732	3 34	12 105	50 183	504 3,390	545 3,327
New Jersey	N	0	0	N	N	—	3	7	115	99	_	0	0	3,390	5,527
New York (Upstate) New York City	1 U	1 0	10 0	44 U	64 U	2 3	2 10	14 23	99 376	54 449	_	0 0	0 0	_	_
Pennsylvania	_	2	9	76	100	4	5	9	183	130	34	105	183	3,390	3,327
E.N. Central	—	11	41	429	486	11	17	38	640	657	8	237	587	10,772	4,123
Illinois Indiana	_	0 2	3 21	15 115	23 156	_	8 1	23 4	297 60	370 47	_	2 0	7 475	64 475	72 251
Michigan Ohio	_	0 6	4 32	17 282	30 277	3 6	2 4	19 8	88 151	62 155	6	102 82	174 420	3,104 6,526	2,458 1,011
Wisconsin	Ν	Ő	0	N	N	2	1	4	44	23	2	12	52	603	331
W.N. Central	1	1	191	34	32	2	5	10	184	180	27	22	84	1,070	310
lowa Kansas	N N	0 0	0 0	N N	N N	_	0 0	2 2	11 16	6 15	N 3	0 0	0 8	N 20	N
Minnesota Missouri	1	0 1	191 3	33	 26	_	1 3	3 8	21 123	52 102	24	0 17	0 82	969	213
Nebraska <sup>†</sup>	_	0	0	_	2	_	0	1	3	4	_	0	0	_	_
North Dakota South Dakota	_	0 0	1 1	1	1 3	2	0 0	1 3	10	1	_	0 1	25 12	44 37	13 84
S. Atlantic	12	26	53	983	787	40	42	186	1,442	1,429	31	90	860	3,154	1,508
Delaware District of Columbia	_	0 0	2 3	21	1 13	6	0 2	2 9	16 86	8 73	_	1 0	5 5	46 27	22 24
Florida	7	13	36	538	425	12	15	29	530	492	_	0	0	_	_
Georgia Maryland†	5	8 0	29 0	331	252	2 12	7 5	147 19	218 212	293 228	_	0 0	0 0	_	_
North Carolina South Carolina <sup>†</sup>	N	0 0	0 0	N	N	4 1	6 1	17 7	215 49	195 47	2	0 16	0 53	765	411
Virginia <sup>†</sup>	N	0	0	N	Ν	3	3	12	113	91	16	30	812	1,248	323
West Virginia E.S. Central	2	1 4	14	93	96	— 10	0 13	1	3	2	13 1	26 0	70	1,068	728
Alabama <sup>†</sup>	N N	0	13 0	146 N	133 N	3	13	24 18	491 216	324 106	1	0	70 70	90 89	36 36
Kentucky Mississippi	_	0 0	5 0	28	24 1	_2	1 0	8 6	50 42	33 37	N	0 0	0 1	N 1	N
Tennessee <sup>†</sup>	2	3	13	118	108	5	5	13	183	148	Ν	Ő	Ó	Ň	Ν
W.S. Central	—	0 0	4 3	14 11	99 12	26 3	27 1	42 6	1,070 55	883 38	136	181 7	1,757 110	8,176 590	4,744
Arkansas Louisiana	_	0	4	3	87	1	4	17	155	192	1	0	8	43	108
Oklahoma Texas†	N N	0	0 0	N N	N N	2 20	1 21	6 37	53 807	29 624	135	0 167	0 1,647	7,543	4,636
Mountain	1	2	27	76	46	_	7	24	286	305	20	52	138	1,948	1,903
Arizona Colorado	N N	0 0	0 0	N N	N N	—	4 1	16 3	131 30	113 33	 12	0 33	0 76	1,040	1,301
Idaho <sup>†</sup>	N	0	0	N	N	_	0	1	2	20	_	0	0	_	
Montana Nevada <sup>†</sup>	_	0	1 27	4	2	_	0 1	1 12	1 71	5 88	_	0 0	0 2	4	_
New Mexico <sup>†</sup>	—	0	1	1	—	—	1	5	45	39		3	34	304	165
Utah Wyoming	1	0 1	8 3	33 38	23 21	_	0 0	1 0	6	7	8	11 0	55 8	568 32	388 49
Pacific	—	0	0	—	—	7	32	49	1,107	1,288	_	0	0	_	_
Alaska California	N	0 0	0 0	N	N	4	0 28	4 39	6 940	6 1,157	_	0 0	0 0	_	_
Hawaii Oregon <sup>†</sup>	N	0	0	N	N	—	0	2 6	13 13	8 21	N N	0	0	N N	N N
Washington	N	0	0	N	N	3	2	11	135	96	N	0	0	N	N
American Samoa	—	0	0	_	—	U	0	0	U	U	U	0	0	U	U
C.N.M.I. Guam	_	0 0	0 0	_	_	U 	0 0	0 0	U	U 3	U	0 3	0 12	U	U 380
Puerto Rico U.S. Virgin Islands	N	0 0	0 0	N	N	_	3 0	10 0	86	155	_	8 0	47 0	266	520
		0	0					0				0	<u> </u>		

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2005 (37th Week)*	West Nile virus disease <sup>†</sup>												
			Neuroinvas	ive	west tille v	ii us uisea	50	No	n-neuroin				
	0		/ious	0	0		0		vious	0	0		
Reporting area	Current week	Med	<u>veeks</u> Max	Cum 2006	Cum 2005		Current week	Med	<u>/eeks</u> Max	Cum 2006	Cum 2005		
United States	1	1	146	827	1,070		3	1	282	1,254	1,461		
New England		0	2	6	7		—	0	2	2	2		
Connecticut Maine <sup>§</sup>	_	0 0	2 0	6	2		_	0 0	1 0	2	1		
Massachusetts	_	0	0	—	4		—	0	1	—	1		
New Hampshire Rhode Island	_	0 0	0 0	_	1		_	0 0	0 0	_	_		
Vermont§	—	0	0	_	—		_	0	0	_	—		
Mid. Atlantic New Jersey	_	0 0	8 2	16 2	35 2		_	0	3 2	5 1	18 1		
New York (Upstate)	_	0	4	_	13		_	0	1		4		
New York City Pennsylvania	_	0 0	4 2	7 7	7 13		_	0 0	2 1	3 1	3 10		
E.N. Central	_	0	25	, 118	222		_	0	16	53	112		
Illinois	—	0	17	79	118		_	0	15	39	87		
Indiana Michigan	_	0 0	2 5	5 15	9 44		_	0 0	1 1	3	1 7		
Ohio		0	6	14	43		—	0	3	4	12		
Wisconsin	_	0	3	5	8		_	0	2	7	5		
W.N. Central lowa	1	0 0	27 3	141 12	138 9		_	0 0	57 4	260 8	433 17		
Kansas	_	0	3	14	9		—	0	3	10	N		
Minnesota Missouri	_	0 0	6 7	24 23	17 14		_	0 0	7 3	30 7	21 12		
Nebraska§	_	0 0	6	23	44		_	0 0	14	52 88	122		
North Dakota South Dakota	1	0	4 7	13 32	12 33		_	0	23 20	65	72 189		
S. Atlantic	_	0	4	6	26		_	0	3	3	19		
Delaware District of Columbia	_	0 0	0 1	_	1		_	0 0	0 1	1	_		
Florida	_	0	2	3	8		_	0	0	_	11		
Georgia Maryland§	_	0 0	3 0	2	6 4		_	0 0	3 0	2	5 1		
North Carolina	—	0	0	_	2		_	0	0	—	2		
South Carolina <sup>§</sup> Virginia <sup>§</sup>	_	0 0	1 0	_	4		_	0 0	0 1	_	_		
West Virginia		Ő	1	1	—		Ν	Õ	Ö	Ν	Ν		
E.S. Central	_	0	10	61	55		_	0	11	56	29		
Alabama <sup>§</sup> Kentucky	_	0 0	1 1		5 3		_	0 0	2 0	_	2		
Mississippi Tennessee <sup>§</sup>	_	0	9	52	35		_	0	11	55	26		
W.S. Central		0 1	2 43	5 202	12 207			0 0	1 15	1 83	1 135		
Arkansas	_	0	43	12	9		_	0	2	4	14		
Louisiana Oklahoma	_	0 0	12 6	38 17	97 4		_	0 0	6 3	26 8	50 6		
Texas <sup>§</sup>	_	1	28	135	97		_	Ő	9	45	65		
Mountain	_	0	54	225	98		1	0	158	635	205		
Arizona Colorado	_	0	8 9	10 40	22 18		1	0	8 32	10 159	39 78		
Idaho§	—	0	27	90	3		_	0	99	305	10		
Montana Nevada <sup>§</sup>	_	0 0	2 9	3 32	8 8		_	0 0	3 13	7 65	17 15		
New Mexico <sup>§</sup>		0	2 7	1	15		—	0	1	2	13		
Utah Wyoming	_	0 0	4	39 10	21 3		_	0 0	15 6	66 21	28 5		
Pacific	_	0	17	52	282		2	0	39	157	508		
Alaska California	_	0 0	0 17	50	281		2	0 0	0 30	137	502		
Hawaii	_	0	0	_	_		_	0	0		—		
Oregon <sup>§</sup> Washington	_	0 0	1 0	2	1		_	0 0	9 1	19 1	6		
American Samoa	U	0	0	U	U		U	0	0	Ŭ	U		
C.N.M.I.	U	0	0	U	U		U	0	0	U	Ŭ		
Guam Puerto Rico	_	0 0	0 0	_	_		_	0 0	0 0	_	_		
U.S. Virgin Islands		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 2005 and 2006 are provisional. <sup>†</sup> Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (proposed) (ArboNET Surveillance). <sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

#### TABLE III. Deaths in 122 U.S. cities.\* week ending September 16, 2006 (37th Week)

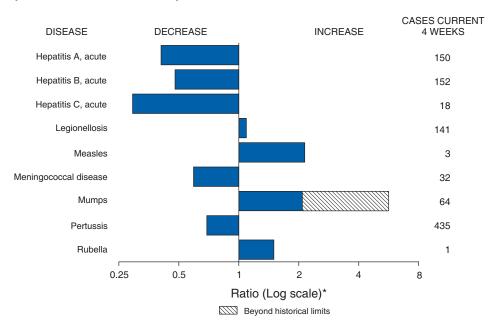
TABLE III. Deaths	in 122 U.S. cities,* week ending September 1 All causes, by age (years)					6, 2006	(37th Week)	All causes, by age (years)							
	All				,		P&I <sup>†</sup>		All						P&I <sup>†</sup>
Reporting Area	Ages	<u>&gt;</u> 65	45-64	25-44	1-24	<1	Total	Reporting Area	Ages	<u>&gt;</u> 65	45-64	25-44	1-24	<1	Total
New England	504	348	114	24	8	10	42	S. Atlantic	1,156	692	295	89	37	42	60
Boston, MA Bridgeport, CT	137 50	96 32	30 11	9 3	1	1 3	12 2	Atlanta, GA Baltimore, MD	146 208	73 120	33 64	17 16	5 6	18 2	6 22
Cambridge, MA	6	3	3		_	_	2	Charlotte, NC	106	60	32	8	5	1	6
Fall River, MA	27	16	8	3	_		1	Jacksonville, FL	144	95	32	8	3	5	5
Hartford, CT	49	33	12	2	2	_	9	Miami, FL	38	17	11	7	2	1	1
Lowell, MA	13	10	3	_	—	—	—	Norfolk, VA	51	32	9	6	1	3	2
Lynn, MA	12	9	2	1	—	_	_	Richmond, VA	46	32	9	4	1	_	2
New Bedford, MA New Haven, CT	22 11	15 7	6 1	1	_	1 2	4 1	Savannah, GA	45	27	10	1	3	4	3
Providence, RI	79	58	15	2	1	2	3	St. Petersburg, FL Tampa, FL	54 173	37 117	12 46	3 4	1 4	1 2	4 8
Somerville, MA	7	5	2		_		_	Washington, D.C.	123	71	29	12	6	5	_
Springfield, MA	24	12	10	1	1	_	1	Wilmington, DE	22	11	8	3	_	_	1
Waterbury, CT	17	14	1	_	2	_	1	E.S. Central	815	516	205	53	18	23	66
Worcester, MA	50	38	10	2	—	_	6	Birmingham, AL	171	113	205	13	3	23 4	12
Mid. Atlantic	1,888	1,273	437	116	38	22	94	Chattanooga, TN	97	65	24	2	2	4	6
Albany, NY	43	30	8	2	1	2	3	Knoxville, TN	101	69	24	3	5	_	5
Allentown, PA	20	17	3	—	—	_	1	Lexington, KY	72	41	20	6	2	3	9
Buffalo, NY	58	46	10	1	1	_	7	Memphis, TN	130	79	26	18	3	4	15
Camden, NJ	12	7	3	1	1	_	_	Mobile, AL	46	27	15	3	_	1	2
Elizabeth, NJ Erie, PA	21 48	13 35	6 9	2 2	1	1	1 3	Montgomery, AL Nashville, TN	57	38 84	16 42	2 6	3	1 6	6 11
Jersey City, NJ	40 21	11	9 4	2 5	1	_	2	,	141						
New York City, NY	973	677	206	68	12	9	37	W.S. Central	1,402	888	333	103	36	42	42
Newark, NJ	32	13	8	9	2	_	_	Austin, TX	85	62	15	3	4	1	_
Paterson, NJ	11	7	3	1	_	_	_	Baton Rouge, LA Corpus Christi, TX	61 66	43 41	11 18	4 4	1	2 2	2
Philadelphia, PA	277	151	88	18	14	5	16	Dallas, TX	203	113	51	18	8	13	11
Pittsburgh, PA§	34	24	8	_	1	1	_	El Paso, TX	104	69	24	8	1	2	5
Reading, PA Rochester, NY	25 140	16 104	6 27	6	1 2	2 1	1 11	Fort Worth, TX	97	63	28	3	_	3	4
Schenectady, NY	24	104	8	0			1	Houston, TX	375	229	93	34	13	6	9
Scranton, PA	32	23	9	_	_	_	1	Little Rock, AR	68	48	11	6	1	2	1
Syracuse, NY	72	45	24	1	1	1	7	New Orleans, LA <sup>1</sup>	U	U	U	U	U	U	U
Trenton, NJ	13	11	2	—	_	_	_	San Antonio, TX Shreveport, LA	178 50	113 39	49 7	6 3	5 1	5	7 3
Utica, NY	13	11	2	—	_	_	2	Tulsa, OK	115	68	26	14	1	6	
Yonkers, NY	19	16	3	_	_	—	1								
E.N. Central	1,975	1,297	470	119	43	46	107	Mountain Albuquerque, NM	1,137 167	725 107	254 36	79 14	40 7	38 3	66 15
Akron, OH	47	33	10	3		1	3	Boise, ID	48	37	5	6	_		6
Canton, OH	48	34	11	2	1	_	3	Colorado Springs, CO	55	40	9	3	_	3	4
Chicago, IL Cincinnati, OH	293 77	171 43	74 22	30 4	12 1	6 7	8 5	Denver, CO	111	69	27	5	2	8	2
Cleveland, OH	208	156	44	4	3	1	11	Las Vegas, NV	273	170	70	15	9	9	13
Columbus, OH	199	123	49	13	7	7	10	Ogden, UT	25	17	4	3	1		2
Dayton, OH	120	76	34	9	1	_	4	Phoenix, AZ Pueblo, CO	184 34	95 20	46 11	21 2	10 1	12	11
Detroit, MI	173	94	47	18	9	5	10	Salt Like City, UT	115	20 84	20	2	6	2	7
Evansville, IN	58	45	9	4	_		1	Tucson, AZ	125	86	26	7	4	1	6
Fort Wayne, IN Gary, IN	75 12	54 9	14 3	1	2	4	5 1	Pacific	1,388	949	307	78	31	00	86
Grand Rapids, MI	68	49	13	3	1	2	5	Berkeley, CA	1,300	949 3	307	1	1	23	
Indianapolis, IN	206	131	54	10	6	5	11	Fresno, CA	64	40	13	8	2	1	_
Lansing, MI	45	30	13	1	_	1	3	Glendale, CA	_	_	_	_	_	_	_
Milwaukee, WI	94	63	23	6	—	2	13	Honolulu, HI	91	61	24	4	_	2	6
Peoria, IL	60	44	13	2	—	1	6	Long Beach, CA	68	43	18	6	1	_	9
Rockford, IL	47	38	5	4	_	_	1	Los Angeles, CA	84	42	29	6	5	2	2
South Bend, IN Toledo, OH	49 96	36 68	12 20	1 4	_	4	2 5	Pasadena, CA Portland, OR	29 116	21 82	6 29	_2	2	3	3 7
Youngstown, OH	30 U	U	20 U	Ū	U	Ū	Ŭ	Sacramento, CA	196	129	47	10	6	4	13
								San Diego, CA	156	108	26	12	6	4	16
W.N. Central Des Moines, IA	532	350	127	30	9	15	39	San Francisco, CA	138	84	42	8	1	3	10
Des Molnes, IA Duluth, MN	 27	23	1	1	1	1	4	San Jose, CA	143	98	30	10	3	2	10
Kansas City, KS	19	15	2	1	1	_	1	Santa Cruz, CA	40	30	9	_	1	—	2
Kansas City, MO	91	53	25	5	2	6	4	Seattle, WA	110	97	11	2		_	5
Lincoln, NE	43	34	7	2	_	_	4	Spokane, WA	41 106	35 76	2 20	1 8	1 2	2	3
Minneapolis, MN	63	32	20	4	3	4	7	Tacoma, WA						_	
Omaha, NE	84	56	24	4	—		6	Total	10,797**	7,038	2,542	691	260	261	602
St. Louis, MO	82 52	51	22	7	_	1	4								
St. Paul, MN Wichita, KS	52 71	40 46	10 16	6	2	2 1	5 4								
wionita, NO	/ 1	40	10	0	2		4	1							

U: Unavailable.

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. <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.

# FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals September 16, 2006, 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.

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