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STD-Prevention Counseling Practices and Human Papillomavirus Opinions Among Clinicians with Adolescent Patients — United States, 2004

In 2000, an estimated 18.9 million new cases of sexually transmitted diseases (STDs) occurred in the United States (*1*). Although young persons aged 15–24 years represented only 25% of the sexually active population, approximately 48% of STD cases in 2000 occurred in this age group (*1*). The most common sexually transmitted infection in persons aged ≤24 years was attributed to human papillomavirus (HPV) (*1*). Although the natural immunity of most young persons can clear HPV infections with no clinical consequences, certain infections persist and result in warts, precancerous changes, and invasive cancers of the anogenital region in both males and females. In 2000, an estimated 4.6 million new HPV infections occurred among persons aged 15–24 years (*1*), resulting in expected direct medical lifetime costs of $2.9 billion (*2*). In June 2006, the Food and Drug Administration licensed the first HPV vaccine for females aged 9–26 years for the prevention of cervical cancer (U.S. 2000 incidence rate: 9.4 cases per 100,000), precancerous genital lesions, and genital warts associated with HPV types included in the vaccine (HPV 6, 11, 16, and 18). Protection has been demonstrated for genital infections associated with HPV types included in the vaccine; therapeutic efficacy for persons already infected has not been demonstrated.* To assess 1) STD risk assessment, counseling, and education practices of U.S. health-care providers during routine adolescent† check-ups and 2) provider opinions regarding methods to prevent HPV acquisition, CDC and Battelle Centers for Public Health Research and Evaluation surveyed clinicians who provided adolescent primary care. The results of this survey indicated that most of the clinicians assessed STD risk in their adolescent patients, addressed STD prevention, and recommended various STD-prevention methods; however, clinician opinions varied regarding the effectiveness of methods for preventing HPV infection and whether their patients would adopt these methods for the long term. Clinicians periodically should assess STD risk in their adolescent patients and provide STD counseling and education to reduce the incidence of STDs in this age group at high risk.

The analyses described in this report resulted from a broader assessment of the knowledge, attitudes, and practices among U.S. clinicians regarding HPV infections and general STD practice (*3*). In May 2004, CDC mailed surveys to 5,386 clinicians in seven specialties who commonly provide STD diagnosis, treatment, and prevention services.§ Nationally representative samples were drawn from databases that included members and nonmembers of the American Medical Association, American Association of Physicians' Assistants, American College of Nurse Midwives, and American Association of Nurse Practitioners. Clinicians were eligible for the survey if they practiced ≥8 hours per week in an outpatient setting, they provided routine checkups, and ≥20% of their patients were aged 13–65 years. Stratified sampling by specialty was conducted to enable comparisons among specialties. The sur-

* Available at http://www.fda.gov/cder/offices/oodp/whatsnew/gardasil.htm.
† An age range for adolescents was not defined in this survey.

§ Family/general physicians; general internists; adolescent medicine physicians; obstetrician/gynecologists; nurse practitioners specializing in family, adult, or women's health; certified nurse midwives; and physician assistants practicing primary care.

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vey collected data on clinician demographic, practice, and patient characteristics; STD risk assessment, counseling, and education practices; and opinions regarding HPV infection prevention methods. Analyses were weighted to adjust for disproportionate sampling by specialty and nonresponse. Survey methods have been more fully described previously (*3*).

To increase the response rate, the initial survey mailing included $50 cash, and up to four additional reminders were sent to the 5,386 clinicians sampled. After adjusting for ineligibility, the overall response rate was 82%. For this study, analyses were restricted to the 2,958 (87%) respondents who reported providing routine adolescent checkups.

Among the 2,958 clinicians, 84% reported practicing in a private setting, 83% were white, and 55% were male. Those surveyed reported practicing a median of 14 years; the majority of their patients were female (mean: 69%), white (mean: 69%), and privately insured (mean: 53%). Nearly all the clinicians (94%) reported previous experience in diagnosing STDs, with reported medians of five and six diagnoses of *Chlamydia trachomatis* infection and genital herpes during the preceding 12 months, respectively. Among the respondents, 81% reported usually or always asking about the sexual behavior of their adolescent patients to assess STD risk. To prevent STDs, 90% of clinicians reported usually or always recommending that their adolescent patients use condoms, 76% recommended practicing monogamy or limiting the number of sex partners, and 54% recommended abstaining from sex.

Surveyed clinicians were asked their opinions regarding use of condoms, practicing monogamy/limiting number of sex partners, and abstinence as methods for both their sexually active adult and adolescent patients to prevent acquisition of HPV infection or HPV-related conditions (Table).[¶] Nearly all (95%) respondents believed that practicing monogamy or limiting the number of sex partners was highly effective, and 81% thought these practices were worthwhile to recommend to most patients. In response to another question, although 91% believed that abstinence was highly effective for prevention of HPV infection, 45% thought that abstinence was worthwhile to recommend. Among the clinician groups sampled, adolescent medicine and family practice physicians were significantly more likely to agree that abstinence was worthwhile to recommend than clinicians in all the other specialties combined (56% [95% confidence interval (CI) = 51%–61%] versus 36% [CI = 33%–39%]; odds ratio = 2.3 [CI =

[¶] Participants were asked to respond to a series of statements (e.g., "For most of my patients, it is worthwhile to recommend consistent condom use." or "Abstinence is highly effective.") by choosing one response from a five-point scale (i.e., strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree).

TABLE. Opinions of clinicians who provide routine adolescent check-ups regarding methods to prevent acquisition of HPV infection or HPV-related conditions in their sexually active adolescent and adult patients — United States, 2004

	Agree method is highly effective		Agree method is worthwhile to recommend to most patients		Agree most patients will adopt method long term	
Method	**%**	**(95% CI*)**	**%**	**(95% CI)**	**%**	**(95% CI)**
Monogamy	95	(94–97)	81†	(78–83)	21†	(18–23)
Limiting number of sex partners	95	(94–96)	—	—	—	—
Abstinence	91	(89–92)	45	(42–47)	6	(5–8)
Consistent condom use	78	(76–80)	89	(87–91)	23	(20–25)

* Confidence interval.
† Monogamy and limiting number of sex partners were combined for these survey questions.

1.8–2.9]; $p<0.05$). In addition, 78% believed that consistent and correct condom use was effective, and 89% thought that condom use was worthwhile to recommend. However, 96% agreed with the statement, "Condoms may not be 100% effective due to slippage, breakage, leakage or pore size," and 97% agreed with the statement, "Condoms cannot prevent transmission of infections during skin-to-skin contact in areas not covered/in contact with a condom." Among respondents, 23% believed consistent condom use would be adopted for the long term by most of their patients, compared with 21% for monogamy/limiting number of sex partners and 6% for abstinence (Table).

Practices of a subset of 352 clinicians who reported ≥75% of their patients were aged <18 years also were analyzed. Of these, 97% reported usually or always during adolescent check-ups recommending that their patients use condoms for STD prevention, 62% recommended practicing monogamy or limiting the number of sex partners, and 51% recommended abstinence. In addition, 93% reported routinely providing STD-prevention education, and 69% reported routinely providing education about genital HPV infection to adult and adolescent patients whom they believed were sexually active. Among the clinicians who provided STD-prevention education, in-person education (73%) was more common than delegating to staff (15%) or providing written materials (5%).

Reported by: *D Montaño, PhD, D Kasprzyk, PhD, L Carlin, PhD, A Greek, PhD, C Freeman, PhD, Battelle Centers for Public Health Research and Evaluation, Seattle, Washington. K Irwin, MD, R Barnes, MPH, N Jain, MD, C Walsh, DrPH, Div of STD Prevention, National Center for HIV, Viral Hepatitis, STDs, and Tuberculosis Prevention (proposed); Z Henderson, MD, EIS Officer, CDC.*

Editorial Note: As recommended by national STD treatment guidelines (*4*), 81% of the clinicians surveyed in this study reported taking advantage of the routine check-up to assess STD risk in their adolescent patients. In addition, 93% of those with ≥75% of their patients aged <18 years reported educating patients they believed were sexually active about prevention of STDs, and 69% reported specifically addressing HPV infection. Clinician counseling of adolescents regarding STD prevention has been determined to reduce the incidence of STDs (*5*). Current national recommendations encourage clinicians to periodically assess adolescents for STD risk and provide STD counseling (*6*).

Although abstinence is the surest method to reduce the risk for acquiring HPV infection and other sexually transmitted infections, monogamy, minimizing the number of sex partners, and condom use also can reduce the risk (*4,7*). Large proportions (78%–95%) of clinicians believed that consistent condom use, abstinence, monogamy, and limiting number of sex partners were highly effective methods to prevent acquisition of HPV infection or HPV-related conditions. However, only 6%–23% believed that the majority of their patients would adopt these methods for the long term.

In this study, clinicians were more likely to rate abstinence, monogamy, and limiting number of sex partners as highly effective compared with condom use; however, they rated condoms as the method their patients most likely would use long term. These findings are consistent with studies suggesting that clinicians are more likely to recommend STD prevention and contraceptive methods such as condoms, which are not as effective as abstinence but more likely to be used (*8*). A limited number of prospective studies have evaluated the effect of condom use on the acquisition of genital HPV infection; a recent prospective study among college women demonstrated that consistent condom use was associated with a 70% reduction in the acquisition of genital HPV infection (*7*). In addition, previously published data indicate that condom use might reduce the risk for both genital warts and cervical cancer (*4*).

Although the majority of clinicians surveyed did not believe that most of their patients would use effective STD-prevention methods long term, they nonetheless thought recommending these methods was worthwhile. Such recommendations might not reach the estimated 40% of adolescents in the United States who do not receive routine medical check-ups and might be at higher risk for STDs (*9*). However, STD risk assessment, screening, and counseling also can be provided during urgent-care visits and nonroutine visits required for sports, camp, and school participation (*9,10*).

The findings in this report are subject to at least four limitations. First, although estimates were weighted for nonresponse bias, whether practices of responders differed substantially from those of nonresponders is unknown. Second, survey responses were not compared with medical or counseling records that might document actual practices; surveyed clinicians might have reported practices that were more consistent with guidelines than were documented in their medical records or reported by their patients. Third, certain questions about prevention methods did not distinguish between sexually inexperienced and sexually active patients, and prevention messages likely differed by patient sexual experience. Finally, general pediatricians who did not indicate a specialty of adolescent medicine were not included in the sample, although their patients might include large proportions of adolescents.

Scientific data link HPV infection to cervical cancer (*4*). Screening tests for HPV infection and the new vaccine to prevent infections from HPV genotypes that cause most cases of cervical HPV infection are now available, in addition to traditional Pap tests for precancerous and cancerous cervical lesions. The Advisory Committee on Immunization Practices issued provisional recommendations that this vaccine be routinely administered to girls aged 11–12 years and used for catch-up immunization in females aged 13–26 years.** Clinicians should be prepared to discuss with their adolescent patients prevention of HPV infection and other viral and bacterial STDs.

To support clinician risk assessment and prevention counseling for HPV infection, CDC and others have updated online training and support materials. A webcast, *HPV and Cervical Cancer: An Update on Prevention Strategies*, is available at http://www.phppo.cdc.gov/phtn/hpv-05; a netconference, *Human Papillomavirus (HPV), Cervical Cancer, and HPV Vaccine and Recommendations,* is available at http://www.cdc.gov/nip/ed/ciinc/hpv.htm. Materials regarding HPV infection also have been updated for patients and the general public to increase awareness of these topics and various prevention strategies. An overview of HPV infection and information regarding STDs is available at http://www.cdc.gov/std/hpv, and information regarding HPV vaccine is available at http://www.cdc.gov/nip/vaccine/hpv/default.htm.

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** Available at http://www.cdc.gov/nip/recs/provisional_recs/hpv.pdf.

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Update: Guillain-Barré Syndrome Among Recipients of Menactra® Meningococcal Conjugate Vaccine — United States, June 2005–September 2006

In October 2005, reports indicating a possible association between Guillain-Barré Syndrome (GBS) and receipt of meningococcal conjugate vaccine (MCV4) (Menactra®, Sanofi Pasteur, Inc., Swiftwater, Pennsylvania) were made to the Vaccine Adverse Event Reporting System (VAERS) (*1*). GBS is a serious neurologic disorder involving inflammatory demyelination of the peripheral nerves. During March

2005–February 2006, eight confirmed cases had occurred within 6 weeks (i.e., the time window of elevated risk noted for GBS after administration of other vaccines) after MCV4 vaccination (*2,3*). This report summarizes nine additional GBS cases reported to VAERS during March–September 2006. This report also provides a preliminary analysis of data from VAERS and the Vaccine Safety Datalink (VSD) since MCV4 became available in the United States in March 2005 and includes all 17 cases of GBS reported since June 2005. Although these data suggest a small increased risk for GBS after MCV4 vaccination, the inherent limitations of VAERS and the uncertainty regarding background incidence rates for GBS require that these findings be viewed with caution. Because of the risk for meningococcal disease and the associated morbidity and mortality, CDC continues to recommend routine vaccination with MCV4 for adolescents, college freshmen living in dormitories, and other populations at increased risk (*4*).

Each of the nine most recent cases reported to VAERS was reviewed by a CDC medical officer and a clinical immunization safety assessment investigator from Boston University to confirm a diagnosis of GBS. Of the nine cases, eight met the surveillance case definition (KS Kohl, MD, The Brighton Collaboration, Atlanta, Georgia, personal communication, 2006), and one was a sensory variant of GBS diagnosed by the attending neurologist based on nerve conduction studies consistent with GBS. The following is an illustrative case report from the nine cases reported most recently (Table).

TABLE. Demographic and clinical characteristics for nine patients reported with Guillain-Barré Syndrome (GBS) after MCV4* vaccination — United States, March–September 2006

								Cerebrospinal fluid		
Patient	**Sex**	**Age (yrs)**	**State**	**Date of vaccination**	**Onset interval (days)**†	**Signs and symptoms**	**Nerve conduction study consistent with GBS**	**White blood cells/μL**	**Protein mg/dL**§	**Concomitant vaccines**¶
1	Male	15	New York	February 27	10	Tingling/weakness/decrease in deep tendon reflexes in extremities.	Yes	Not performed		Tdap
2	Female	15	Michigan	March 3	2	Weakness/decrease in deep tendon reflexes in lower extremities; MRI** consistent with GBS.	Not performed	3	29	Hepatitis B, Tdap
3	Male	16	Michigan	March 22	13	Tingling/numbness in feet; decrease in deep tendon reflexes in lower extremities.	Yes	2	30	None
4	Female	18	North Carolina	May 22	15	Numbness/weakness in extremities; slurred speech.	Yes	Not performed		None
5	Male	43	Oklahoma	June 2	11	Numbness in extremities; gait difficulty; paresthesias of extremities and tongue; areflexia in upper and lower extremities; decrease in muscle strength in bilateral lower extremities.	Not performed	2	100	TIV, YFV, MMR, IPV, typhoid, hepatitis A, hepatitis B
6	Female	11	Kentucky	June 29	33	Numbness/weakness/decrease in deep tendon reflexes/decrease in muscle strength in bilateral lower extremities; gait abnormalities.	Yes	1	17	Tdap
7	Male	17	Arkansas	July 7	9	Difficulty swallowing; weakness in gait.	Not performed	1	109	None
8	Male	30	New York	July 31	9	Tingling in feet/face; weakness in bilateral lower extremities.	Yes	0	92	None
9	Female	16	Mississippi	July 31	13	Tingling/numbness in extremities; absent deep tendon reflexes bilaterally in upper and lower extremities; decrease in muscle strength in lower extremities.	Yes	0	59	HPV

* Meningococcal conjugate vaccine (Menactra®, Sanofi Pasteur, Inc., Swiftwater, Pennsylvania).
† From date of vaccination to date of onset of neurologic events.
§ Usual reference range: 15–40 mg/dL.
¶ Tdap: tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; TIV: trivalent inactivated influenzavirus vaccine; YFV: yellow fever vaccine; MMR: measles, mumps, and rubella vaccine; IPV: inactivated poliovirus vaccine; HPV: human papillomavirus vaccine.
** Magnetic resonance imaging.

Mississippi, July 2006

On July 31, 2006, an adolescent girl aged 16 years from Mississippi received MCV4 and human papillomavirus (HPV) vaccines. On August 13, she experienced numbness and tingling in her extremities. On August 25, she was evaluated by a neurologist for increasing weakness and subsequently admitted to the hospital. On physical examination, she was found to have absent reflexes bilaterally in the upper and lower extremities and had decreased muscle strength in the lower extremities. Nerve conduction studies were consistent for GBS, and analysis of the cerebrospinal fluid showed the protein to be 59 mg/dL (reference range: 15–40 mg/dL) with no white blood cells. The patient received intravenous immunoglobulin, improved, and was discharged on September 5. As of September 7, she still had residual weakness but was continuing to improve.

Case Characteristics

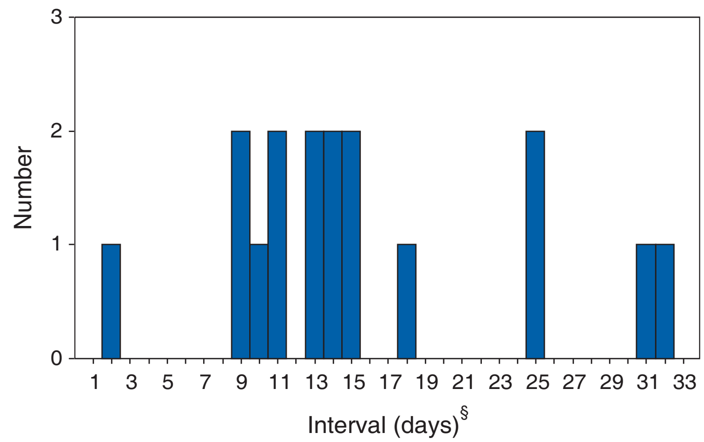
Clinical data for other possible causes of GBS frequently were not available when investigating the 17 cases of GBS after MCV4 vaccination. *Campylobacter jejuni* is a leading cause of gastroenteritis and the most frequent antecedent pathogen in GBS cases (*5*). None of the patients had reported diarrheal prodromes; however, many *C. jejuni* infections are asymptomatic. Three of the 17 patients had stool cultures; one was tested for *C. jejuni*, and the results were negative. A serum sample from one of the patients was tested for *C. jejuni,* and the result was negative; no other serum samples were available for testing. None of the states where the patients resided reported outbreaks of *C. jejuni* during June 2005–September 2006.

The range of onset intervals (i.e., date of vaccination through date of onset of adverse event) for the 17 cases was 2–33 days, with a mean and median of 15.7 and 14 days, respectively (Figure). Using a temporal scan statistic, the cases were determined to be significantly clustered at onset intervals of 9–15 days and greater than expected by chance (p = 0.012 [*6*]).

Comparison of Rates

Information from a managed-care organization within VSD indicates that approximately 94% of persons who have received MCV4 are aged 11–19 years (CDC, unpublished data, 2006). Therefore, analyses were limited to this age group and excluded two GBS cases in persons aged 30 years and 43 years. To assess whether the VAERS reporting rate for GBS after MCV4 vaccination was higher than expected, the VAERS reporting rate was calculated by dividing the 15 confirmed GBS cases in persons aged 11–19 years with onset within 6 weeks of vaccination by 7.46 million person-months (i.e., 5.39 million vaccine doses distributed to persons aged 11–19 years multiplied by 6 weeks follow-up per dose). The resulting rate was 0.20 per 100,000 person-months.

FIGURE. Number of cases* of Guillain-Barré Syndrome and interval between MCV4† vaccination and onset of neurologic events — United States, June 2005–September 2006



* N = 17, as of September 22, 2006.
† Meningococcal conjugate vaccine (Menactra®, Sanofi Pasteur, Inc., Swiftwater, Pennsylvania).
§ Cluster at 9–15 days statistically significant (p = 0.012; temporal scan statistics [*5*]).

The background incidence rate for GBS was estimated both from the Healthcare Cost and Utilization Project (HCUP), which is a multistate hospital discharge database, and the VSD database. Using 2000–2003 data from HCUP, the background incidence rate for GBS among persons aged 11–19 years was estimated at 0.11 per 100,000 person-months. Based on HCUP data, the ratio of the VAERS reporting rate of GBS after MCV4 vaccination to the background rate was 1.78 (95% confidence interval [CI] = 1.02–2.85). A separate analysis was performed, using a VSD background incidence rate of 0.11 per 100,000 person-months, based on 2000–2004 data and using a Poisson model to adjust for seasonal variation. Using these VSD data, the ratio of the VAERS reporting rate of GBS after MCV4 vaccination to the expected incidence rate was 1.77 (CI = 0.96–3.07).

Finally, an analysis of MCV4 use based on VSD data revealed that, during March 2005–September 20, 2006, a total of 126,506 doses were delivered and no cases of GBS were observed among vaccine recipients aged 11–19 years within 6 weeks of vaccination (0.2 cases would be expected during that period). During the same period, two cases of GBS were reported among an equal number of persons aged 11–19 years from a matched comparison group receiving preventive care and who had not received MCV4 vaccination.

Reported by: *EJ Woo, MD, R Ball, MD, M Braun, MD, Center for Biologics Evaluation and Research, Food and Drug Admin, Rockville, Maryland. T Clark, MD, N Rosenstein Messonnier, MD, Div of*

Bacterial Diseases; M Wharton, MD, National Center for Immunization and Respiratory Diseases (proposed); C Vellozzi, MD, S Campbell, MSPH, E Weintraub, MPH, R Davis, MD, Immunization Safety Office, Office of the Chief Science Officer, CDC.

Editorial Note: *Neisseria meningitidis* is a major cause of bacterial meningitis and sepsis in the United States. The case-fatality ratio for meningococcal disease is 10%–14% (*4*). Meningococcal disease also causes substantial morbidity; 11%–19% of survivors have sequelae (e.g., neurologic disability, limb loss, or hearing loss). Although rates of disease are highest among children aged <2 years, 62% of meningococcal disease cases in the United States occur among persons aged >11 years (*4*). During 1991–2002, the rate for persons aged 11–19 years was 1.2 per 100,000 per year and was higher than the rate for the general population. The Advisory Committee on Immunization Practices (ACIP) has recommended MCV4 vaccination for the prevention of invasive meningococcal disease (*4*).

In October 2005 and April 2006, CDC and the Food and Drug Administration alerted health-care providers about a possible association between GBS and MCV4 (*1,3*). Since introduction of MCV4, a total of 15 cases of GBS have been reported in persons aged 11–19 years with onset within 6 weeks of MCV4 vaccination. The ratio calculated by using HCUP data, but not VSD data, to define the background incidence rate, suggests a statistically significant increased risk for GBS after vaccination with MCV4.

The completeness of GBS reporting to VAERS, a passive surveillance system (*7*), is unknown. If underreporting to VAERS of GBS after MCV4 vaccination has occurred, the risk would be higher than estimated in this report. In addition, VSD has a limited ability to detect rare health events such as GBS; therefore, not finding any cases after vaccination in this population aged 11–19 years should not offer substantial reassurance regarding the safety of MCV4. Finally, the timing of onset of neurologic symptoms within 1–5 weeks of vaccination among reported cases continues to be of concern.

Using the HCUP background incidence rate and assuming the ratio of 1.78 accurately represents the true magnitude of increased risk after MCV4 vaccination, the number of excess cases of GBS for every 1 million doses distributed to persons aged 11–19 years is approximately 1.25 (CI = 0.058–5.99). However, substantial uncertainty exists regarding the risk estimate, using either the HCUP or VSD background incidence rate. Furthermore, no surge in the frequency of GBS reports to VAERS was noted after either the October 2005 or April 2006 CDC reports, as might be expected if underreporting had occurred (e.g., after alerts for intussusception associated with RotaShield® vaccine [*8*]).

GBS is a rare illness, regardless of etiology; expected incidence rates for GBS are not precisely known, and the available data cannot determine with certainty whether MCV4 increases the risk for GBS. Ongoing evaluation of GBS after MCV4 vaccination is being performed using VSD data. A larger study will be necessary to provide a more definitive assessment, but any such study likely will take several years to accumulate cases and attain sufficient statistical power.

In May 2005, CDC recommended routine vaccination with MCV4 of adolescents, college freshmen living in dormitories, and others at high risk for meningococcal disease (*4*). However, CDC recommends that persons with a history of GBS not receive MCV4, although persons with a history of GBS at especially high risk for meningococcal disease (i.e., microbiologists routinely exposed to isolates of *Neisseria meningitidis*) might consider vaccination. Given the data in this report, ACIP will review the current recommendations for MCV4. A Vaccine Information Statement and fact sheet providing information on the vaccine and reported GBS cases is available at http://www.cdc.gov/nip/publications/vis/default.htm. An updated fact sheet for health-care workers on GBS and Menactra is available at http://www.cdc.gov/nip/vacsafe/concerns/gbs/menactra.htm. Because of the ongoing risk for meningococcal disease and the limitations of the data indicating a small risk for GBS after MCV4 vaccination, the additional cases reported here do not affect or change current CDC recommendations (*4*).

CDC encourages all persons to report cases of GBS or any other clinically significant adverse events associated with MCV4 or any other vaccination to VAERS. Reports may be submitted securely online at http://www.vaers.hhs.gov or by fax at 877-721-0366. Reporting forms and additional information are available at telephone, 800-822-7967.

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Vaccination Coverage Among Children Entering School — United States, 2005–06 School Year

One of the national health objectives for 2010 is to achieve and sustain ≥95% vaccination coverage among children in kindergarten through first grade for the following vaccines: hepatitis B vaccine; diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids and acellular pertussis vaccine, or diphtheria and tetanus toxoids vaccine (DTP/DTaP/DT); poliovirus (polio) vaccine; measles, mumps, and rubella vaccines; and varicella vaccine (*1*). To determine vaccination coverage among children entering kindergarten, data were analyzed from reports submitted to CDC by states and the District of Columbia (DC) for the 2005–06 school year. This report summarizes the results of that analysis, which indicated that coverage for each vaccine was reported to have exceeded 95% in more than half of the states (Table 1).

For the 2005–06 school year, DC and all states except two (Illinois and Wyoming) submitted reports of vaccination coverage levels for children entering kindergarten. Of these, 49 reports included coverage for polio vaccine, DTP/DTaP/DT vaccine, measles-containing vaccine, and rubella-containing vaccine; 46 reports included coverage for mumps-containing vaccine; 43 reports included coverage for hepatitis B vaccine; and 41 reports included coverage for varicella vaccine (Table 2).

TABLE 1. Number and percentage of states reporting ≥90% or ≥95% vaccination coverage among children entering kindergarten, by vaccine — United States, 2005–06 school year

	States* reporting ≥90% coverage		States* reporting ≥95% coverage	
Vaccine	No.	(%)	No.	(%)
Polio†	45	(88.2)	33	(64.7)
DTP/DTaP/DT§	43	(84.3)	34	(66.7)
Measles¶	43	(84.3)	31	(60.8)
Rubella**	43	(84.3)	33	(64.7)
Hepatitis B††	41	(80.4)	31	(60.8)
Mumps§§	40	(78.4)	32	(62.7)
Varicella¶¶	36	(70.6)	29	(56.9)

* All states and the District of Columbia.
† Three or more doses of any poliovirus vaccine.
§ Four or more doses of any diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids and acellular pertussis vaccine, or diphtheria tetanus toxoids vaccine.
¶ One or more doses of measles-containing vaccine.
** One or more doses of rubella-containing vaccine.
†† Three or more doses of hepatitis B vaccine.
§§ One or more doses of mumps-containing vaccine.
¶¶ One or more doses of varicella vaccine or history of varicella disease.

All states based their assessments, in part, on public schools; in addition, 47 states assessed private schools, and 17 states assessed home schools. In 2005–06, 11 states reported assessments based on 100% of children entering kindergarten in public, private, and home schools; in the 2004–05 school year, five state reports included all school types (*2*). Although many states conducted a census of all students in the schools they assessed, five states selected a random sample of schools, students, or both to determine coverage rates. Health departments reviewed immunization records to assess coverage in six states, relied on self-reported coverage from schools in 29 states, and used some other methodology (e.g., reports from health departments and school personnel) in 14 states.

Four of the eight U.S. territories that receive federal immunization grants also reported data for the 2005–06 school year. All four reports included coverage for polio vaccine; DTP/DTaP/DT vaccine; measles, mumps, and rubella vaccines; and hepatitis B vaccine (Table 2). Two U.S. territories reported coverage for varicella vaccine. The percentage of children surveyed by the U.S. territories ranged from 10% to 100%. Both public and private schools were included in the assessments, and varying methods were used to assess coverage (e.g., self-reports, health department audits, and vaccination registries).

To determine coverage, state or territory up-to-date status was used rather than number of doses received because the number of doses required to be up-to-date varies depending on timing of vaccinations, area requirements regarding number of doses, and brand of vaccines. National and territorial estimates of coverage were calculated by weighting each state's or territory's coverage estimate according to the size of the kindergarten enrollment for 2005–06.

Coverage for the newest recommended vaccine included in the assessment, varicella, was reported as ≥95% in 29 (57%) states and DC and ≥90% in 36 (71%) states and DC (Table 1). Coverage for other vaccines was higher, ranging from 31 (61%) states with ≥95% coverage for measles and hepatitis B vaccines, to 34 (67%) states with ≥95% coverage for DTP/DTaP/DT vaccine.

Varicella coverage was <95% in the two territories (Puerto Rico [89%] and the Virgin Islands [88%]) that reported varicella coverage. Vaccination coverage ≥95% was reported for hepatitis B by Mariana Islands and Puerto Rico. Coverage levels in the reporting territories for all other vaccines were <95%.

TABLE 2. Estimated vaccination coverage among children enrolled in kindergarten, by vaccine and state*/territory — United States, 2005–06 school year

State/Territory	% surveyed†	Polio (%)§	DTP/DTaP/DT (%)¶	Measles (%)**	Mumps (%)††	Rubella (%)§§	Hepatitis B (%)¶¶	Varicella (%)***
United States	**—**	**95.7**	**95.5**	**95.4**	**95.9**	**95.9**	**96.0**	**96.0**
Alabama	100.0	95.1	95.1	95.1	95.1	95.1	—	97.0
Alaska	93.2	98.8	98.3	97.7	97.7	97.7	98.7	—
Arizona	99.3	97.6	96.6	95.1	95.1	95.1	96.5	96.5
Arkansas	100.0	95.5	96.6	94.7	94.6	94.5	96.6	—
California	100.0	96.7	96.4	96.8	99.2	99.2	98.4	98.8
Colorado	1.7	90.5	89.6	86.3	86.3	86.3	93.7	93.2
Connecticut	100.0	99.0	98.9	99.0	99.0	99.0	99.0	99.1
Delaware	75.7	89.7	89.8	87.1	87.1	87.1	90.2	84.8
District of Columbia	100.0	94.4	93.6	93.9	93.9	93.9	95.6	96.5
Florida	100.0	94.1	94.1	94.1	94.1	94.1	94.1	94.1
Georgia	100.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
Hawaii	99.8	99.1	99.0	99.2	99.2	99.2	99.6	99.8
Idaho	100.0	93.3	85.9	87.3	87.3	87.3	93.9	—
Illinois†††	—	—	—	—	—	—	—	—
Indiana	100.0	97.6	97.6	97.3	99.5	99.5	98.9	99.0
Iowa	93.2	93.0	93.0	93.0	—	93.0	93.0	93.0
Kansas	35.4	94.8	84.1	94.4	94.4	94.4	91.3	85.3
Kentucky	95.0	95.0	95.1	94.5	94.5	94.5	94.2	94.7
Louisiana	100.0	97.6	98.9	99.2	99.2	99.2	98.9	98.2
Maine	96.9	94.0	94.5	93.9	93.9	93.9	—	94.9
Maryland	69.2	99.4	99.2	98.6	99.1	99.1	99.2	99.5
Massachusetts	98.1	95.7	95.1	95.7	98.5	98.5	97.7	98.0
Michigan	100.0	97.8	97.2	96.9	96.9	96.9	97.6	97.9
Minnesota	97.2	95.7	95.3	95.6	95.6	95.6	96.6	97.0
Mississippi	100.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
Missouri	95.0	97.6	97.0	96.9	96.9	96.9	97.5	97.6
Montana	98.9	99.8	99.8	99.8	99.8	99.8	—	—
Nebraska	91.3	98.5	98.7	97.8	97.8	97.8	97.2	97.8
Nevada	91.4	78.3	91.3	97.3	97.3	97.3	93.6	95.0
New Hampshire	94.9	96.1	96.3	93.3	97.7	97.7	98.5	99.1
New Jersey	100.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1
New Mexico	100.0	98.7	98.6	98.5	98.5	98.5	99.6	99.4
New York	100.0	98.4	98.4	96.8	98.3	98.3	98.1	98.2
North Carolina	86.6	99.3	99.1	99.3	99.3	99.3	99.6	99.9
North Dakota	92.5	94.4	95.3	94.0	94.0	94.0	96.4	95.5
Ohio	100.0	94.8	94.4	97.6	97.6	97.6	96.8	—
Oklahoma	80.1	97.5	96.8	97.6	97.6	97.6	99.4	99.5
Oregon	98.2	95.8	95.3	95.5	96.6	96.6	95.8	96.2
Pennsylvania	84.4	77.6	77.6	77.6	77.6	77.6	77.6	77.6
Rhode Island	95.1	96.5	95.7	96.0	96.0	96.0	98.3	98.5
South Carolina	9.7	94.8	96.0	95.4	95.4	95.4	95.7	95.7
South Dakota	99.4	98.9	99.0	98.2	98.2	98.2	—	99.9
Tennessee	100.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1
Texas	100.0	98.9	98.6	98.5	99.2	99.4	99.4	99.2
Utah	97.4	98.3	97.8	98.1	98.4	98.4	98.7	99.0
Vermont	99.8	96.3	96.9	93.6	—	93.6	—	—
Virginia	6.3	95.5	93.8	95.5	95.5	95.5	93.9	89.5
Washington	97.5	90.9	91.1	93.9	95.5	95.5	92.8	—
West Virginia	96.9	100.0	98.8	96.9	—	96.9	—	—
Wisconsin	2.3	96.7	96.0	87.0	87.0	87.0	95.2	96.9
Wyoming†††	—	—	—	—	—	—	—	—
U.S. territories	**—**	**90.9**	**93.4**	**89.7**	**89.7**	**89.7**	**95.6**	**88.5**
Guam	11.4	92.1	91.5	82.3	82.3	82.3	94.1	—
Mariana Islands	100.0	90.0	93.0	91.1	91.1	91.1	98.0	—
Puerto Rico	51.2	90.9	93.6	89.9	89.9	89.9	95.6	88.5
U.S. Virgin Islands	9.8	91.0	91.6	93.8	93.8	93.8	93.8	87.6

* Includes District of Columbia.
† The proportion of eligible children included in the assessment survey.
§ Three or more doses of any poliovirus vaccine
¶ Four or more doses of any diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids and acellular pertussis vaccine, or diphtheria and tetanus toxoids vaccine.
** One or more doses of measles-containing vaccine.
†† One or more doses of mumps-containing vaccine.
§§ One or more doses of rubella-containing vaccine.
¶¶ Three or more doses of hepatitis B vaccine.
*** One or more doses of varicella vaccine or history of varicella disease.
††† Did not report vaccination coverage to CDC during 2005–06 school year.

Reported by: *C Stanwyck, PhD, J Davila, MSPH, B Lyons, MPH, C Knighton, Immunization Svcs Div, National Center for Immunization and Respiratory Diseases (proposed), CDC.*

Editorial Note: More than half of reporting states indicate that they have already reached the *Healthy People 2010* goal of ≥95% coverage for each of the vaccines recommended by the Advisory Committee on Immunization Practices (ACIP); the remaining states are making progress toward this goal. However, required vaccines and methods for surveying kindergarten-aged children vary substantially from state to state; the majority of states rely on self-reports by schools, rather than audits by health departments, to determine coverage, which might lead to underestimations or overestimations. CDC provided a new online reporting system, which has been available since the 2002–03 school year, to help states and U.S.-affiliated jurisdictions collect and report data on vaccination coverage among children entering school. Anecdotal reports from states indicate that this system, which automates data-management and calculation tasks, has made reporting coverage easier. CDC also has promoted greater standardization of reporting, for example, by encouraging all states to report coverage based on ACIP recommendations rather than on state requirements (*3*). These improvements in survey methods and assessment procedures will help ensure that health jurisdictions are accurately reporting progress toward the ≥95% coverage goal.

State laws requiring proof of vaccination at school entry have been considered a safety net for the U.S. vaccination program because they are intended to ensure that no child is missed (*4*). This safety net relies on school nurses, teachers, health department staff, and others to identify children who are not up-to-date with their vaccinations. Findings of high nationwide coverage in recent years underscore the success of school entry requirements in boosting vaccination coverage, which increased substantially when entry requirements were established. Childhood vaccination coverage also is measured nationally among children aged 19–35 months (*5*). Higher percentages of children are up-to-date when entering kindergarten than at younger ages, suggesting that school entry laws are an important factor in maintaining high vaccination coverage and ensuring completion of the vaccine doses recommended at ages 4–6 years (*5*).

The findings in this report are subject to at least two limitations. First, the substantial variation in assessment methods limits the comparability of these data and suggests, in some cases, that data quality could be improved (e.g., by using methods other than self-report, standardizing measurement of vaccination coverage, monitoring data for validity and reliability, and using appropriate sampling methods). Second, children attending private schools or home schools were not surveyed by all states. The difference in vaccination rates between children schooled at home and children in public or private school environments is unknown.

Additional information about assessing and reporting vaccination coverage among children entering school is available at http://www.cdc.gov/nip/coverage/schoolsurv/overview.htm. The schedule of recommended vaccinations for children is available at http://www.cdc.gov/nip/recs/child-schedule-4pg-landscp.pdf.

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Varicella Surveillance Practices — United States, 2004

Varicella became a reportable disease in the United States in 1972, with states reporting weekly aggregate data to the National Notifiable Disease Surveillance System (NNDSS) (*1*). In 1981, varicella reporting was removed from the national notifiable diseases list (*2*) because reporting of this common disease was becoming a burden in the absence of a vaccine. This action was followed by additional changes in varicella surveillance practices (Box). In 1995, varicella vaccine was licensed and added to the routine childhood vaccination schedule. In 2002, the Council of State and Territorial Epidemiologists (CSTE) recommended that varicella case-based surveillance be implemented in all states by 2005; in 2003, varicella again was added to the national notifiable diseases list (*3*) to allow for monitoring of the effect of varicella vaccine on varicella incidence. In 2004, to assess the progress in varicella surveillance in the United States, CDC surveyed immunization program managers in selected public health jurisdictions. This report describes the results of that survey, which indicated that substantial progress has been made toward the implementation of case-based surveillance as recommended by CSTE in 2002. As of 2004, however, 28 jurisdictions still had not implemented case-based surveillance. To

BOX. History of national varicella surveillance and related events — United States, 1972–2004

Year	Surveillance milestones
1972	Varicella becomes a nationally notifiable disease.
1981	Varicella is removed from the national notifiable diseases list.*
1995	Varicella vaccine is licensed and recommended for routine childhood vaccination in the United States.
1998	Council of State and Territorial Epidemiologists (CSTE) recommends that states establish some form of ongoing systematic morbidity surveillance and that varicella deaths become nationally notifiable, with implementation on January 1, 1999.
2002	CSTE recommends including varicella in the National Notifiable Disease Surveillance System by 2003 and establishing case-based surveillance in all states by 2005, with implementation on January 1, 2003.

* During 1972–1997, a total of 14 states maintained continuous varicella reporting to CDC.

monitor the effect of the vaccination program on the changing epidemiology of varicella disease, every state should now be conducting case-based surveillance for varicella. This is particularly important in light of the 2006 recommendation by the Advisory Committee on Immunization Practices for a routine second dose of varicella vaccine for children aged 4–6 years because enhanced surveillance is needed to further monitor varicella epidemiology.

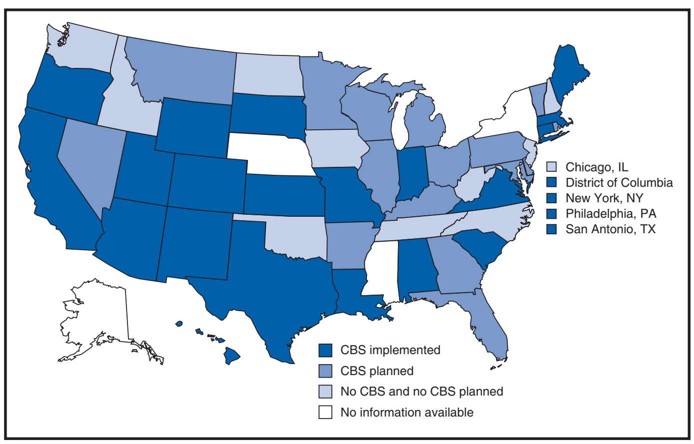
In September 2004, a self-administered survey was distributed to immunization program managers in all 50 states, the District of Columbia (DC), and five cities (Chicago, Illinois; New York, New York; Philadelphia, Pennsylvania; Houston, Texas; and San Antonio, Texas). The survey included questions about varicella reporting and surveillance practices, existing or planned legislation mandating varicella reporting, and barriers to and strategies for implementing varicella case-based surveillance.

For the survey, case-based surveillance was defined as the collection and reporting of data on individual cases of varicella. Statewide case-based surveillance was defined as solicitation of varicella case reports from any reporting source within the state, including but not limited to health-care providers, hospitals, and schools. Sentinel-site case-based surveillance was defined as the solicitation of individual varicella case reports from designated reporting sites, such as selected physician offices or schools. Mandated varicella reporting was defined as the existence of a reporting law or regulation requiring reporting of varicella cases to public health officials.

Fifty-one (91%) of the 56 jurisdictions responded to the survey, including 46 states (all but Alaska, Mississippi, Nebraska, and New York), DC, and four cities (Chicago, New York, Philadelphia, and San Antonio). Twenty-three (45%) of the respondents (from 19 states, three cities, and DC) reported having established case-based surveillance. Of the 19 states, 15 reported that they had implemented statewide reporting, two reported that they received reports only from sentinel sites, and two did not respond regarding methods for case-based surveillance. Of the three city respondents reporting establishment of case-based surveillance, one was located in a state that reported having established case-based surveillance; the other two cities were in states that were planning to implement case-based surveillance. DC received reports from throughout the jurisdiction. Seventeen (33%) of the respondents indicated that they were planning to implement case-based surveillance, although the time frame for implementation was unknown (Figure 1).

The respondents who reported that they had established case-based surveillance stated that they were receiving varicella case reports from hospitals (70% of respondents), emergency departments (68%), outpatient clinics (68%), physician offices (68%), laboratories (68%), elementary and high schools (61%), colleges (58%), and day care facilities (52%). Thirty (59%) of 51 respondents reported that they had mandated varicella case reporting, including 26 states, DC, and three cities; two of the cities are in states that reported having varicella reporting laws. Twenty-one (70%) of these 30 jurisdic-

FIGURE 1. Status of varicella case-based surveillance (CBS) in public health jurisdictions (N = 55)* — United States, 2004



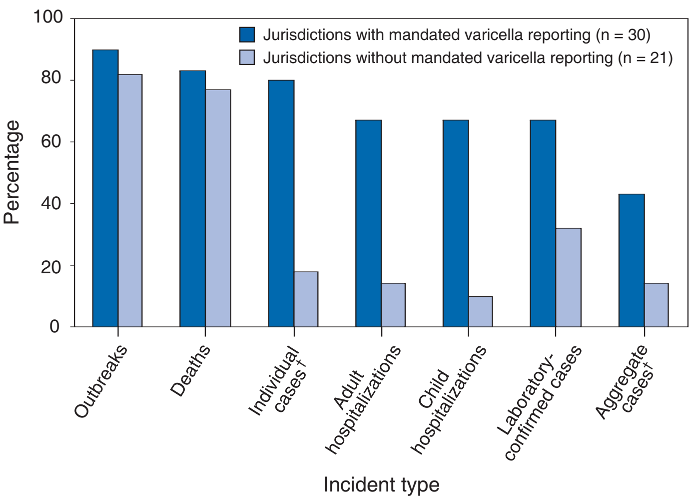
* Includes all 50 states, the District of Columbia, and four U.S. cities (Chicago, Illinois; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas).

tions had implemented case-based surveillance, but only four (20%) of the 21 jurisdictions without mandated varicella reporting had implemented case-based surveillance.

When queried about the various varicella incidents that are reported (e.g., outbreaks, deaths, individual cases, adult hospitalizations, child hospitalizations, laboratory-confirmed cases, and aggregate cases), a greater proportion of respondents from jurisdictions with a reporting mandate stated that they were being informed about hospitalizations, laboratory-confirmed cases, and aggregate cases than respondents from jurisdictions without a mandate. However, outbreaks and deaths were reported most frequently and at nearly the same rate, regardless of a reporting mandate; 90% of outbreaks and 83% of deaths were reported from states with varicella reporting mandates, and 82% of outbreaks and 77% of deaths were reported from states without varicella reporting mandates (Figure 2).

Respondents were questioned about barriers to and strategies for the implementation of case-based surveillance. The most frequently reported barrier was lack of staffing resources (39%). Respondents also identified other barriers, including the absence of a reporting mandate (16%), difficulty establishing support for varicella surveillance among local health department staff and community partners (10%), the perception that varicella is not serious enough to be reported (4%), and the lack of usefulness of the individual case data (1%).

FIGURE 2. Percentage of public health jurisdictions (N = 51)* reporting varicella incidents, by incident type and presence or absence of a varicella reporting mandate — United States, 2004



* Includes 46 states (all but Alaska, Mississippi, Nebraska, and New York), four cities (Chicago, Illinois; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas), and the District of Columbia.

† Categories are not mutually exclusive; seven states and one city receive both aggregate and individual case reports (e.g., individual for adults and aggregate for children).

The most frequently cited successful strategy in facilitating case-based surveillance implementation was partnering with the reporting community (i.e., groups that report varicella cases, such as physician groups, day care centers, or school nurses) through meetings, e-mails, and newsletters (41%).

Reported by: *F Averhoff, MD, L Zimmerman, MPH, R Harpaz, MD, D Guris, MD, Epidemiology and Surveillance Div, National Center for Immunization and Respiratory Diseases (proposed); A Rue, MPH, EIS Officer, CDC.*

Editorial Note: The results of the survey described in this report provide a snapshot of case-based varicella surveillance implementation in the United States in 2004 and help interpret trends in surveillance data as case-based surveillance implementation increases. The findings suggest that substantial progress has been made toward the implementation of case-based surveillance as recommended by the CSTE in 2002; however, 28 jurisdiction respondents still had not implemented case-based surveillance as of 2004. In 2006, 31 jurisdictions are conducting case-based surveillance for varicella.

Implementation of a national varicella vaccination program in 1995 resulted in reestablishment of national varicella surveillance. In 1995, only 17 states were reporting varicella to NNDSS, and levels of reporting in states that had reported continually since 1970 had been declining (*2*). In 1995, CDC initiated support for active surveillance in three geographic areas in the United States; two of these sites continue to provide data that have demonstrated the effect of the vaccination program and the changing epidemiology of varicella disease. These geographic areas have vaccination coverage that is higher than the national average and is therefore not representative of the U.S. population (*4*). Supplementary surveillance data from national varicella mortality reports and outbreak investigations provide additional information. However, mortality reports measure only severe disease. In addition, although outbreak investigations provide critical data about vaccine effectiveness, they provide more limited data on varicella epidemiology. Because numbers of infected persons usually are small, not all outbreaks are investigated, and the settings in which they are investigated are inconsistent, leading to variable findings. Although morbidity and outbreak data have been important for guiding the varicella vaccination program during the initial years of implementation, more complete national data are necessary to maintain an effective and efficient vaccination program. Case-based surveillance is necessary to 1) assess the effect of vaccination on the epidemiology of varicella, including changes in age distribution and severity of cases; 2) evaluate the proportion of cases in persons who are vaccinated (i.e., breakthrough disease); and 3) assess and monitor vaccine effectiveness.

Because the considerable number of cases in the early vaccine era made case-based surveillance impractical in states with limited resources, CSTE initially did not recommend implementation of case-based surveillance in 1995. As a first step to implementing national surveillance, varicella deaths became reportable in 1999 (*5*), and states were also encouraged by CSTE to establish some form of morbidity reporting (*6*). In 2002, with rapidly decreasing varicella rates (*4*), CSTE recommended that national case-based surveillance be implemented by 2005 (*7*).

States with mandatory varicella notification more frequently reported implementing case-based surveillance and receiving reports of varicella incidents. Reports of deaths and outbreaks were less affected by the presence or absence of reporting mandates in the jurisdiction and were the most frequently cited type of report received by public health officials. In addition to the lack of mandatory reporting laws, other barriers to the implementation of case-based surveillance, such as insufficient staffing resources, were identified.

A gradual approach to full implementation of case-based surveillance might mitigate the burden of implementation on jurisdictions. CSTE has previously recommended that states consider initiating case-based surveillance using sentinel-site surveillance if statewide case-based surveillance was not feasible initially. Case-based surveillance might also be initiated by collecting only data for key variables (e.g., age of the patient, varicella vaccination history, and severity of disease). Collecting and analyzing this information locally will enable jurisdictions to monitor their own programs. When feasible, jurisdictions can incorporate additional variables, such as other symptoms, complications, and diagnostic laboratory data.

While states have been planning and implementing varicella case-based surveillance, CDC has been developing an electronic system capable of accepting individual case reports through NNDSS; this system is expected to be operational in 2006. These data will allow for the monitoring of national trends and will help guide national varicella vaccination policy.

As a guide for case-based varicella surveillance, a new varicella worksheet is available from CDC at http://www.cdc.gov/nip/diseases/varicella/default.htm. State and local public health officials with questions regarding implementation of case-based surveillance can contact CDC by telephone, 404-639-8230.

Acknowledgments

The findings in this report are based, in part, on contributions by state and local health departments.

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Errata: Vol. 55, Nos. 38 and 39

In issue No. 38, on page 1051, in Table II, "Provisional cases of selected notifiable diseases, United States, weeks ending September 23, 2006, and September 24, 2005 (38th Week)," errors occurred in data reported for Hepatitis (viral, acute) by type: B.

In the column, "Cum 2006," the entry for United States should read **2,803**; for Mid. Atlantic, **295**; and for New York City, **60**.

In issue No. 39, on page 1079, in Table II, "Provisional cases of selected notifiable diseases, United States, weeks ending September 30, 2006, and October 1, 2005 (39th Week)," errors occurred in data reported for Hepatitis (viral, acute) by type: B.

In the column, "Cum 2006," the entry for United States should read **2,943**; for Mid. Atlantic, **310**; and for New York City, **60**.

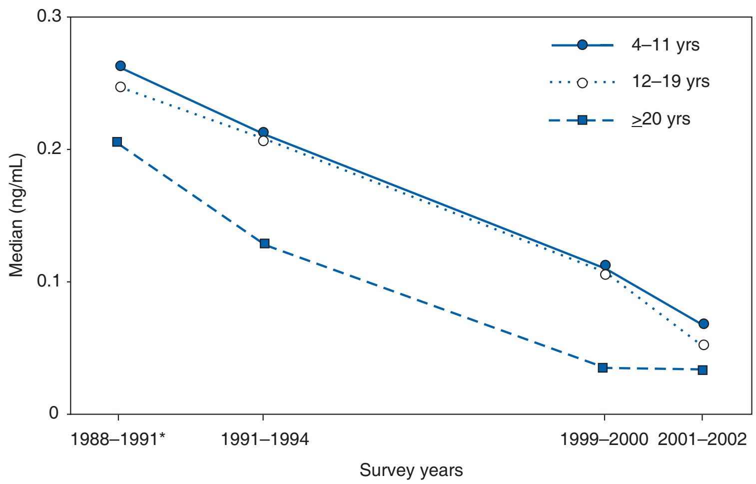
Erratum: Vol. 55, No. 40

In the report, "Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation — United States, 2003–2005," on page 1092, in the fourth paragraph, the third sentence should have read, "Second, the cross-sectional study design does **not** permit determining the temporal sequence of arthritis onset and selected characteristics (e.g., obesity or physical inactivity)."

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Median Serum Cotinine Levels in Nonsmokers, by Age Group — National Health and Nutrition Examination Survey (NHANES), United States,1988–1991 through 2001–2002



* NHANES III was conducted in two phases: October 1988–September 1991 and October 1991–September 1994. Additional information is available at http://www.cdc.gov/nchs/nhanes.htm.

Cotinine is a metabolite only of nicotine. Among nonsmokers, the presence of cotinine in serum indicates exposure to secondhand tobacco smoke. From 1988–1991 through 2001–2002, median serum cotinine levels decreased by 74% in children aged 4–11 years, 79% in persons aged 12–19 years, and 83% in persons aged ≥20 years, suggesting a substantial reduction in the exposure of the U.S. population to secondhand tobacco smoke.

SOURCE: Pirkle JL, Bernert JT, Caudill SP, Sosnoff CS, Pechacek TF. Trends in the exposure of nonsmokers in the U.S. population to secondhand smoke: 1988–2002. Environ Health Perspect 2006;114:853–8.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending October 14, 2006 (41st Week)*

Disease	Current week	Cum 2006	5-year weekly average[†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2005	2004	2003	2002	2001	
Anthrax	—	1	0	—	—	—	2	23	
Botulism:									
foodborne	—	8	0	19	16	20	28	39	
infant	—	64	2	90	87	76	69	97	
other (wound & unspecified)	—	43	1	33	30	33	21	19	
Brucellosis	2	84	2	122	114	104	125	136	CA (2)
Chancroid	1	24	1	17	30	54	67	38	MA (1)
Cholera	—	6	0	8	5	2	2	3	
Cyclosporiasis[§]	—	100	1	734	171	75	156	147	
Diphtheria	—	—	0	—	—	1	1	2	
Domestic arboviral diseases[§,¶]:									
California serogroup	—	37	5	80	112	108	164	128	
eastern equine	—	6	0	21	6	14	10	9	
Powassan	—	1	—	1	1	—	1	N	
St. Louis	—	4	1	13	12	41	28	79	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis[§]:									
human granulocytic	—	287	9	790	537	362	511	261	
human monocytic	3	300	7	522	338	321	216	142	NY (1), TN (2)
human (other & unspecified)	1	133	1	122	59	44	23	6	NY (1)
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	8	0	9	19	32	34	—	
nonserotype b	1	68	2	135	135	117	144	—	NY (1)
unknown serotype	3	162	2	217	177	227	153	—	TN (3)
Hansen disease[§]	2	58	1	88	105	95	96	79	NH (1), NV (1)
Hantavirus pulmonary syndrome[§]	—	25	0	29	24	26	19	8	
Hemolytic uremic syndrome, postdiarrheal[§]	3	190	5	221	200	178	216	202	NE (1), SC (1), AL (1)
Hepatitis C viral, acute	2	606	32	771	713	1,102	1,835	3,976	NY (1), OK (1)
HIV infection, pediatric (age <13 yrs)[§,††]	—	52	7	380	436	504	420	543	
Influenza-associated pediatric mortality[§,§§,¶¶]	—	40	—	45	—	N	N	N	
Listeriosis	9	526	19	892	753	696	665	613	NY (1), PA (2), MO (1), KS (1), NC (1), FL (1), LA (1), WA (1)
Measles	—***	44	0	66	37	56	44	116	
Meningococcal disease,[†††] invasive:									
A, C, Y, & W-135	1	172	3	297	—	—	—	—	MN (1)
serogroup B	—	108	2	157	—	—	—	—	
other serogroup	—	14	0	27	—	—	—	—	
Mumps	16	5,832	5	314	258	231	270	266	OH (1), MN (10), MO (2), KS (2), AL (1)
Plague	—	12	0	8	3	1	2	2	
Poliomyelitis, paralytic	—	—	0	1	—	—	—	—	
Psittacosis[§]	—	18	0	19	12	12	18	25	
Q fever[§]	1	122	1	139	70	71	61	26	CA (1)
Rabies, human	—	1	0	2	7	2	3	1	
Rubella	—	8	0	11	10	7	18	23	
Rubella, congenital syndrome	—	1	—	1	—	1	1	3	
SARS-CoV[§,§§]	—	—	—	—	—	8	N	N	
Smallpox[§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome[§]	1	81	1	129	132	161	118	77	OH (1)
Streptococcus pneumoniae,[§] invasive disease (age <5 yrs)	15	806	12	1,257	1,162	845	513	498	NY (1), OH (3), IN (1), MN (4), NE (1), OK (5)
Syphilis, congenital (age <1 yr)	1	210	8	361	353	413	412	441	FL (1)
Tetanus	—	17	0	27	34	20	25	37	
Toxic-shock syndrome (other than streptococcal)[§]	1	73	1	96	95	133	109	127	SC (1)
Trichinellosis	—	11	0	19	5	6	14	22	
Tularemia[§]	1	71	3	154	134	129	90	129	KS (1)
Typhoid fever	5	211	8	324	322	356	321	368	MO (1), CA (4)
Vancomycin-intermediate *Staphylococcus aureus*[§]	—	2	—	2	—	N	N	N	
Vancomycin-resistant *Staphylococcus aureus*[§]	—	—	0	3	1	N	N	N	
Yellow fever	—	—	—	—	—	—	1	—	

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

* Incidence data for reporting year 2006 is provisional, whereas data for 2001, 2002, 2003, 2004, and 2005 are finalized.

† 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.

†† 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. Pediatric HIV data will not be updated monthly for the remainder of this year due to upgrading of the national HIV/AIDS surveillance data management system. 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).

¶¶ Cumulative totals for 2005 and 2006 do not include reports from states where influenza-associated pediatric mortality is not a notifiable condition.

*** No measles cases were reported for the current week.

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
		Previous 52 weeks					Previous 52 weeks					Previous 52 weeks			
Reporting area	Current week	Med	Max	Cum 2006	Cum 2005	Current week	Med	Max	Cum 2006	Cum 2005	Current week	Med	Max	Cum 2006	Cum 2005
United States	11,448	19,103	35,170	746,835	753,499	62	151	1,643	6,459	3,253	77	70	594	3,806	5,986
New England	834	632	1,550	25,745	25,083	—	0	0	—	—	5	4	30	242	293
Connecticut	—	170	1,214	7,196	7,335	N	0	0	N	N	—	0	27	27	69
Maine§	53	43	67	1,779	1,752	N	0	0	N	N	—	0	4	32	25
Massachusetts	623	289	534	12,003	11,140	—	0	0	—	—	—	1	14	88	130
New Hampshire	37	37	65	1,548	1,469	—	0	0	—	—	—	1	4	37	31
Rhode Island	107	60	100	2,354	2,620	—	0	0	—	—	3	0	6	14	7
Vermont§	14	20	43	865	767	N	0	0	N	N	2	0	5	44	31
Mid. Atlantic	1,471	2,413	3,696	95,102	92,619	—	0	0	—	—	7	11	444	439	2,404
New Jersey	100	373	497	14,214	15,197	N	0	0	N	N	—	0	3	10	53
New York (Upstate)	435	499	1,727	18,940	18,300	N	0	0	N	N	4	3	441	134	2,003
New York City	429	731	1,570	30,283	30,054	N	0	0	N	N	—	2	9	74	127
Pennsylvania	507	749	1,105	31,665	29,068	N	0	0	N	N	3	4	13	221	221
E.N. Central	1,665	3,127	12,578	125,067	126,563	—	1	3	38	9	16	16	92	924	1,421
Illinois	591	971	1,693	40,878	39,586	—	0	0	—	—	—	1	7	72	142
Indiana	255	391	510	15,349	15,909	N	0	0	N	N	2	1	18	70	65
Michigan	627	658	9,888	27,627	21,064	—	0	3	34	9	1	2	7	109	93
Ohio	79	686	1,432	25,555	33,890	—	0	1	4	—	13	5	33	298	679
Wisconsin	113	398	531	15,658	16,114	N	0	0	N	N	—	5	53	375	442
W.N. Central	673	1,151	1,456	46,040	46,458	—	0	12	1	4	8	11	74	677	530
Iowa	184	157	225	6,512	5,623	N	0	0	N	N	—	1	28	154	114
Kansas	161	153	269	5,619	5,812	N	0	0	N	N	2	1	7	62	32
Minnesota	—	230	346	8,522	9,750	—	0	12	—	3	5	2	22	162	109
Missouri	253	439	612	17,871	17,772	—	0	1	1	1	—	2	18	147	226
Nebraska§	—	95	176	4,109	4,055	N	0	1	N	N	—	1	16	79	21
North Dakota	27	34	58	1,318	1,263	N	0	0	N	N	1	0	4	9	1
South Dakota	48	51	116	2,089	2,183	N	0	0	N	N	—	1	7	64	27
S. Atlantic	2,112	3,512	4,929	141,672	140,614	—	0	1	3	1	34	14	65	818	570
Delaware	82	68	92	2,796	2,647	N	0	0	N	N	—	0	3	12	4
District of Columbia	60	52	103	1,907	3,029	—	0	0	—	—	—	0	3	12	10
Florida	768	946	1,157	38,394	34,346	N	0	0	N	N	24	6	32	380	260
Georgia	1	644	2,142	23,199	24,862	—	0	0	—	—	7	3	11	164	116
Maryland§	328	334	486	13,830	14,554	—	0	1	3	1	—	0	3	15	26
North Carolina	480	572	1,772	26,400	25,379	N	0	0	N	N	2	0	11	81	70
South Carolina§	—	306	1,306	13,895	15,028	N	0	0	N	N	1	1	13	108	18
Virginia§	367	423	840	18,760	18,674	N	0	0	N	N	—	1	6	38	53
West Virginia	26	58	226	2,491	2,095	N	0	0	N	N	—	0	3	8	13
E.S. Central	533	1,419	1,947	57,121	54,694	—	0	0	—	—	2	3	12	143	181
Alabama§	16	391	756	16,054	12,291	N	0	0	N	N	—	1	10	62	21
Kentucky	10	160	402	6,437	6,976	N	0	0	N	N	—	1	8	31	122
Mississippi	—	374	802	14,472	17,015	—	0	0	—	—	—	0	3	14	2
Tennessee§	507	505	602	20,158	18,412	N	0	0	N	N	2	1	5	36	36
W.S. Central	1,613	2,182	3,605	86,501	86,963	—	0	1	1	—	—	4	29	204	192
Arkansas	200	158	335	6,482	6,870	—	0	0	—	—	—	0	2	18	4
Louisiana	88	265	761	11,366	13,057	—	0	1	1	N	—	0	9	51	74
Oklahoma	375	221	2,159	9,591	9,078	N	0	0	N	N	—	1	4	32	36
Texas§	950	1,408	1,844	59,062	57,958	N	0	0	N	N	—	1	20	103	78
Mountain	658	1,027	1,839	39,466	49,471	25	114	452	4,499	2,102	5	3	39	293	116
Arizona	427	359	881	14,546	16,914	23	111	448	4,397	2,020	3	0	2	22	9
Colorado	—	151	482	4,512	11,938	N	0	0	N	N	—	1	7	58	39
Idaho§	—	50	191	2,236	2,018	N	0	0	N	N	1	0	5	30	14
Montana	—	44	195	1,912	1,827	N	0	0	N	N	—	0	26	105	16
Nevada§	172	77	432	3,920	5,704	2	1	4	49	48	1	0	1	8	11
New Mexico§	—	172	339	7,422	6,648	—	0	3	13	16	—	0	4	16	13
Utah	59	93	170	3,887	3,539	—	1	3	38	15	—	0	3	16	11
Wyoming	—	27	55	1,031	883	—	0	2	2	3	—	0	11	38	3
Pacific	1,889	3,294	5,079	130,121	131,034	37	43	1,179	1,917	1,137	—	2	52	66	279
Alaska	—	84	152	3,247	3,347	—	0	0	—	—	—	0	1	4	3
California	1,189	2,570	4,231	101,948	101,598	37	43	1,179	1,917	1,137	—	0	14	—	162
Hawaii	—	103	135	4,026	4,369	N	0	0	N	N	—	0	1	4	1
Oregon§	307	170	315	6,931	7,020	N	0	0	N	N	—	1	6	58	61
Washington	393	350	604	13,969	14,700	N	0	0	N	N	—	0	38	—	52
American Samoa	U	0	46	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	18	37	—	666	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	75	161	2,945	3,304	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	5	16	178	196	—	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 year 2006 is provisional.
† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005
United States	224	324	1,029	13,190	15,092	3,909	6,519	14,136	259,144	258,672	19	40	142	1,608	1,807
New England	15	24	75	987	1,377	107	107	288	4,325	4,519	2	2	19	129	137
Connecticut	—	0	37	222	298	—	42	241	1,698	1,921	2	0	9	40	40
Maine†	4	2	13	137	173	3	2	6	101	112	—	0	4	17	8
Massachusetts	—	10	18	357	620	82	46	86	1,936	1,951	—	1	7	52	69
New Hampshire	—	0	9	24	51	6	4	9	156	132	—	0	2	7	7
Rhode Island	4	0	25	96	86	14	8	19	381	356	—	0	7	4	7
Vermont†	7	3	12	151	149	2	1	4	53	47	—	0	2	9	6
Mid. Atlantic	39	64	254	2,536	2,719	443	648	1,014	25,393	26,625	6	8	30	333	344
New Jersey	—	8	13	297	358	81	102	143	3,872	4,498	—	1	4	45	71
New York (Upstate)	24	24	227	935	942	154	123	455	4,941	5,341	5	2	27	108	100
New York City	—	15	29	685	720	101	175	357	7,581	8,052	—	1	6	64	62
Pennsylvania	15	15	29	619	699	107	218	399	8,999	8,734	1	3	8	116	111
E.N. Central	23	49	86	1,926	2,695	830	1,288	7,047	50,932	51,436	—	5	14	219	310
Illinois	—	10	21	353	628	179	378	710	15,624	15,623	—	1	6	47	104
Indiana	N	0	0	N	N	136	161	237	6,865	6,402	—	1	11	66	55
Michigan	5	14	22	519	645	419	258	5,880	11,579	8,720	—	0	3	18	19
Ohio	18	16	32	642	629	29	329	648	11,554	16,093	—	2	6	65	95
Wisconsin	—	10	40	412	793	67	134	172	5,310	4,598	—	0	4	23	37
W.N. Central	21	29	260	1,464	1,678	184	366	436	14,545	14,750	4	2	15	118	91
Iowa	—	5	15	232	227	25	34	52	1,404	1,243	—	0	1	1	—
Kansas	3	3	11	151	163	44	44	124	1,578	2,061	—	0	3	14	11
Minnesota	1	1	238	478	691	—	62	105	2,199	2,737	3	0	9	59	38
Missouri	12	10	32	436	382	105	190	251	7,911	7,432	—	0	6	32	29
Nebraska†	3	2	8	94	106	—	23	56	1,062	918	—	0	2	7	12
North Dakota	2	0	7	14	12	4	2	7	94	80	1	0	3	5	1
South Dakota	—	1	7	59	97	6	6	15	297	279	—	0	0	—	—
S. Atlantic	40	49	96	1,984	2,186	1,050	1,555	2,334	63,231	61,470	2	10	26	414	427
Delaware	—	1	4	34	46	28	27	44	1,160	677	—	0	1	1	—
District of Columbia	1	1	5	53	42	18	34	61	1,270	1,675	—	0	1	4	7
Florida	25	18	40	846	772	324	439	554	18,262	15,751	1	3	9	134	104
Georgia	9	10	44	425	586	3	309	1,014	11,436	11,558	—	2	12	80	92
Maryland†	3	4	11	162	165	105	128	186	5,148	5,462	1	1	5	55	59
North Carolina	N	0	0	N	N	490	286	766	13,704	12,179	—	0	9	46	68
South Carolina†	2	1	7	82	89	—	132	704	6,262	6,894	—	1	3	28	29
Virginia†	—	7	50	359	451	66	130	288	5,227	6,722	—	1	8	50	44
West Virginia	—	0	6	23	35	16	17	42	762	552	—	0	4	16	24
E.S. Central	5	8	40	393	335	168	564	864	23,111	21,786	5	2	7	85	96
Alabama†	3	5	29	215	150	5	183	310	7,428	7,029	1	0	5	21	17
Kentucky	N	0	0	N	N	4	55	132	2,305	2,398	—	0	1	4	11
Mississippi	—	0	0	—	—	—	141	436	5,696	5,603	—	0	1	3	—
Tennessee†	2	4	12	178	185	159	188	237	7,682	6,756	4	1	4	57	68
W.S. Central	12	6	31	227	258	591	899	1,430	37,376	35,312	—	1	15	57	97
Arkansas	8	2	6	100	71	103	81	142	3,351	3,574	—	0	2	7	7
Louisiana	—	0	5	24	53	61	161	354	6,950	7,272	—	0	2	8	32
Oklahoma	4	2	24	103	134	140	79	764	3,575	3,603	—	1	14	40	52
Texas†	N	0	0	N	N	287	555	879	23,500	20,863	—	0	2	2	6
Mountain	11	30	65	1,306	1,188	164	217	552	8,904	10,685	—	3	8	160	184
Arizona	5	3	36	130	119	91	92	201	3,632	3,855	—	1	7	74	92
Colorado	—	9	33	439	409	—	41	90	1,595	2,535	—	1	4	42	37
Idaho†	5	3	12	149	115	—	3	15	132	84	—	0	1	4	4
Montana	—	2	11	83	58	—	2	20	150	126	—	0	0	—	—
Nevada†	1	2	8	82	87	56	24	194	1,288	2,233	—	0	1	—	14
New Mexico†	—	1	6	49	70	—	30	64	1,348	1,239	—	0	4	22	21
Utah	—	7	19	344	310	17	17	25	666	552	—	0	4	15	9
Wyoming	—	1	4	30	20	—	2	6	93	61	—	0	1	3	7
Pacific	58	59	202	2,367	2,656	372	803	963	31,327	32,089	—	2	15	93	121
Alaska	—	1	15	75	91	—	11	23	451	462	—	0	2	9	26
California	45	42	105	1,658	1,886	269	659	830	25,780	26,724	—	0	9	21	50
Hawaii	—	1	3	39	55	—	18	29	725	806	—	0	1	14	8
Oregon†	5	8	14	314	349	30	28	58	1,046	1,203	—	1	6	47	37
Washington	8	6	90	281	275	73	74	142	3,325	2,894	—	0	4	2	—
American Samoa	U	0	0	U	U	U	0	2	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	11	—	1	15	—	71	—	0	2	—	9
Puerto Rico	—	2	12	62	215	—	5	16	188	291	—	0	1	1	3
U.S. Virgin Islands	—	0	0	—	—	—	0	5	30	45	—	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 year 2006 is provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

	Hepatitis (viral, acute), by type										Legionellosis				
	A					B									
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	34	68	245	2,527	3,317	42	84	597	3,183	4,110	63	44	127	1,786	1,646
New England	2	3	20	146	378	1	2	9	78	120	4	2	12	103	117
Connecticut	—	1	2	34	43	—	0	3	27	39	2	0	9	40	22
Maine†	—	0	2	6	3	—	0	2	15	12	—	0	2	7	6
Massachusetts	—	1	13	51	240	—	0	5	14	40	—	0	6	27	55
New Hampshire	—	0	16	36	76	—	0	2	12	24	—	0	1	1	9
Rhode Island	2	0	4	11	10	1	0	4	9	1	1	0	10	21	16
Vermont†	—	0	2	8	6	—	0	1	1	4	1	0	3	7	9
Mid. Atlantic	3	6	15	272	540	—	8	55	327	531	38	15	46	660	559
New Jersey	—	2	7	61	112	—	2	8	80	196	—	2	10	79	96
New York (Upstate)	1	1	14	68	83	—	1	43	49	46	30	5	29	260	143
New York City	1	2	9	91	261	—	2	5	67	111	—	2	9	84	85
Pennsylvania	1	1	5	52	84	—	3	9	131	178	8	5	18	237	235
E.N. Central	2	6	12	229	291	5	8	24	316	447	9	8	24	351	342
Illinois	—	1	4	50	106	—	1	7	57	130	—	0	4	21	47
Indiana	1	0	5	24	14	3	0	17	45	33	—	0	3	24	24
Michigan	1	2	8	82	89	—	3	7	105	144	—	2	7	93	94
Ohio	—	1	4	45	43	2	2	10	103	105	9	4	19	180	146
Wisconsin	—	1	3	28	39	—	0	4	6	35	—	0	5	33	31
W.N. Central	—	2	30	104	71	1	4	22	130	215	1	1	15	55	64
Iowa	—	0	2	8	18	—	0	3	14	22	—	0	3	10	5
Kansas	—	0	5	24	14	—	0	2	8	24	—	0	2	4	2
Minnesota	—	0	29	9	3	—	0	13	17	29	1	0	11	12	16
Missouri	—	1	3	39	28	—	2	7	76	112	—	0	3	18	24
Nebraska†	—	0	3	16	8	1	0	2	14	22	—	0	2	7	3
North Dakota	—	0	2	—	—	—	0	0	—	—	—	0	1	—	2
South Dakota	—	0	3	8	—	—	0	1	1	6	—	0	6	4	12
S. Atlantic	13	10	29	435	590	14	23	66	911	1,105	8	9	19	332	315
Delaware	—	0	2	10	5	—	1	4	36	26	—	0	2	8	13
District of Columbia	—	0	2	6	4	—	0	2	5	10	3	0	5	19	9
Florida	11	4	13	176	234	11	8	19	333	380	2	3	9	132	90
Georgia	1	1	7	51	112	2	3	7	127	169	—	0	4	15	28
Maryland†	—	1	6	53	59	—	3	10	131	123	2	1	6	67	88
North Carolina	—	0	20	67	70	—	0	23	123	128	—	0	5	29	24
South Carolina†	1	0	3	21	35	1	2	7	67	122	1	0	1	3	12
Virginia†	—	1	11	46	67	—	1	18	43	115	—	1	7	49	36
West Virginia	—	0	3	5	4	—	0	18	46	32	—	0	3	10	15
E.S. Central	2	2	8	102	219	2	6	15	254	290	1	1	9	71	68
Alabama†	—	0	3	13	41	—	1	8	79	69	—	0	2	9	12
Kentucky	1	0	5	31	23	1	1	5	58	57	—	0	4	24	25
Mississippi	—	0	1	5	17	—	0	2	11	44	—	0	1	1	3
Tennessee†	1	1	5	53	138	1	2	8	106	120	1	1	7	37	28
W.S. Central	—	3	77	138	381	9	14	315	592	497	—	0	32	43	39
Arkansas	—	0	9	35	16	—	1	4	37	55	—	0	3	3	5
Louisiana	—	0	4	15	56	—	0	4	28	64	—	0	2	4	1
Oklahoma	—	0	2	6	4	9	0	17	52	39	—	0	3	1	7
Texas†	—	2	73	82	305	—	11	295	475	339	—	0	26	35	26
Mountain	1	5	18	209	261	—	4	39	142	437	—	2	8	99	82
Arizona	1	2	16	121	140	—	1	23	34	280	—	1	5	33	20
Colorado	—	1	4	33	34	—	1	5	29	46	—	0	2	21	18
Idaho†	—	0	2	9	20	—	0	2	10	13	—	0	3	11	3
Montana	—	0	3	9	7	—	0	7	—	3	—	0	1	5	5
Nevada†	—	0	2	11	19	—	1	5	30	42	—	0	2	7	17
New Mexico†	—	0	3	12	21	—	0	2	15	18	—	0	1	4	3
Utah	—	0	2	11	19	—	0	5	24	33	—	0	1	18	12
Wyoming	—	0	1	3	1	—	0	1	—	2	—	0	0	—	4
Pacific	11	19	163	892	586	10	9	61	433	468	2	1	9	72	60
Alaska	—	0	0	—	4	—	0	1	5	7	—	0	1	—	—
California	8	15	162	805	485	9	7	41	327	314	2	1	9	72	57
Hawaii	—	0	2	9	21	—	0	1	6	6	—	0	1	—	3
Oregon†	—	0	5	38	38	1	1	5	56	84	N	0	0	N	N
Washington	3	1	13	40	38	—	0	18	39	57	—	0	0	—	—
American Samoa	U	0	0	U	1	U	0	0	U	—	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	2	—	0	0	—	18	—	0	0	—	—
Puerto Rico	—	0	5	23	58	—	1	8	24	40	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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* Incidence data for reporting year 2006 is provisional.
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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

Reporting area	Lyme disease Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Malaria Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005
United States	131	248	2,153	13,500	18,133	10	25	125	974	1,124
New England	56	32	780	2,298	3,166	—	1	11	44	63
Connecticut	37	13	753	1,556	519	—	0	3	11	16
Maine†	16	1	34	192	219	—	0	1	4	5
Massachusetts	—	1	35	33	2,158	—	0	3	19	34
New Hampshire	1	6	60	433	194	—	0	3	9	5
Rhode Island	—	0	5	1	32	—	0	8	—	2
Vermont†	2	1	14	83	44	—	0	1	1	1
Mid. Atlantic	62	151	1,176	7,783	10,545	1	5	13	204	302
New Jersey	—	21	168	1,655	3,137	—	1	3	28	70
New York (Upstate)	57	74	1,150	3,301	3,207	1	1	11	37	40
New York City	—	1	17	101	356	—	2	6	104	162
Pennsylvania	5	39	227	2,726	3,845	—	1	3	35	30
E.N. Central	—	10	141	1,210	1,625	—	2	7	102	121
Illinois	—	0	2	—	120	—	1	4	42	67
Indiana	—	0	3	16	27	—	0	3	9	4
Michigan	—	1	6	42	47	—	0	2	16	19
Ohio	—	1	5	37	51	—	1	3	27	20
Wisconsin	—	9	136	1,115	1,380	—	0	3	8	11
W.N. Central	1	6	168	500	684	1	0	32	34	43
Iowa	—	0	8	77	88	—	0	1	1	8
Kansas	—	0	2	4	3	1	0	2	7	5
Minnesota	—	4	167	398	575	—	0	30	14	11
Missouri	1	0	3	12	13	—	0	1	6	16
Nebraska†	—	0	1	8	3	—	0	1	4	3
North Dakota	—	0	3	—	—	—	0	1	1	—
South Dakota	—	0	1	1	2	—	0	1	1	—
S. Atlantic	6	31	110	1,440	1,903	3	7	16	265	246
Delaware	2	8	28	414	576	—	0	1	5	3
District of Columbia	—	0	7	41	8	—	0	2	3	8
Florida	—	1	5	35	34	1	1	6	52	43
Georgia	—	0	1	3	5	1	1	6	70	44
Maryland†	2	14	67	685	1,012	—	1	5	57	89
North Carolina	1	0	4	25	44	1	0	8	25	25
South Carolina†	1	0	2	14	19	—	0	2	9	7
Virginia†	—	3	25	214	189	—	1	9	42	26
West Virginia	—	0	44	9	16	—	0	2	2	1
E.S. Central	1	0	3	23	31	1	0	3	20	24
Alabama†	—	0	1	7	2	1	0	2	9	4
Kentucky	—	0	2	7	5	—	0	2	3	8
Mississippi	—	0	0	—	—	—	0	1	3	—
Tennessee†	1	0	2	9	24	—	0	2	5	12
W.S. Central	—	0	3	15	71	—	1	31	55	106
Arkansas	—	0	1	—	4	—	0	1	2	5
Louisiana	—	0	0	—	3	—	0	1	4	4
Oklahoma	—	0	0	—	—	—	0	2	7	9
Texas†	—	0	3	15	64	—	1	29	42	88
Mountain	1	0	4	25	20	—	1	9	56	46
Arizona	1	0	2	5	7	—	0	9	18	10
Colorado	—	0	1	5	—	—	0	2	11	23
Idaho†	—	0	2	5	2	—	0	1	1	—
Montana	—	0	0	—	—	—	0	1	2	—
Nevada†	—	0	1	2	3	—	0	1	3	3
New Mexico†	—	0	1	1	3	—	0	1	4	3
Utah	—	0	1	6	2	—	0	2	17	5
Wyoming	—	0	1	1	3	—	0	0	—	2
Pacific	4	4	17	206	88	4	5	13	194	173
Alaska	—	0	1	2	4	—	0	4	23	5
California	4	4	16	192	58	3	4	10	130	127
Hawaii	N	0	0	N	N	—	0	2	4	15
Oregon†	—	0	2	9	18	—	0	1	9	11
Washington	—	0	3	3	8	1	0	5	28	15
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	—	3
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

	Meningococcal disease, invasive										Pertussis				
	All serogroups					Serogroup unknown									
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	6	20	85	855	979	5	13	58	561	596	87	264	2,877	10,218	18,021
New England	—	1	3	35	62	—	0	2	25	22	2	28	83	970	1,097
Connecticut	—	0	2	9	12	—	0	2	2	1	—	1	5	35	55
Maine†	—	0	1	4	2	—	0	1	3	2	—	1	11	63	43
Massachusetts	—	0	2	15	28	—	0	2	15	5	—	18	43	594	831
New Hampshire	—	0	2	5	12	—	0	2	5	12	2	2	36	139	61
Rhode Island	—	0	1	—	3	—	0	0	—	—	—	0	17	45	29
Vermont†	—	0	1	2	5	—	0	0	—	2	—	1	14	94	78
Mid. Atlantic	—	3	13	129	122	—	2	11	98	93	19	34	137	1,438	1,075
New Jersey	—	0	2	11	28	—	0	2	11	28	—	4	13	161	147
New York (Upstate)	—	1	7	31	33	—	0	5	4	12	16	15	123	661	410
New York City	—	1	4	50	19	—	1	4	50	19	—	1	8	64	87
Pennsylvania	—	1	5	37	42	—	0	5	33	34	3	12	26	552	431
E.N. Central	2	3	11	98	122	2	1	6	67	99	18	40	133	1,447	3,072
Illinois	—	0	4	18	27	—	0	4	18	27	—	7	35	230	720
Indiana	1	0	5	20	18	1	0	1	7	8	—	4	75	189	253
Michigan	—	0	3	19	26	—	0	3	8	15	2	8	30	410	250
Ohio	1	1	5	38	32	1	1	4	31	30	16	14	30	475	927
Wisconsin	—	0	2	3	19	—	0	2	3	19	—	4	29	143	922
W.N. Central	2	1	4	47	66	1	0	3	16	29	8	28	552	981	3,004
Iowa	1	0	2	14	15	1	0	1	6	1	—	6	63	212	796
Kansas	—	0	1	1	9	—	0	1	1	9	3	7	28	238	352
Minnesota	1	0	2	12	13	—	0	1	3	5	1	0	485	161	966
Missouri	—	0	2	13	22	—	0	1	2	11	2	7	42	249	368
Nebraska†	—	0	2	5	4	—	0	1	3	3	2	2	9	75	236
North Dakota	—	0	1	1	—	—	0	1	1	—	—	0	25	26	115
South Dakota	—	0	1	1	3	—	0	0	—	—	—	0	4	20	171
S. Atlantic	—	3	14	149	184	—	2	7	61	78	8	20	46	790	1,152
Delaware	—	0	1	4	4	—	0	1	4	4	—	0	1	3	15
District of Columbia	—	0	1	1	5	—	0	1	1	4	—	0	3	6	7
Florida	—	1	6	59	70	—	0	5	21	28	4	4	9	176	173
Georgia	—	0	2	12	14	—	0	2	12	14	—	0	3	17	41
Maryland†	—	0	2	11	19	—	0	1	2	3	—	3	9	98	166
North Carolina	—	0	11	24	28	—	0	3	7	6	—	0	22	155	98
South Carolina†	—	0	2	18	13	—	0	2	8	8	4	4	22	145	329
Virginia†	—	0	4	15	25	—	0	3	6	9	—	2	27	155	284
West Virginia	—	0	2	5	6	—	0	0	—	2	—	0	9	35	39
E.S. Central	1	1	4	32	49	1	1	4	26	38	19	7	25	299	442
Alabama†	—	0	1	5	5	—	0	1	4	3	16	1	16	83	73
Kentucky	—	0	2	7	17	—	0	2	7	17	—	1	5	53	132
Mississippi	—	0	1	3	5	—	0	1	3	5	—	1	4	37	48
Tennessee†	1	0	2	17	22	1	0	2	12	13	3	2	10	126	189
W.S. Central	—	1	23	52	96	—	0	6	23	24	2	16	360	546	1,889
Arkansas	—	0	3	9	13	—	0	2	6	3	1	1	21	49	252
Louisiana	—	0	2	6	29	—	0	1	3	6	1	0	3	13	44
Oklahoma	—	0	4	8	14	—	0	0	—	2	—	0	124	18	1
Texas†	—	1	16	29	40	—	0	4	14	13	—	14	215	466	1,592
Mountain	—	1	5	58	80	—	0	4	27	21	7	60	230	2,135	3,313
Arizona	—	0	3	16	31	—	0	3	16	10	5	8	177	419	826
Colorado	—	0	2	19	17	—	0	1	2	—	—	20	40	650	1,070
Idaho†	—	0	2	3	4	—	0	2	2	3	1	2	8	78	177
Montana	—	0	1	4	—	—	0	1	2	—	—	2	9	97	551
Nevada†	—	0	1	3	12	—	0	0	—	2	1	0	9	51	43
New Mexico†	—	0	1	4	5	—	0	1	1	4	—	2	6	62	155
Utah	—	0	1	5	11	—	0	0	—	2	—	14	39	716	447
Wyoming	—	0	2	4	—	—	0	2	4	—	—	1	8	62	44
Pacific	1	5	29	255	198	1	5	25	218	192	4	41	1,334	1,612	2,977
Alaska	—	0	1	2	3	—	0	1	2	3	—	2	15	61	119
California	1	3	14	157	129	1	3	14	157	129	—	26	1,136	1,129	1,424
Hawaii	—	0	1	7	11	—	0	1	7	6	—	2	4	68	144
Oregon†	—	1	7	60	36	—	1	4	41	36	—	2	8	94	601
Washington	—	0	25	29	19	—	0	11	11	18	4	7	195	260	689
American Samoa	U	0	0	—	—	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	—	—	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	1	—	0	0	—	1	—	0	0	—	2
Puerto Rico	—	0	1	4	7	—	0	1	4	7	—	0	1	1	6
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

	Rabies, animal					Rocky Mountain spotted fever					Salmonellosis				
		Previous 52 weeks					Previous 52 weeks					Previous 52 weeks			
Reporting area	Current week	Med	Max	Cum 2006	Cum 2005	Current week	Med	Max	Cum 2006	Cum 2005	Current week	Med	Max	Cum 2006	Cum 2005
United States	112	114	174	4,859	4,906	51	39	246	1,700	1,369	660	803	2,291	31,890	34,468
New England	12	12	26	546	587	—	0	2	2	7	14	30	403	1,570	1,813
Connecticut	5	3	14	165	164	—	0	0	—	—	—	0	395	395	402
Maine†	1	2	7	89	50	N	0	0	N	N	—	2	10	91	140
Massachusetts	—	4	17	178	291	—	0	1	1	5	—	17	53	782	962
New Hampshire	1	0	5	40	12	—	0	1	1	1	7	3	24	169	146
Rhode Island	—	0	4	21	20	—	0	2	—	1	4	0	17	77	81
Vermont†	5	1	4	53	50	—	0	0	—	—	3	1	6	56	82
Mid. Atlantic	—	23	60	1,110	797	1	1	6	63	82	51	84	272	3,883	4,181
New Jersey	N	0	0	N	N	—	0	2	7	25	—	14	43	644	822
New York (Upstate)	—	10	22	416	444	—	0	2	4	1	33	22	233	996	987
New York City	—	0	5	27	26	—	0	3	16	6	1	23	43	943	981
Pennsylvania	—	14	42	667	327	1	1	3	36	50	17	29	67	1,300	1,391
E.N. Central	1	1	18	142	163	—	0	6	32	38	40	96	173	3,995	4,713
Illinois	1	0	7	45	47	—	0	1	3	11	—	25	45	856	1,554
Indiana	—	0	2	11	11	—	0	1	5	—	2	15	67	712	508
Michigan	—	0	5	41	35	—	0	1	2	5	4	16	32	765	771
Ohio	—	0	9	45	70	—	0	4	21	20	33	23	56	1,015	1,081
Wisconsin	N	0	0	N	N	—	0	1	1	2	1	15	27	647	799
W.N. Central	2	5	20	256	285	2	2	15	200	143	31	43	107	2,063	2,108
Iowa	—	1	7	53	—	—	0	1	4	6	—	7	21	343	356
Kansas	—	1	5	63	71	1	0	1	6	5	2	6	16	275	305
Minnesota	1	1	6	37	62	—	0	2	4	2	12	10	60	570	455
Missouri	1	1	8	66	66	1	2	11	165	118	15	14	36	606	653
Nebraska†	—	0	0	—	—	—	0	5	21	7	1	4	9	148	179
North Dakota	—	0	7	16	28	—	0	1	—	—	1	0	46	20	29
South Dakota	—	0	4	21	58	—	0	0	—	5	—	3	7	101	131
S. Atlantic	86	36	118	1,689	1,756	42	15	94	942	681	308	207	450	8,574	9,591
Delaware	—	0	0	—	—	—	0	3	18	7	2	2	9	125	109
District of Columbia	—	0	0	—	—	—	0	1	1	2	1	1	7	51	45
Florida	—	0	99	140	201	—	0	3	15	13	166	95	228	3,615	3,821
Georgia	54	2	9	154	218	1	0	3	29	84	54	27	100	1,311	1,551
Maryland†	—	7	13	254	315	—	1	6	60	62	8	12	29	549	652
North Carolina	12	9	22	418	399	40	15	87	703	356	55	32	130	1,286	1,220
South Carolina†	—	3	11	137	180	1	0	5	30	62	15	21	51	791	1,142
Virginia†	20	11	27	498	393	—	2	13	83	89	—	20	57	748	912
West Virginia	—	1	13	88	50	—	0	2	3	6	7	2	19	98	139
E.S. Central	4	4	16	213	132	6	5	29	303	250	37	54	149	2,310	2,391
Alabama†	—	1	8	69	68	2	1	9	97	64	21	15	71	770	556
Kentucky	2	0	4	25	16	—	0	1	1	3	4	8	23	361	403
Mississippi	—	0	2	4	5	—	0	1	2	13	—	12	39	578	760
Tennessee†	2	2	9	115	43	4	3	21	203	170	12	14	31	601	672
W.S. Central	—	14	34	549	758	—	1	161	105	141	57	83	922	3,017	3,403
Arkansas	—	0	4	26	32	—	0	10	46	102	36	15	45	740	604
Louisiana	—	0	0	—	—	—	0	1	2	6	1	12	33	455	767
Oklahoma	—	1	9	52	67	—	0	154	35	7	20	7	48	403	333
Texas†	—	12	29	471	659	—	0	4	22	26	—	45	839	1,419	1,699
Mountain	1	3	27	180	239	—	1	6	46	25	15	53	87	2,039	1,894
Arizona	1	2	10	120	155	—	0	6	10	12	11	16	67	659	517
Colorado	—	0	1	—	16	—	0	1	2	4	—	12	30	515	486
Idaho†	—	0	25	25	—	—	0	3	13	3	2	3	9	142	115
Montana	—	0	2	13	15	—	0	2	2	1	—	3	16	108	76
Nevada†	—	0	1	1	14	—	0	0	—	—	2	4	20	165	150
New Mexico†	—	0	2	7	9	—	0	2	7	3	—	4	13	183	216
Utah	—	0	1	9	14	—	0	2	6	—	—	5	15	230	264
Wyoming	—	0	2	5	16	—	0	1	6	2	—	1	5	37	70
Pacific	6	3	9	174	189	—	0	1	7	2	107	109	426	4,439	4,374
Alaska	—	0	4	14	1	—	0	0	—	—	—	1	7	62	46
California	6	3	9	143	181	—	0	1	5	—	95	86	292	3,472	3,321
Hawaii	—	0	0	—	—	—	0	0	—	—	—	4	10	185	244
Oregon†	—	0	4	17	7	—	0	1	2	2	1	7	16	337	338
Washington	U	0	0	U	U	N	0	0	N	N	11	7	124	383	425
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	7
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	1	3	—	30
Puerto Rico	—	1	6	66	58	N	0	0	N	N	—	6	35	189	513
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 year 2006 is provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

Reporting area	Shiga toxin-producing *E. coli* (STEC)†					Shigellosis					Streptococcal disease, invasive, group A				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005
United States	31	56	297	2,340	2,525	231	244	1,013	9,403	11,678	25	90	283	3,941	3,703
New England	1	3	60	219	186	1	4	60	210	264	1	4	15	178	237
Connecticut	—	0	59	59	51	—	0	54	54	47	U	0	3	U	83
Maine§	—	0	8	30	28	—	0	2	3	13	—	0	2	15	12
Massachusetts	—	1	9	82	72	—	3	11	128	162	—	2	6	101	108
New Hampshire	1	0	3	23	14	—	0	4	7	12	—	0	9	44	16
Rhode Island	—	0	2	8	5	1	0	6	12	14	1	0	3	6	9
Vermont§	—	0	2	2	16	—	0	2	6	16	—	0	2	12	9
Mid. Atlantic	3	4	107	160	294	4	16	72	671	1,060	5	18	43	757	738
New Jersey	—	0	3	3	63	—	4	26	210	270	—	3	8	123	152
New York (Upstate)	—	0	103	12	112	2	4	60	190	222	4	4	32	254	212
New York City	—	0	4	27	13	1	5	12	202	350	—	3	8	126	144
Pennsylvania	—	0	5	5	106	1	1	5	69	218	1	6	13	254	230
E.N. Central	2	11	53	512	521	2	19	38	707	915	1	14	43	671	767
Illinois	—	1	7	59	123	—	7	14	231	315	—	3	11	144	256
Indiana	1	1	8	70	54	—	2	18	112	127	1	2	11	96	86
Michigan	1	1	7	71	78	—	3	10	119	195	—	3	12	184	184
Ohio	—	3	18	150	132	2	3	11	132	85	—	4	19	205	161
Wisconsin	—	2	40	162	134	—	3	9	113	193	—	1	4	42	80
W.N. Central	4	8	35	348	432	36	35	77	1,301	1,252	—	5	57	287	226
Iowa	—	2	8	109	89	—	2	10	80	70	N	0	0	N	N
Kansas	—	0	3	—	42	1	3	20	112	171	—	1	5	48	35
Minnesota	3	3	27	190	139	18	2	19	142	72	—	0	52	136	86
Missouri	1	2	13	145	84	8	13	69	583	797	—	1	5	61	57
Nebraska§	—	1	8	55	44	1	2	14	112	90	—	0	4	25	19
North Dakota	—	0	15	—	6	8	0	18	71	4	—	0	5	9	9
South Dakota	—	0	5	36	28	—	4	21	201	48	—	0	3	8	20
S. Atlantic	3	7	39	356	330	81	54	133	2,247	1,774	7	22	43	935	748
Delaware	—	0	2	7	8	—	0	2	8	11	—	0	2	10	5
District of Columbia	—	0	1	2	—	—	0	2	14	11	—	0	2	13	8
Florida	2	2	29	77	78	46	26	73	1,110	863	5	6	16	239	194
Georgia	—	1	6	70	45	32	17	56	759	468	2	4	11	178	162
Maryland§	1	1	8	71	67	1	2	10	95	76	—	4	12	169	147
North Carolina	2	1	10	92	46	2	1	21	127	149	—	0	26	138	104
South Carolina§	—	0	2	6	9	—	1	9	70	87	—	1	6	52	31
Virginia§	—	0	8	—	75	—	1	8	60	108	—	2	11	110	75
West Virginia	—	0	2	7	2	—	0	2	4	1	—	0	6	26	22
E.S. Central	5	3	21	189	138	15	13	37	553	1,034	2	3	11	164	149
Alabama§	4	0	5	38	26	6	3	20	186	197	N	0	0	N	N
Kentucky	2	1	12	79	52	9	4	12	180	262	—	0	5	34	30
Mississippi	—	0	0	—	8	—	1	8	65	77	—	0	0	—	—
Tennessee§	—	0	4	24	52	—	3	12	122	498	2	3	9	130	119
W.S. Central	1	1	52	39	85	8	34	596	1,168	2,894	5	7	58	311	258
Arkansas	1	0	7	21	11	2	1	7	83	52	—	0	5	24	16
Louisiana	—	0	1	—	18	1	1	25	98	120	—	0	1	7	5
Oklahoma	—	0	8	18	23	5	3	286	105	536	4	2	14	85	94
Texas§	—	1	44	64	33	—	28	308	882	2,186	1	4	43	195	143
Mountain	3	5	16	245	244	24	23	82	1,024	688	3	11	78	551	494
Arizona	3	1	8	88	23	22	12	32	527	361	2	6	57	292	210
Colorado	—	1	8	87	64	—	3	18	180	126	—	3	8	112	151
Idaho§	1	1	7	61	34	—	0	4	15	14	—	0	2	8	3
Montana	—	0	1	—	14	—	0	6	13	5	—	0	0	—	—
Nevada§	4	0	3	21	18	2	1	20	98	45	1	0	3	13	8
New Mexico§	—	0	1	4	22	—	2	10	121	99	—	1	7	63	69
Utah	—	1	13	103	61	—	1	6	62	33	—	1	7	60	50
Wyoming	—	0	3	17	8	—	0	3	8	5	—	0	1	3	3
Pacific	9	7	55	272	295	60	37	148	1,522	1,797	1	2	9	87	86
Alaska	—	0	1	—	9	—	0	2	9	11	—	0	0	—	—
California	4	4	18	168	107	47	31	104	1,245	1,541	—	0	0	—	—
Hawaii	—	0	2	12	10	—	1	4	35	28	1	2	9	87	86
Oregon§	—	2	47	102	90	—	2	31	110	112	N	0	0	N	N
Washington	5	1	32	92	79	13	2	43	123	105	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	7	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	3	—	16	—	0	0	—	—
Puerto Rico	—	0	0	—	2	—	0	2	12	5	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2006 is provisional.
† Includes *E. coli* O157:H7; Shiga toxin positive, serogroup non-0157; and Shiga toxin positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease Drug resistant, all ages					Syphilis, primary and secondary					Varicella (chickenpox)				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005
United States	32	52	334	2,022	2,072	96	173	334	6,921	6,656	441	802	3,204	32,112	21,884
New England	—	1	24	30	176	5	4	17	163	162	14	37	144	1,169	4,153
Connecticut	U	0	7	U	74	—	0	11	34	34	U	0	58	U	1,238
Maine†	—	0	2	8	N	—	0	2	7	1	—	4	20	151	247
Massachusetts	—	0	6	—	76	4	2	6	101	100	—	0	54	94	1,859
New Hampshire	—	0	0	—	—	—	0	2	10	13	6	7	47	387	245
Rhode Island	—	0	11	10	17	1	0	6	9	13	—	0	0	—	—
Vermont†	—	0	2	12	9	—	0	1	2	1	8	12	50	537	564
Mid. Atlantic	1	3	15	127	172	12	21	35	879	821	77	103	183	3,737	3,674
New Jersey	N	0	0	N	N	2	3	7	132	112	—	0	0	—	—
New York (Upstate)	—	1	10	45	66	4	2	14	121	64	—	0	0	—	—
New York City	U	0	0	U	U	1	10	23	418	491	—	0	0	—	—
Pennsylvania	1	2	9	82	106	5	5	10	208	154	77	103	183	3,737	3,674
E.N. Central	13	11	41	456	517	6	18	38	697	722	168	237	587	11,467	4,546
Illinois	—	0	3	15	27	—	8	23	325	404	—	2	7	68	79
Indiana	5	2	21	123	161	2	1	4	70	53	—	0	475	475	251
Michigan	—	0	4	17	35	1	2	19	91	65	51	102	174	3,361	2,729
Ohio	8	6	32	301	294	3	4	8	161	172	117	93	420	6,933	1,141
Wisconsin	N	0	0	N	N	—	1	4	50	28	—	12	52	630	346
W.N. Central	1	1	191	97	35	—	5	11	197	202	23	23	84	1,135	367
Iowa	N	0	0	N	N	—	0	2	14	8	N	0	0	N	N
Kansas	N	0	0	N	N	—	0	2	16	15	3	0	8	27	—
Minnesota	—	0	191	60	—	—	0	3	21	58	—	0	0	—	—
Missouri	1	1	3	36	28	—	3	8	130	116	19	19	82	1,025	255
Nebraska†	—	0	0	—	2	—	0	1	3	4	—	0	0	—	—
North Dakota	—	0	1	—	2	—	0	1	1	—	—	0	25	44	20
South Dakota	—	0	1	1	3	—	0	3	12	1	1	1	12	39	92
S. Atlantic	14	26	53	1,052	853	28	41	186	1,650	1,642	34	90	860	3,411	1,736
Delaware	—	0	2	—	1	—	0	2	16	9	—	1	5	52	27
District of Columbia	—	0	3	23	13	—	2	9	100	86	4	0	5	34	28
Florida	12	13	36	586	466	7	15	29	584	566	—	0	0	—	—
Georgia	2	8	29	348	272	1	7	147	280	350	—	0	0	—	—
Maryland†	—	0	0	—	—	5	5	19	234	250	—	0	0	—	—
North Carolina	N	0	0	N	N	12	5	17	241	210	—	0	0	—	—
South Carolina†	—	0	0	—	—	—	1	6	54	61	10	16	53	836	472
Virginia†	N	0	0	N	N	3	3	12	136	107	—	30	812	1,302	368
West Virginia	—	1	14	95	101	—	0	1	5	3	20	27	70	1,187	841
E.S. Central	3	3	13	155	145	3	13	25	568	363	1	1	70	94	95
Alabama†	N	0	0	N	N	—	5	19	255	117	1	1	70	93	95
Kentucky	1	0	5	30	26	—	1	8	56	37	N	0	0	N	N
Mississippi	—	0	0	—	1	—	1	6	48	39	—	0	1	1	—
Tennessee†	2	0	3	13	125	118	3	5	13	209	170	N	0	0	N	N
W.S. Central	—	0	5	18	100	39	27	43	1,217	976	124	183	1,757	8,990	5,223
Arkansas	—	0	3	12	12	—	1	5	60	40	38	7	110	636	3
Louisiana	—	0	4	6	88	27	4	17	216	204	—	0	8	48	110
Oklahoma	N	0	0	N	N	2	1	6	59	31	—	0	0	—	—
Texas†	N	0	0	N	N	10	21	36	882	701	86	170	1,647	8,306	5,110
Mountain	—	2	8	87	74	1	8	25	325	342	—	54	138	2,109	2,090
Arizona	N	0	0	N	N	1	3	16	145	137	—	0	0	—	—
Colorado	N	0	0	N	N	—	1	3	32	39	—	33	76	1,152	1,450
Idaho†	N	0	0	N	N	—	0	1	2	20	—	0	0	—	—
Montana	—	0	1	—	—	—	0	1	1	5	—	0	2	2	—
Nevada†	—	0	3	12	29	—	1	12	85	91	—	0	3	7	2
New Mexico†	—	0	1	1	—	—	1	5	52	42	—	3	34	307	175
Utah	—	0	8	34	23	—	0	1	8	8	—	11	55	608	412
Wyoming	—	1	4	40	22	—	0	0	—	—	—	0	8	33	51
Pacific	—	0	0	—	—	2	33	49	1,225	1,426	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	4	9	6	—	0	0	—	—
California	N	0	0	N	N	1	28	40	1,045	1,270	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	2	15	9	N	0	0	N	N
Oregon†	N	0	0	N	N	1	0	6	14	26	N	0	0	N	N
Washington	N	0	0	N	N	—	3	10	142	115	N	0	0	N	N
American Samoa	—	0	0	—	—	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	—	0	0	—	—	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	3	—	4	12	—	393
Puerto Rico	N	0	0	N	N	—	2	10	86	167	—	8	47	284	560
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2006 is provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 14, 2006, and October 15, 2005 (41st Week)*

Reporting area	West Nile virus disease† Neuroinvasive: Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Non-neuroinvasive: Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005
United States	—	1	165	1,197	1,274	—	1	372	2,145	1,665
New England	—	0	3	8	9	—	0	2	3	4
Connecticut	—	0	2	6	4	—	0	1	2	2
Maine§	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	2	4	—	0	1	1	2
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island	—	0	0	—	1	—	0	0	—	—
Vermont§	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	0	6	16	47	—	0	3	6	22
New Jersey	—	0	2	2	3	—	0	1	2	3
New York (Upstate)	—	0	0	—	19	—	0	0	—	5
New York City	—	0	4	7	11	—	0	2	3	3
Pennsylvania	—	0	2	7	14	—	0	1	1	11
E.N. Central	—	0	37	204	258	—	0	18	80	154
Illinois	—	0	21	111	136	—	0	16	58	114
Indiana	—	0	5	22	11	—	0	2	5	11
Michigan	—	0	8	31	54	—	0	1	2	8
Ohio	—	0	11	29	46	—	0	3	7	15
Wisconsin	—	0	2	11	11	—	0	2	8	6
W.N. Central	—	0	32	196	166	—	0	74	378	462
Iowa	—	0	2	17	14	—	0	4	12	23
Kansas	—	0	3	14	15	—	0	3	10	N
Minnesota	—	0	6	29	18	—	0	7	34	27
Missouri	—	0	13	46	17	—	0	2	11	13
Nebraska§	—	0	7	33	55	—	0	24	123	132
North Dakota	—	0	5	20	12	—	0	27	115	74
South Dakota	—	0	7	37	35	—	0	22	73	193
S. Atlantic	—	0	3	8	32	—	0	3	6	26
Delaware	—	0	0	—	1	—	0	1	—	—
District of Columbia	—	0	0	—	3	—	0	1	1	1
Florida	—	0	2	3	10	—	0	0	—	11
Georgia	—	0	1	2	8	—	0	2	4	10
Maryland§	—	0	1	2	4	—	0	1	1	1
North Carolina	—	0	0	—	2	—	0	0	—	2
South Carolina§	—	0	1	—	4	—	0	0	—	—
Virginia§	—	0	0	—	—	—	0	0	—	1
West Virginia	—	0	1	1	—	N	0	0	N	N
E.S. Central	—	0	12	88	63	—	0	15	87	38
Alabama§	—	0	1	4	6	—	0	2	—	4
Kentucky	—	0	1	3	4	—	0	1	1	—
Mississippi	—	0	9	74	39	—	0	15	84	31
Tennessee§	—	0	3	7	14	—	0	2	2	3
W.S. Central	—	1	57	300	260	—	0	26	155	148
Arkansas	—	0	4	21	12	—	0	2	5	15
Louisiana	—	0	14	66	109	—	0	8	49	54
Oklahoma	—	0	6	22	17	—	0	3	12	13
Texas§	—	0	37	191	122	—	0	15	89	66
Mountain	—	0	59	303	137	—	0	220	1,214	232
Arizona	—	0	6	24	45	—	0	6	27	53
Colorado	—	0	10	60	21	—	0	48	250	85
Idaho§	—	0	29	108	3	—	0	149	710	10
Montana	—	0	3	12	8	—	0	7	21	17
Nevada§	—	0	9	34	14	—	0	13	74	17
New Mexico§	—	0	1	1	19	—	0	1	3	13
Utah	—	0	8	50	21	—	0	17	93	31
Wyoming	—	0	7	14	6	—	0	7	36	6
Pacific	—	0	15	74	302	—	0	45	216	579
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	15	70	301	—	0	33	171	573
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon§	—	0	2	4	1	—	0	12	42	6
Washington	—	0	0	—	—	—	0	2	3	—
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2006 is provisional.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (proposed) (ArboNET Surveillance).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending October 14, 2006 (41st Week)

Reporting Area	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1	Total
New England	474	328	113	17	7	9	34
Boston, MA	138	95	30	6	2	5	9
Bridgeport, CT	40	25	11	—	2	2	3
Cambridge, MA	14	12	2	—	—	—	1
Fall River, MA	20	17	2	1	—	—	2
Hartford, CT	48	35	11	1	1	—	7
Lowell, MA	16	12	3	—	—	1	1
Lynn, MA	6	6	—	—	—	—	—
New Bedford, MA	13	11	1	—	1	—	2
New Haven, CT	U	U	U	U	U	U	U
Providence, RI	47	32	12	2	1	—	2
Somerville, MA	3	3	—	—	—	—	—
Springfield, MA	52	28	18	6	—	—	3
Waterbury, CT	30	21	8	—	—	1	—
Worcester, MA	47	31	15	1	—	—	4
Mid. Atlantic	1,976	1,349	429	128	38	29	113
Albany, NY	39	32	7	—	—	—	3
Allentown, PA	22	18	3	1	—	—	1
Buffalo, NY	85	54	18	7	2	3	10
Camden, NJ	32	20	7	1	1	3	3
Elizabeth, NJ	13	10	2	—	—	1	1
Erie, PA	55	43	8	2	1	1	1
Jersey City, NJ	24	19	4	1	—	—	2
New York City, NY	991	682	215	60	20	12	43
Newark, NJ	34	16	11	6	—	1	—
Paterson, NJ	20	10	9	1	—	—	4
Philadelphia, PA	272	155	80	22	10	5	8
Pittsburgh, PA§	23	12	7	4	—	—	3
Reading, PA	39	30	4	3	—	2	6
Rochester, NY	148	113	27	6	1	1	17
Schenectady, NY	15	9	4	2	—	—	—
Scranton, PA	26	22	4	—	—	—	3
Syracuse, NY	79	65	6	6	2	—	7
Trenton, NJ	34	17	12	5	—	—	—
Utica, NY	9	9	—	—	—	—	—
Yonkers, NY	16	13	1	1	1	—	1
E.N. Central	2,083	1,350	508	133	45	47	126
Akron, OH	58	42	12	1	3	—	9
Canton, OH	38	26	9	3	—	—	4
Chicago, IL	352	221	92	23	9	7	25
Cincinnati, OH	92	53	21	10	4	4	5
Cleveland, OH	240	173	49	11	2	5	11
Columbus, OH	188	132	36	11	1	8	17
Dayton, OH	128	92	28	4	2	2	10
Detroit, MI	160	86	54	12	5	3	11
Evansville, IN	47	32	12	2	1	—	4
Fort Wayne, IN	75	50	16	7	1	1	6
Gary, IN	16	9	5	1	—	1	—
Grand Rapids, MI	47	28	14	3	1	1	6
Indianapolis, IN	202	105	59	23	9	6	6
Lansing, MI	58	36	15	6	—	1	3
Milwaukee, WI	95	65	25	3	1	1	1
Peoria, IL	43	27	6	6	1	3	2
Rockford, IL	46	29	13	1	2	1	1
South Bend, IN	54	36	14	1	1	2	1
Toledo, OH	82	56	19	4	2	1	2
Youngstown, OH	62	52	9	1	—	—	2
W.N. Central	525	325	143	26	15	16	18
Des Moines, IA	—	—	—	—	—	—	—
Duluth, MN	22	14	8	—	—	—	1
Kansas City, KS	15	8	5	1	—	1	—
Kansas City, MO	83	49	25	4	4	1	4
Lincoln, NE	34	19	14	1	—	—	1
Minneapolis, MN	73	47	13	6	3	4	4
Omaha, NE	72	48	14	2	3	5	3
St. Louis, MO	77	46	19	6	2	4	—
St. Paul, MN	73	40	28	3	1	1	3
Wichita, KS	76	54	17	3	2	—	2
S. Atlantic	1,113	676	282	94	33	28	43
Atlanta, GA	161	97	36	18	6	4	6
Baltimore, MD	147	82	45	14	3	3	11
Charlotte, NC	94	60	19	11	3	1	4
Jacksonville, FL	131	87	31	7	1	5	3
Miami, FL	104	66	24	9	4	1	4
Norfolk, VA	37	18	14	3	1	1	—
Richmond, VA	49	21	17	8	3	—	2
Savannah, GA	48	28	13	2	3	2	2
St. Petersburg, FL	51	34	11	1	1	4	5
Tampa, FL	177	120	37	8	6	6	4
Washington, D.C.	106	60	32	11	2	1	2
Wilmington, DE	8	3	3	2	—	—	—
E.S. Central	749	494	169	53	17	16	56
Birmingham, AL	147	89	37	15	4	2	13
Chattanooga, TN	70	50	11	4	3	2	4
Knoxville, TN	73	50	14	6	2	1	4
Lexington, KY	80	49	21	7	—	3	8
Memphis, TN	126	85	30	4	6	1	10
Mobile, AL	77	54	18	2	1	2	4
Montgomery, AL	19	10	6	1	—	2	—
Nashville, TN	157	107	32	14	1	3	13
W.S. Central	1,381	860	362	91	31	37	61
Austin, TX	79	44	25	6	2	2	2
Baton Rouge, LA	53	37	14	1	1	—	—
Corpus Christi, TX	48	31	12	3	1	1	6
Dallas, TX	187	91	58	23	6	9	11
El Paso, TX	90	69	11	6	2	2	3
Fort Worth, TX	98	58	30	5	3	2	1
Houston, TX	277	159	80	20	7	11	10
Little Rock, AR	75	44	21	4	3	3	—
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	256	175	60	15	4	2	19
Shreveport, LA	83	56	18	5	1	3	5
Tulsa, OK	135	96	33	3	1	2	4
Mountain	1,001	689	186	74	26	25	55
Albuquerque, NM	110	83	14	6	1	6	9
Boise, ID	49	39	6	2	—	2	3
Colorado Springs, CO	75	52	14	5	2	2	7
Denver, CO	99	59	25	6	4	5	3
Las Vegas, NV	237	163	51	19	2	2	9
Ogden, UT	41	28	8	4	1	—	—
Phoenix, AZ	145	94	29	8	9	4	8
Pueblo, CO	34	29	5	—	—	—	—
Salt Like City, UT	89	59	14	11	2	3	6
Tucson, AZ	122	83	20	13	5	1	10
Pacific	1,350	940	267	85	25	33	90
Berkeley, CA	20	12	6	1	—	1	2
Fresno, CA	89	68	15	3	1	2	10
Glendale, CA	5	4	1	—	—	—	—
Honolulu, HI	67	51	13	1	2	—	6
Long Beach, CA	58	40	13	2	2	1	3
Los Angeles, CA	100	62	18	15	2	3	14
Pasadena, CA	13	11	1	1	—	—	2
Portland, OR	107	75	25	5	—	2	4
Sacramento, CA	200	133	43	16	4	4	13
San Diego, CA	140	103	25	5	2	5	7
San Francisco, CA	108	74	21	11	—	2	8
San Jose, CA	156	115	29	4	3	5	6
Santa Cruz, CA	21	17	2	2	—	—	—
Seattle, WA	116	66	27	10	9	4	10
Spokane, WA	57	41	9	3	—	4	3
Tacoma, WA	93	68	19	6	—	—	2
Total	10,652**	7,011	2,459	701	237	240	596

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.

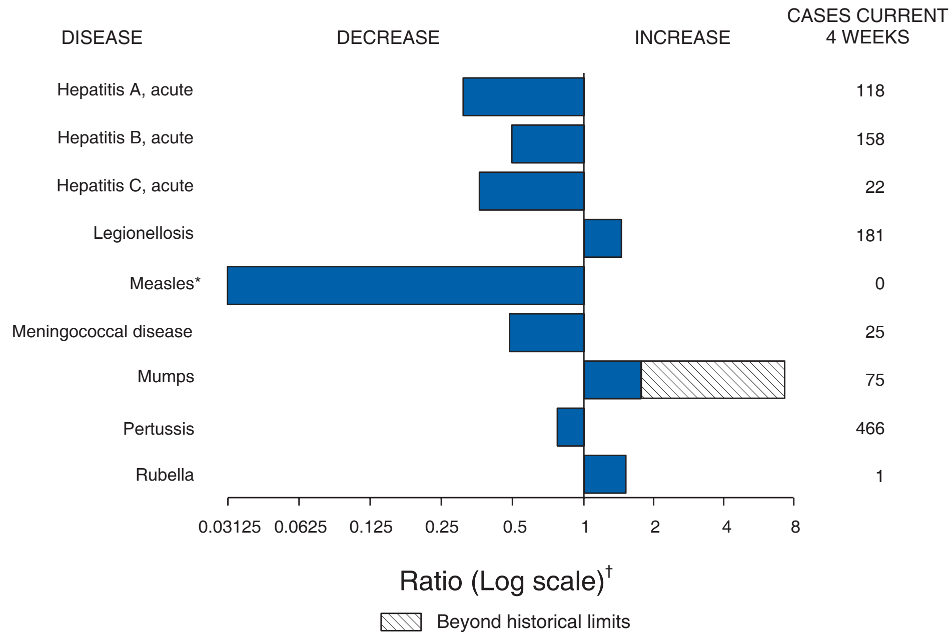
† Pneumonia and influenza.

§ 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.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals October 14, 2006, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 41 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

Patsy A. Hall

Deborah A. Adams, Rosaline Dhara

Willie J. Anderson, Vernitta Love

Lenee Blanton, Pearl C. Sharp

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