MMWR™
Morbidity and Mortality Weekly Report

Weekly October 6, 2006 / Vol. 55 / No. 39

Childhood Influenza Vaccination Coverage — United States, 2004–05 Influenza Season

Children aged <2 years are at increased risk for influenza-related hospitalizations, and children aged 24–59 months are more likely than older children to visit a clinic, hospital, or emergency department with influenza-associated illness (*1*). In 2002, the Advisory Committee on Immunization Practices (ACIP) encouraged annual influenza vaccinations for children aged 6–23 months (and for household contacts of and out-of-home caregivers for children aged <2 years) (*2*). For the 2004–05 influenza season, ACIP strengthened its encouragement to a full recommendation (*3*). For the upcoming 2006–07 influenza season, ACIP has further extended its recommendation to include all children aged 6–59 months (and their household contacts and out-of-home caregivers) (*1*). Others recommended to receive influenza vaccination include children aged 6–18 years who have certain high-risk medical conditions, are on chronic aspirin therapy, or who are household contacts of persons at high risk for influenza complications (*1*). This report provides an assessment of influenza vaccination coverage among children aged 6–23 months during the 2004–05 influenza season. The findings demonstrate that vaccination coverage in that age group approximately doubled from the 2003–04 influenza season, with substantial variability among states and urban areas. However, the percentage of fully vaccinated children remained low, underscoring the need for increased measures to improve pediatric vaccination coverage and ongoing monitoring of coverage among young children and their close contacts.

The findings in this report are based on data from the 2005 National Immunization Survey (NIS), which provides estimates of vaccination coverage among noninstitutionalized children aged 19–35 months at the time of household interview.* For the 2005 reporting period, NIS included children born during February 2002–July 2004 with adequate provider data. The survey was conducted in all 50 states and selected urban areas† (*4,5*) (Table). Complete influenza vaccination histories were obtained from children's vaccination providers.

Two measures of childhood influenza vaccination coverage for the 2004–05 season are reported: 1) receipt of 1 or more doses of influenza vaccine during September–December 2004 and 2) full vaccination (based on ACIP recommendations for 2 doses of influenza vaccine for children who had not received vaccine for a previous influenza season and 1 dose for children who had received influenza vaccine for a previous season) (*1*). Children were considered fully vaccinated if they had 1) received no doses of influenza vaccine before September 1,

* NIS is an ongoing, random-digit–dialed telephone survey of households, followed by a mail survey of all of the children's vaccination providers to obtain vaccination data.

† Five new areas were separately sampled by the NIS in 2005: Alameda and San Bernardino counties, California; the Denver, Colorado, area consisting of Adams, Arapahoe, Denver, and Douglas counties; St. Louis County and city, Missouri; and Clark County, Nevada. Six urban areas separately sampled by the NIS in previous years were not separately sampled in 2005 but are included in statewide estimates: San Diego and Santa Clara counties, California; Miami-Dade County, Florida; Orleans Parish, Louisiana; Boston, Massachusetts; and Marion County, Indiana. Although Orleans Parish, Louisiana, was initially oversampled in 2005, estimates are not available because of interruptions in telephone service, movement of the population, and difficulty locating providers in the aftermath of Hurricane Katrina.

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The *MMWR* series of publications is published by the Coordinating Center for Health Information and Service, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

Suggested Citation: Centers for Disease Control and Prevention. [Article title]. MMWR 2006;55:[inclusive page numbers].

2004, but then received 2 doses from September 1 through the date of interview or January 31, 2005 (whichever came earlier), or 2) received 1 or more doses of influenza vaccine before September 1 and then received 1 or more doses during September–December 2004. Analyses for both measures included only those children who were aged 6–23 months during the entire span of September–December 2004. Data were weighted to adjust for households with multiple telephone lines, household nonresponse, nonassessment of households without telephones, and known population-control estimates.

During the 2005 NIS, the household survey response rate was 65.1%; health-care provider vaccination records were obtained for 17,563 children (63.6%) aged 19–35 months for whom household interviews were completed. Of those children, 12,056 (68.6%) (unweighted sample size) met the age criteria for this assessment. Of these, 33.4% (95% confidence interval [CI] = ±1.4) had received 1 or more doses of influenza vaccine, and 17.8% (CI = ±1.1) were fully vaccinated (Table); consequently, 46.8% of those receiving at least 1 dose during the 2004–05 season needed, but did not receive, a second dose. In comparison, coverage estimates for the 2003–04 season were 17.5% for 1 or more doses of influenza vaccine and 8.4% for fully vaccinated.

Substantial variability in influenza vaccination coverage was observed among states and surveyed urban areas. Percentages of children receiving 1 or more doses of influenza vaccine ranged from 9.1% (CI = ±5.2) in Clark County, Nevada, to 59.3% (CI = ±9.1) in Massachusetts (Table). Percentages of children who were fully vaccinated ranged from 3.3% (CI = ±3.4) in Detroit, Michigan, to 35.5% (CI = ±8.9) in Massachusetts (Table).

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Editorial Note: The findings in this report indicate that, during the first season in which ACIP recommended routine annual influenza vaccination for children aged 6–23 months, coverage approximately doubled from the previous year. This increase in vaccination coverage from the 2003–04 to the 2004–05 influenza season likely was influenced by the change from an encouragement to a full recommendation.

The 2004–05 influenza season was marked by a shortfall of influenza vaccine, resulting from one vaccine manufacturer's unexpected decrease in available supply for distribution in the United States (*6*). In response to the shortfall, ACIP issued recommendations that vaccine be targeted to persons in eight priority groups, including children aged 6–23 months, and that providers defer vaccination of persons not in the priority groups (*6*). Because the affected manufacturer's vaccine was

TABLE. Influenza vaccination-coverage levels among children aged 6–23 months,* by state and selected urban area† — National Immunization Survey (NIS), United States, September–December 2004

State/Urban area	Unweighted sample size	1+Flu§ %	1+Flu§ (95% CI**)	Fully vaccinated¶ %	Fully vaccinated¶ (95% CI)
United States	**12,056**	**33.4**	**±1.4**	**17.8**	**±1.1**
Alabama	293	31.3	±8.7	12.8	±6.1
Jefferson County	144	27.1	±8.0	11.2	±5.5
Alaska	122	31.1	±8.9	20.1	±7.5
Arizona	303	26.7	±5.7	12.4	±4.0
Maricopa County	157	25.4	±7.6	11.0	±5.2
Arkansas	111	19.8	±9.1	7.6	±6.4
California	567	30.7	±5.6	15.4	±4.2
Alameda County	143	37.6	±9.1	25.8	±7.8
Los Angeles County	151	28.1	±7.6	11.9	±5.1
San Bernardino County	107	21.0	±8.2	11.0	±6.0
Colorado	267	40.4	±7.2	23.8	±5.8
Denver	135	NA††	—	25.2	±8.6
Connecticut	154	53.1	±8.7	23.5	±7.8
Delaware	112	36.3	±9.9	21.8	±8.0
District of Columbia	194	33.9	±7.5	18.7	±5.8
Florida	370	20.5	±6.7	7.1	±3.7
Duval County	201	26.3	±7.0	14.5	±5.6
Georgia	349	35.4	±6.7	20.6	±5.1
Fulton/DeKalb counties	168	40.4	±9.4	25.1	±7.7
Hawaii	142	42.2	±9.5	21.2	±7.7
Idaho	151	15.7	±5.8	6.4	±3.9
Illinois	289	29.9	±8.0	14.3	±5.1
Chicago	188	25.4	±7.5	8.6	±4.7
Indiana	131	26.0	±9.1	10.3	±5.4
Iowa	138	35.8	±9.4	21.4	±8.0
Kansas	170	27.7	±7.8	13.9	±5.1
Kentucky	146	25.1	±8.2	15.3	±6.9
Louisiana	375	26.4	±5.2	11.7	±3.8
Maine	136	28.7	±8.1	15.7	±6.7
Maryland	309	48.4	±8.5	25.8	±7.2
Baltimore	151	36.8	±9.0	22.1	±7.6
Massachusetts	153	59.3	±9.1	35.5	±8.9
Michigan	298	30.5	±7.3	15.5	±5.9
Detroit	109	13.1	±7.0	3.3	±3.4
Minnesota	134	50.6	±9.5	25.1	±8.2
Mississippi	180	22.7	±7.0	9.5	±4.3
Missouri	375	30.4	±5.7	17.1	±4.6
St. Louis County and city	192	43.1	±8.2	23.4	±6.3
Montana	178	31.1	±7.8	12.2	±5.1
Nebraska	150	53.8	±9.1	33.2	±8.4
Nevada	254	11.8	±4.3	6.2	±3.5
Clark County	136	9.1	±5.2	5.3	±4.4
New Hampshire	159	42.4	±8.4	21.9	±6.7
New Jersey	340	36.6	±8.2	19.9	±6.6
Newark	172	21.6	±7.6	10.3	±6.2
New Mexico	153	34.5	±8.8	22.1	±7.9
New York	299	37.9	±6.2	24.0	±5.5
New York	135	32.1	±9.0	20.0	±8.1
North Carolina	154	38.2	±9.1	20.8	±7.7
North Dakota	195	34.3	±7.5	24.4	±6.6
Ohio	451	27.6	±6.0	17.7	±5.1
Cuyahoga County	168	26.6	±8.0	15.9	±6.5
Franklin County	115	30.1	±8.9	18.5	±7.1
Oklahoma	175	29.5	±7.7	13.5	±5.5
Oregon	134	30.3	±8.3	13.1	±5.8
Pennsylvania	273	47.9	±7.9	27.1	±6.6
Philadelphia County	123	NA	—	22.7	±8.4
Rhode Island	178	50.9	±7.9	30.5	±7.2
South Carolina	188	30.8	±7.9	12.8	±5.2
South Dakota	165	40.3	±8.6	19.1	±6.6
Tennessee	531	26.9	±5.3	15.8	±4.4
Davidson County	167	34.6	±8.3	17.0	±5.8
Shelby County	207	18.6	±6.0	10.1	±4.3
Texas	843	28.7	±5.1	16.2	±3.9
Bexar County	153	26.1	±7.8	12.6	±4.9
City of Houston	172	22.0	±6.5	13.8	±5.2
Dallas County	124	27.9	±8.9	15.1	±7.5
El Paso County	179	9.2	±4.3	4.6	±3.0
Utah	129	NA	—	19.1	±7.9
Vermont	124	31.0	±9.2	15.8	±7.3
Virginia	176	49.9	±9.7	28.7	±8.5
Washington	273	27.9	±6.5	13.1	±4.7
King County	128	34.5	±9.9	18.0	±6.8
West Virginia	165	23.2	±7.2	9.3	±4.6
Wisconsin	278	45.4	±8.2	27.1	±7.0
Milwaukee County	139	NA	—	27.7	±10.0
Wyoming	122	18.8	±7.4	9.0	±5.4

* N = 12,056 (unweighted). These measures of influenza vaccination coverage represent a subset of children included in the 2005 NIS. Only those children who were aged 6–23 months during the entire period of September–December 2004 and who had provider-verified vaccination records are included.

† Five new areas were sampled separately by the NIS in 2005: Alameda and San Bernardino counties, California; the Denver, Colorado, area consisting of Adams, Arapahoe, Denver, and Douglas counties; St. Louis County and city, Missouri; and Clark County, Nevada. Six urban areas sampled separately by the NIS in previous years were not sampled separately in 2005 but are included in statewide estimates: San Diego and Santa Clara counties, California; Miami-Dade County, Florida; Orleans Parish, Louisiana; Boston, Massachusetts; and Marion County, Indiana. Although Orleans Parish, Louisiana, was initially oversampled in 2005, estimates are not available because of interruptions in telephone service, movement of the population, and difficulty locating providers in the aftermath of Hurricane Katrina.

§ Defined as receipt of 1 or more doses of influenza vaccination during September–December 2004.

¶ Children were considered fully vaccinated if they had 1) received no doses of influenza vaccine before September 1, 2004, but then received 2 doses from September 1 through either the date of interview or January 31, 2005, or 2) received 1 or more doses of influenza vaccine before September 1, 2004, and then received 1 or more doses during September–December 2004.

** Confidence interval.

†† Estimate not reported because it is unstable; standard error of the estimate is >5.1.

not licensed for use in children aged <4 years, the supply of influenza vaccine for children aged 6–23 months for the 2004–05 influenza season was not directly affected by the shortfall. Current projections for the 2006–07 influenza season indicate that approximately 100–115 million doses of influenza vaccine likely will be available.

The substantial variability in influenza vaccination coverage for children aged 6–23 months by state and urban area is

similar to that observed for other routinely recommended childhood vaccines and is likely attributable to several factors. First, varying degrees of programmatic and provider implementation are observed in the first year after a new ACIP recommendation. Correspondingly, parental awareness, attitudes, and access to influenza vaccination services for children also likely varied. In addition, the influenza vaccine shortage that occurred during the 2004–05 season affected communities differently, with some having greater mismatches between supply and demand.

The findings in this report reveal that during the first year of the recommendation, the percentage of children aged 6–23 months who were fully vaccinated for influenza remained low. The importance of 2 doses of influenza vaccine for previously unvaccinated children aged <9 years was highlighted in a recent study (*7*). During the 2003–04 influenza season, vaccine effectiveness[§] in preventing medically attended influenza-like illness (ILI) or pneumonia and influenza (P&I) in fully vaccinated children aged 6–23 months was determined to be 25% and 49%, respectively. In contrast, for children aged 6–23 months receiving 1 dose of influenza vaccine, no statistically significant reduction in ILI or P&I was determined (*7*). The maximum benefit from influenza vaccination is obtained when all recommended doses are administered before the onset of influenza activity in the community, which might be particularly difficult to achieve among children requiring 2 doses because of the minimum interval of 4 weeks required between doses (*8*). However, providers should routinely offer influenza vaccine throughout the influenza season, even after influenza activity has been documented in the community (*1*).

The influenza vaccine coverage estimates in this study differ from estimates from the Behavioral Risk Factor Surveillance System (BRFSS), which reported coverage of 48.4% for children aged 6–23 months who received at least 1 dose of influenza vaccine during the 2004–05 influenza season (*9*). At least three different factors might have contributed to the difference in estimates. First, different birth cohorts were included in the two surveys. BRFSS included children aged 6–23 months at the time of interview in February 2005, whereas NIS included children aged 6–23 months during the entire period of September–December 2004; these differences might have produced greater or lesser estimates, depending upon the population size and vaccination rates of groups excluded from either survey. Second, the vaccination periods differed. BRFSS estimates included vaccinations administered during September 2004–January 2005, whereas NIS estimates for 1 or more doses included vaccinations administered during September–December 2004. Third, BRFSS estimates are based on parental report, which might result in overestimates, whereas NIS estimates are confirmed by provider-reported data. A recent study reported that among children aged 6–23 months whose parents reported they had received influenza vaccination, only 65.8% actually had been vaccinated, according to medical records (*10*).

The findings in this report are subject to at least four limitations. First, NIS is a telephone survey; although statistical adjustments compensate for nonresponse and households without telephones, some bias might remain. Second, NIS relies on provider-verified vaccination histories; incomplete record-keeping or incomplete reporting by providers might result in underestimates of vaccination coverage. Third, the estimates in this report count influenza vaccinations administered during the primary vaccination period and thus underestimate entire season coverage to the extent that vaccination late in the season occurred, particularly for fully vaccinated coverage. The estimates are for children who were aged 6–23 months during the entire September–December 2004 period and thus might overestimate coverage among all children recommended to receive influenza vaccination, to the extent that excluded children had lower coverage (i.e., those who became eligible for influenza vaccination at age 6 months after September 1, 2004, and those who reached 2 years of age before January 2005). Finally, because of sampling uncertainty and wide confidence intervals for many state and urban area estimates from NIS, these estimates should be interpreted with caution.

This report underscores the need to continue monitoring annual influenza vaccination coverage among young children, including the newly recommended group aged 6–59 months. In addition, because protection of young children is enhanced by vaccination of household contacts and out-of-home caregivers, monitoring vaccination coverage among these persons also is important. Currently, NHIS is used to monitor vaccination coverage among older children and household contacts of persons aged <5 years; plans for assessing influenza vaccination among out-of-home caregivers are under consideration. Complete recommendations for the 2006–07 influenza season have been published (*1*), and updates on the influenza season and vaccine supply are available at http://www.cdc.gov/flu.

[§] For this study, vaccine effectiveness (%) was defined as (1 – hazard ratio) × 100, where the hazard ratio compared the rate of influenza-like illness or pneumonia and influenza outcomes in vaccinated children to the rate in unvaccinated children.

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Influenza and Pneumococcal Vaccination Coverage Among Persons Aged ≥65 Years — United States, 2004–2005

Vaccination of persons at increased risk for complications from influenza and pneumococcal disease is a key public health strategy in the United States. During the 1990–1999 influenza seasons, approximately 36,000 deaths were attributed annually to influenza infection, with approximately 90% of deaths occurring among adults aged ≥65 years (*1*). In 1998, an estimated 3,400 adults aged ≥65 years died as a result of invasive pneumococcal disease (*2*). One of the *Healthy People 2010* objectives is to achieve 90% coverage of noninstitutionalized adults aged ≥65 years for both influenza and pneumococcal vaccinations (objective 14-29) (*3*). To assess progress toward this goal, this report examines vaccination coverage for persons interviewed in the 2004 and 2005 Behavioral Risk Factor Surveillance System (BRFSS) surveys. The 2004–05 influenza season was characterized by an influenza vaccine shortage. As a result, the Advisory Committee on Immunization Practices (ACIP) issued recommendations that influenza vaccine be reserved for persons in priority groups, including persons aged ≥65 years, and that others should defer vaccination until supply was sufficient (*4*). The results of this assessment indicated that, overall, influenza vaccination coverage was lower in the 2005 survey year than in 2004, whereas pneumococcal vaccination coverage was nearly unchanged from 2004 to 2005. In both years, influenza and pneumococcal vaccination coverage varied from state to state. Continued measures are needed to increase the proportion of older adults who receive influenza and pneumococcal vaccines; health-care providers should offer pneumococcal vaccine all year and should continue to offer influenza vaccine during December and throughout the influenza season, even after influenza activity has been documented in the community.

BRFSS is an ongoing, state-based, random-digit–dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥18 years. All 50 states, the District of Columbia (DC), and three U.S. territories participate in the survey. In 2004 and 2005, respondents were asked, "During the past 12 months, have you had a flu shot?" and "Have you ever had a pneumonia shot?" The median state/area CASRO response rates were 52.7% (range: 32.2%–66.6%) in 2004 and 51.1% (range: 34.6%–67.4%) in 2005 (*5,6*). In 2004, a total of 303,822 persons responded, of whom 68,514 (22.6%) were aged ≥65 years; in 2005, a total of 356,112 persons responded, of whom 87,351 (24.5%) were aged ≥65 years. Respondents who reported unknown influenza (0.3% in 2004 and 2005) or pneumococcal (3.1% in 2004 and 3.5% in 2005) vaccination status were excluded from the analysis. In addition to vaccination coverage for 2004 and 2005, a secondary analysis of influenza vaccination restricted to persons interviewed during January–June of each survey year was conducted because the majority of these persons were reporting specifically on vaccination received during the preceding September through December; thus, they would have received vaccine for a single influenza season. Vaccination levels were estimated for the 50 states, DC, Puerto Rico, and the U.S. Virgin Islands. Hawaii did not report data to BRFSS in 2004. Data were weighted by age, sex, and race, adjusting for probabilities of selection, not having a landline telephone, and nonresponse, to reflect the estimated adult population. Overall vaccination coverage was calculated as the weighted mean of state percentages. Statistical software was used to calculate percentage estimates and 95% confidence intervals (CIs).

Overall, in 2004, 67.6% (CI = 66.9%–68.3%) of respondents aged ≥65 years reported having received influenza vaccine during the preceding 12 months. Vaccination coverage levels ranged from 35.3% (Puerto Rico) to 78.8% (Colorado), with a median of 67.9% (Table). In 2005, 63.3% (CI = 62.7%–64.0%) of respondents aged ≥65 years reported having received influenza vaccine during the preceding 12 months. Vaccination coverage levels ranged from 32.0% (Puerto Rico) to 78.2% (Minnesota), with a median of 65.5%. The median change in influenza vaccination coverage from the 2004 to the 2005 survey was -5.1%. In 16 states, the decline in influenza vaccination coverage was statistically significant ($p<0.05$). In 13 of the 16 states, the coverage decline was <10%.

TABLE. Percentage of adults aged ≥65 years who reported receiving influenza vaccine during the preceding 12 months and percentage of adults aged ≥65 years who reported ever receiving pneumococcal vaccine, by state/area — United States, Behavioral Risk Factor Surveillance System, 2004–2005

	Influenza vaccine					Pneumococcal vaccine				
	2004		2005		%	2004		2005		%
State/Area	%	(95% CI*)	%	(95% CI)	difference†	%	(95% CI)	%	(95% CI)	difference
Alabama	66.2	(62.6–69.6)	60.8	(57.0–64.5)	-8.2¶	60.1	(56.4–63.8)	61.9	(58.0–65.6)	2.9
Alaska	64.1	(55.8–71.7)	61.1	(53.5–68.2)	-4.8	57.2	(48.7–65.4)	61.2	(53.3–68.5)	6.9
Arizona	66.2	(61.5–70.5)	62.5	(58.4–66.5)	-5.5	68.6	(64.2–72.7)	65.4	(61.2–69.3)	-4.7
Arkansas	68.7	(65.5–71.7)	65.2	(62.4–68.0)	-5.0	62.0	(58.7–65.2)	57.4	(54.5–60.3)	-7.4¶
California	70.9	(67.0–74.6)	65.9	(62.1–69.5)	-7.1	63.6	(59.3–67.6)	61.3	(57.3–65.1)	-3.6
Colorado	78.8	(75.6–81.8)	74.2	(71.4–76.9)	-5.8¶	70.1	(66.5–73.5)	70.2	(67.2–73.0)	0.1
Connecticut	73.1	(70.4–75.6)	71.1	(68.1–73.9)	-2.7	67.8	(65.0–70.5)	69.3	(66.2–72.2)	2.2
Delaware	69.3	(65.3–73.0)	65.8	(61.9–69.4)	-5.1	66.3	(62.1–70.2)	65.9	(61.9–69.7)	-0.5
District of Columbia	54.9	(49.5–60.1)	54.7	(50.2–59.1)	-0.4	51.4	(46.0–56.7)	51.6	(47.0–56.1)	0.4
Florida	65.1	(62.4–67.8)	55.6	(52.9–58.2)	-14.6¶	64.3	(61.5–67.1)	62.4	(59.7–64.9)	-3.0
Georgia	64.4	(60.5–68.2)	60.8	(57.5–64.1)	-5.6	59.4	(55.4–63.4)	62.5	(59.2–65.8)	5.3
Hawaii§	—	—	72.1	(69.0–75.0)	—	—	—	66.0	(62.6–69.2)	—
Idaho	66.2	(62.8–69.5)	63.9	(60.8–67.0)	-3.4	60.1	(56.6–63.6)	61.6	(58.4–64.7)	2.5
Illinois	65.4	(61.7–68.9)	55.9	(52.5–59.2)	-14.6¶	58.3	(54.5–62.0)	57.0	(53.7–60.4)	-2.1
Indiana	64.3	(61.4–67.1)	64.0	(60.9–66.9)	-0.5	62.1	(59.2–64.9)	65.3	(62.3–68.3)	5.2
Iowa	74.1	(71.3–76.7)	71.7	(69.0–74.2)	-3.3	68.2	(65.2–71.0)	69.1	(66.3–71.8)	1.3
Kansas	68.1	(66.0–70.3)	66.0	(63.9–68.0)	-3.2	62.5	(60.3–64.8)	66.8	(64.7–68.8)	6.8¶
Kentucky	64.3	(61.0–67.5)	62.4	(59.4–65.3)	-2.9	57.7	(54.2–61.2)	62.9	(59.9–65.7)	8.9¶
Louisiana	68.6	(65.9–71.1)	62.4	(58.0–66.7)	-9.0¶	67.4	(64.7–70.0)	71.4	(67.1–75.3)	5.9
Maine	72.2	(68.6–75.5)	67.8	(64.2–71.1)	-6.1	65.6	(61.8–69.3)	64.4	(60.7–68.0)	-1.8
Maryland	64.6	(60.4–68.6)	59.3	(56.4–62.1)	-8.2¶	64.0	(59.8–68.0)	62.0	(59.1–64.9)	-3.1
Massachusetts	70.6	(67.7–73.3)	69.8	(67.1–72.4)	-1.0	65.3	(62.2–68.3)	64.8	(61.8–67.6)	-0.8
Michigan	66.9	(63.9–69.8)	67.1	(65.2–68.9)	0.3	60.0	(56.8–63.1)	66.2	(64.3–68.1)	10.5¶
Minnesota	78.3	(75.3–81.0)	78.2	(74.7–81.3)	-0.1	67.9	(64.5–71.1)	71.1	(67.3–74.7)	4.7
Mississippi	66.9	(63.9–69.7)	61.5	(58.1–64.8)	-8.0¶	64.5	(61.4–67.5)	65.7	(62.3–69.0)	1.9
Missouri	69.1	(65.6–72.4)	61.7	(58.1–65.3)	-10.7¶	67.1	(63.6–70.4)	64.8	(61.1–68.3)	-3.4
Montana	72.2	(68.8–75.3)	69.5	(66.2–72.6)	-3.7	71.6	(68.1–74.8)	69.9	(66.5–73.1)	-2.3
Nebraska	75.8	(73.6–77.9)	72.6	(70.4–74.8)	-4.2¶	65.7	(63.2–68.1)	68.0	(65.6–70.2)	3.4
Nevada	59.0	(53.2–64.6)	53.0	(47.4–58.5)	-10.2	66.7	(61.0–72.0)	69.8	(64.4–74.7)	4.6
New Hampshire	70.7	(67.6–73.7)	70.2	(67.3–73.0)	-0.8	66.8	(63.5–69.9)	69.8	(66.7–72.6)	4.5
New Jersey	67.6	(65.6–69.5)	63.4	(61.3–65.5)	-6.1¶	64.3	(62.2–66.3)	64.0	(61.9–66.1)	-0.4
New Mexico	72.4	(69.8–74.9)	68.0	(65.1–70.7)	-6.1¶	64.7	(61.8–67.4)	64.7	(61.7–67.5)	0.0
New York	65.9	(62.7–69.0)	61.8	(59.0–64.6)	-6.2	63.0	(59.6–66.2)	62.0	(59.0–64.9)	-1.6
North Carolina	67.0	(65.1–68.9)	65.5	(63.7–67.2)	-2.3	64.3	(62.2–66.2)	66.2	(64.4–67.9)	3.0
North Dakota	74.3	(70.7–77.6)	70.1	(67.0–73.0)	-5.6	70.3	(66.5–73.9)	71.7	(68.5–74.6)	1.9
Ohio	67.6	(62.9–71.9)	64.7	(61.3–67.9)	-4.3	61.1	(56.3–65.6)	61.5	(58.0–64.9)	0.8
Oklahoma	75.0	(72.7–77.1)	73.2	(71.0–75.2)	-2.4	70.0	(67.6–72.2)	71.1	(68.8–73.2)	1.5
Oregon	71.1	(68.0–73.9)	68.9	(67.0–70.6)	-3.1	69.4	(66.3–72.4)	71.4	(69.6–73.2)	2.9
Pennsylvania	63.8	(61.1–66.4)	59.3	(57.0–61.6)	-7.0¶	63.9	(61.2–66.6)	67.2	(64.9–69.4)	5.1
Rhode Island	73.0	(69.5–76.3)	67.2	(63.7–70.5)	-8.0¶	70.0	(66.3–73.5)	71.5	(68.0–74.7)	2.1
South Carolina	66.0	(63.3–68.7)	60.9	(58.6–63.2)	-7.7¶	64.0	(61.1–66.7)	65.6	(63.2–67.9)	2.5
South Dakota	76.9	(74.6–79.1)	76.3	(74.1–78.4)	-0.8	66.2	(63.5–68.7)	66.3	(63.8–68.7)	0.2
Tennessee	66.4	(62.5–70.1)	61.6	(58.0–65.0)	-7.2	63.6	(59.6–67.4)	63.8	(60.2–67.2)	0.3
Texas	67.1	(63.7–70.2)	61.6	(58.7–64.4)	-8.2¶	61.4	(58.0–64.7)	62.2	(59.3–65.1)	1.4
Utah	75.5	(72.1–78.6)	69.6	(66.1–72.9)	-7.7¶	65.8	(62.0–69.4)	66.4	(62.8–69.8)	0.9
Vermont	66.6	(64.0–69.1)	66.3	(63.8–68.8)	-0.4	65.7	(63.0–68.2)	66.7	(64.2–69.2)	1.7
Virginia	68.6	(64.8–72.2)	66.8	(63.4–70.1)	-2.6	61.6	(57.3–65.8)	66.5	(62.7–70.0)	7.8
Washington	67.9	(66.1–69.7)	67.8	(66.3–69.3)	-0.2	65.8	(63.9–67.6)	66.9	(65.3–68.4)	1.7
West Virginia	67.9	(64.3–71.3)	63.6	(60.2–66.9)	-6.2	64.7	(61.1–68.2)	68.2	(64.9–71.4)	5.4
Wisconsin	74.3	(70.9–77.3)	71.8	(68.6–74.9)	-3.3	70.3	(66.7–73.7)	65.7	(62.1–69.1)	-6.6
Wyoming	73.8	(70.6–76.9)	72.9	(70.0–75.6)	-1.3	70.7	(67.3–73.9)	71.2	(68.2–74.0)	0.7
Puerto Rico	35.3	(31.7–39.2)	32.0	(28.4–35.8)	-9.4	32.7	(29.0–36.6)	28.3	(24.7–32.1)	-13.5
U.S. Virgin Islands	39.4	(33.2–45.9)	37.5	(31.4–44.1)	-4.7	32.8	(26.8–39.3)	29.1	(23.5–35.5)	-11.1
Median	*67.9*		*65.5*		*-5.1*	*64.6*		*65.7*		*1.4*
Range	*35.3–78.8*		*32.0–78.2*		*-14.6–0.3*	*32.7–71.6*		*28.3–71.7*		*-13.5–10.5*

* Confidence interval.
† Relative percentage difference from 2004 to 2005.
§ The state of Hawaii did not report data in 2004.
¶ p<0.05, 95% CI for difference excludes zero.

Overall, during the first 6 months of 2004, 73.8% (CI = 72.8%–74.7%) of respondents aged ≥65 years reported having received influenza vaccine, compared with 64.0% (CI = 63.1%–64.9%) of respondents aged ≥65 years in the first 6 months of 2005. Vaccination coverage in the first half of 2004 ranged from 38.2% (Puerto Rico) to 82.5% (Colorado), with a median of 75.2%, and in the first half of 2005 from 36.9% (Puerto Rico) to 80.2% (Minnesota), with a median of 65.5%. Influenza vaccination coverage decreased in all but two states/areas; the declines ranged from 23.7% to 3.2%, with a median of 12.0%. The decline in coverage was statistically significant in 44 states, and was <10% in nine of the 44 states.

In 2004, the overall proportion of respondents aged ≥65 years reporting ever having received pneumococcal vaccine was 63.4% (CI = 62.7%–64.1%). Vaccination coverage ranged from 32.7% (Puerto Rico) to 71.6% (Montana), with a median of 64.6%. In 2005, the overall proportion of respondents aged ≥65 years reporting ever having received pneumococcal vaccine was 63.7% (CI = 63.1%–64.4%). Vaccination coverage ranged from 28.3% (Puerto Rico) to 71.7% (North Dakota), with a median of 65.7%. In three states, the increase in pneumococcal vaccination coverage from 2004 to 2005 was statistically significant, whereas one state had a statistically significant decline in pneumococcal vaccination coverage during this period. In the three states with a significant increase in coverage, the increase ranged from 6.8% to 10.5%. Among persons aged ≥65 years vaccinated against influenza, 22.8% in 2004 and 20.6% in 2005 reported never having received pneumococcal vaccine.

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Editorial Note: These BRFSS data indicate that among persons aged ≥65 years, overall influenza vaccination coverage declined from 67.6% to 63.3% from 2004 to 2005, whereas pneumococcal vaccination coverage was nearly unchanged (63.4% and 63.7%, respectively). Both influenza and pneumococcal vaccination levels among adults aged ≥65 years remain below the *Healthy People 2010* objective of 90% coverage nationwide.

Estimated influenza vaccination coverage for the first 6 months of each year suggests that adults aged ≥65 years were affected by the 2004–05 vaccine shortage, with a median coverage decline of 12.0% from 2004 to 2005. Approximately 61 million doses of influenza vaccine were produced during the 2004–05 influenza season, compared with 95 million and 87 million doses during the 2002–03 and 2003–04 seasons, respectively. Although the supply interruption reduced influenza vaccination coverage in priority groups compared with the previous year, high levels of coverage nonetheless were achieved by diverting available vaccine to priority groups. This measure was supported by a special nationwide BRFSS survey administered and analyzed monthly to monitor vaccine uptake by priority groups.

Management of the 2004–05 influenza season vaccine shortage was complicated by the lack of a centralized system to manage information on vaccine ordering and receipt from all manufacturers and distributors. Recurring vaccine supply concerns during the 2005–06 influenza season, resulting from one vaccine manufacturer's inability to produce as much vaccine as originally planned, again highlighted the challenges posed to influenza vaccination with few manufacturers producing the vaccine. During the 2006–07 influenza season, three manufacturers will be providing trivalent inactivated influenza vaccine, and a fourth will continue to supply live attenuated influenza vaccine (licensed for use in persons aged 5–49 years with no underlying medical conditions), thereby reducing vulnerability to supply or distribution challenges. CDC is working with manufacturers and distributors to improve the availability, timeliness, and completeness of a vaccine-supply tracking system first initiated during the 2004–05 influenza season.

Even during years with limited influenza vaccine availability, millions of doses remain unused at the end of the influenza season: in each season since 2000–01, 4%–13% of influenza vaccine doses produced were not distributed (CDC, unpublished data, 2006). Because influenza activity often does not peak until January or later, ACIP and CDC recommend that health-care providers continue to offer influenza vaccine to patients during December and later months. The National Influenza Vaccine Summit will promote the importance of continuing to offer influenza vaccine after the optimal period of October–November. In addition, expanding the production capacity of influenza vaccine manufacturers is needed to ensure availability of influenza vaccine and vaccination before the start of influenza virus circulation.

On the basis of data from the National Health Interview Survey (NHIS), pneumococcal vaccination coverage increased by 32% (from 42.6% to 56.3%) among persons aged ≥65 years from 1997 to 2005, but coverage has remained nearly unchanged since 2002 (56.2%).* In the 2004 and 2005 BRFSS surveys, approximately 20% of persons aged ≥65 years who said they received influenza vaccine reported never having received a pneumococcal vaccination, indicating missed opportunities for pneumococcal vaccine administration at the time of influenza vaccination. Offering pneumococcal vaccine with influenza vaccination should facilitate improvement in pneumococcal vaccination coverage.

* Available at http://www.cdc.gov/nchs/about/major/nhis/released200609.htm#4.

The findings in this report are subject to at least three limitations. First, influenza and pneumococcal vaccination status were based on self-report and were not validated. The validity of self-reported pneumococcal vaccination is lower than that of influenza vaccination (*7*). Second, median BRFSS response rates were low in both years (<60%), and BRFSS does not reach persons without landline telephones. Finally, because BRFSS surveillance is conducted during a 12-month period, questions regarding receipt of influenza vaccination do not reflect a single influenza season. The influenza vaccination estimates restricted to the first 6 months of each survey year mitigate the effects of this limitation.

BRFSS results have been compared with results from NHIS, a household-based, face-to-face interview survey with higher response rates. Although NHIS uses a national sampling scheme and BRFSS uses a state-based scheme, comparisons indicate similar trends; however, some subgroup differences are more pronounced in BRFSS. Vaccination coverage estimates in BRFSS surveys are consistently higher than NHIS estimates (*8*), although receipt of influenza and pneumococcal vaccination is self-reported in both surveys. NHIS estimates for 2005 indicate 59.5% influenza and 56.3% pneumococcal vaccination coverage in persons aged ≥65 years, compared with 63.3% and 63.7%, respectively, in the 2005 BRFSS.

Variation in influenza and pneumococcal vaccination coverage observed among states/areas suggests that coverage for both vaccines can be improved. Current projections indicate that the supply of influenza vaccine for the 2006–07 season will be 100–115 million doses, sufficient to meet the estimated demand among groups recommended for influenza vaccination.† This estimate might be affected by changes in anticipated yield and by the potential licensing of an additional vaccine. Strategies such as standing orders, reminder/recall systems, and offering vaccinations to hospitalized patients before discharge have been shown to improve vaccination coverage in adults (*9*) and should be used to facilitate progress toward the *Healthy People 2010* objective of 90% coverage with both influenza and pneumococcal vaccines among persons aged ≥65 years.

Acknowledgment

This report is based on data contributed by state BRFSS coordinators.

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† Additional information is available at http://www.cdc.gov/flu/professionals/vaccination/pdf/targetpopchart.pdf.

Outbreaks of Multidrug-Resistant *Shigella sonnei* Gastroenteritis Associated with Day Care Centers — Kansas, Kentucky, and Missouri, 2005

Infection with *Shigella sonnei* that is resistant to antibiotics commonly used in pediatric practice has become more common during the past decade (*1*). In 2005, Kansas, Kentucky, and Missouri reported increases in shigellosis cases associated with day care centers caused predominantly by multidrug-resistant (MDR) (i.e., resistant to ampicillin and trimethoprim-sulfamethoxazole [TMP/SMX]) strains of *S. sonnei*. Pulsed-field gel electrophoresis (PFGE) patterns for isolates from Kansas and Missouri were similar, suggesting a common outbreak in the Kansas City area, whereas isolates from Kentucky had a different pattern. This report describes the investigation of two outbreaks of MDR shigellosis associated with day care centers and reviews measures for prevention and control of *S. sonnei* infection in these settings. Given the current rates of resistance to antibiotics available to treat children with shigellosis safely, public health measures initiated during shigellosis outbreaks should focus on promoting appropriate handwashing and diapering practices in day care centers.

Shigellosis is a reportable disease in all three states. A confirmed case is defined as illness in a person with *S. sonnei* isolated from a clinical specimen, and a probable case is defined as clinically compatible symptoms in a person who was epidemiologically linked to a confirmed case.

Case Reports

Kansas City Metropolitan Area (Kansas). During May 1–December 31, 2005, a total of 201 confirmed *S. sonnei* infections were reported among residents of the Kansas City Metropolitan Area (Kansas) (Figure 1). Median age of patients was 7 years (range: 1–70 years). Among patients aged ≤10 years, 66 (51%) were female; among patients aged ≥18 years, 41 (80%) were female. Information about patient exposures to day care settings was not collected. The Kansas Department of Health and Environment Laboratory conducted antimicrobial susceptibility testing on 60 isolates; 53 (88%) isolates were resistant to both ampicillin and TMP/SMX, eight (13%) were resistant to ampicillin/sulbactam, and none were resistant to ceftriaxone, gentamicin, or ciprofloxacin.

Kansas City Metropolitan Area (Missouri). During May 1–December 31, 2005, a total of 645 confirmed and 85 probable shigellosis cases in the Kansas City Metropolitan Area (Missouri) were reported to the Missouri Department of Health and Senior Services (Figure 1). The median age of patients was 6 years (range: 0–67 years). Overall, 532 (74.0%) infections occurred among children aged ≤10 years; 255 (48%) were among females. Among 157 patients aged ≥18 years, 117 (74.5%) were female. A total of 42 licensed day care centers each had one or more cases of shigellosis among attendees. Routine surveillance data indicated that 36% of patients or one of their household members had attended a day care center; however, a random sample of 10 patients who were reinterviewed indicated that an estimated 82% of patients or one of their household members might have had exposure to a day care center. Antibiotic susceptibility testing of 28 isolates was performed by the National Antimicrobial Resistance Monitoring System (NARMS) Laboratory; 25 (89%) were resistant to ampicillin and TMP/SMX. No resistance to ceftriaxone, ciprofloxacin, or nalidixic acid was observed.

Kentucky. During May 1–August 31, 2005, a total of 148 confirmed cases of *S. sonnei* infection were reported in Fayette County (Figure 2), which represented a 42-fold increase above the previous 5-year baseline. The median age of patients was 4 years (range: 0–61 years); among children aged ≤10 years, 59 (50%) were female. Among adults aged ≥18 years, 18 (78%) were female. A total of 137 (93%) cases occurred among attendees, their family members, or staff at 16 day care centers in Fayette County. Twelve isolates underwent antimicrobial susceptibility testing at the University of Kentucky; all were resistant to ampicillin and TMP/SMX, and none were resistant to ceftriaxone or ciprofloxacin.

Control Measures

In all three states, local public health agencies conducted case investigations and met with day care center staff to promote handwashing and observe diapering and food preparation practices. In Kansas, local public health agencies used Glo-Germ™ (DMA International; Moab, Utah) kits to educate students and staff about proper handwashing techniques. All three states require exclusion of children with shigellosis from day care centers until documentation indicates no *S. sonnei* in two consecutive stool cultures obtained ≥24 hours apart and ≥24 hours after completing antibiotic treatment. In Kentucky, four day care centers voluntarily stopped accepting new admissions for 1 week to protect new enrollees in day care centers that experienced ongoing transmission despite intensive measures to modify and monitor hygiene practices.

FIGURE 1. Number of cases of *Shigella sonnei* infection, by week of illness onset — Kansas City Metroplitan Area, May 1–December 31, 2005

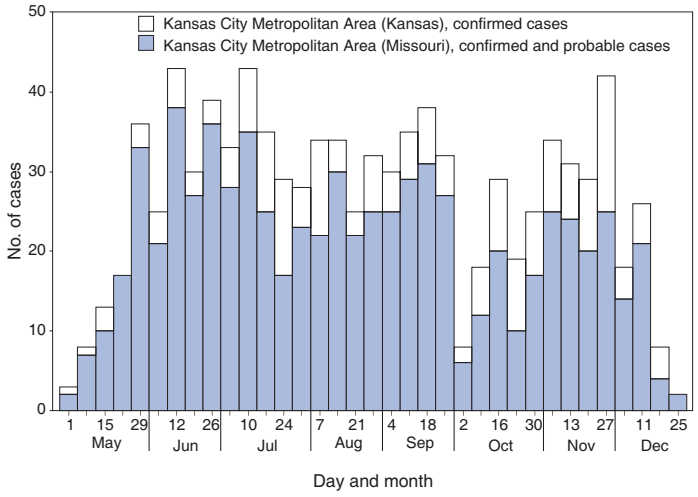
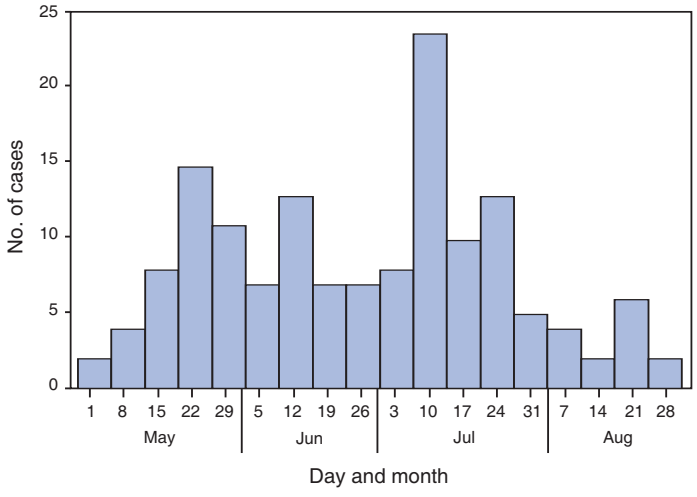


FIGURE 2. Number of confirmed cases of *Shigella sonnei* infection, by week of illness onset — Fayette County, Kentucky, May 1–August 31, 2005



From the earliest stages of the outbreaks, public health alerts describing the outbreak, providing information about shigellosis, and promoting handwashing were distributed to day care centers, schools, and the general public in affected counties in fliers (e.g., distributed through retailers), letters, and press releases. Health-care providers in all three states were informed of local *S. sonnei* antibiotic-resistance patterns and advised to test and treat patients with shigellosis with appropriate antibiotics during the outbreak. Despite the early implementation of these measures, the outbreaks persisted for several months, lasting through the summer in Kentucky and into early winter in Kansas and Missouri.

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Editorial Note: In the United States, *Shigella* species cause an estimated 450,000 cases of gastroenteritis each year (*2*), mostly among children aged <5 years. *S. sonnei* is the most common species of laboratory-confirmed *Shigella* infection in the United States and usually causes an acute, self-limited, diarrheal illness (*3*). During the past two decades, numerous outbreaks of *S. sonnei* infection have been associated with day care centers (*4*). Because few bacteria are required to transmit shigellosis from person to person through the fecal-oral route, shigellosis can propagate in settings with insufficient hygiene practices. Certain states, including the three states in this report, require that children with shigellosis be excluded from day care centers until documentation indicates that they have submitted two consecutive stool specimens that do not yield *S. sonnei*; however, whether excluding children until stool cultures do not yield *Shigella* bacteria reduces transmission is unclear. As a result, the control of shigellosis outbreaks associated with day care centers often requires considerable time, effort, and expense from health departments, day care centers, and affected families.

Although antibiotics are not required for this generally mild disease, they are often prescribed to shorten the duration of illness and reduce the infectious period, particularly in day care center attendees and food handlers (*5*). Surveillance data for antimicrobial resistance among all *S. sonnei* isolates received by NARMS during 1999–2003 indicated that 80% of the isolates were resistant to ampicillin and 47% to TMP/SMX; 38% were resistant to both drugs (*6*). In the two outbreaks described in this report, resistance to both ampicillin and TMP/SMX was 89%, complicating shigellosis treatment in these communities.

Although ampicillin and TMP/SMX have been the drugs of choice for treatment of shigellosis, current resistance patterns limit the use of these antibiotics. Fluoroquinolones are an effective alternative for adults but are not approved by the Food and Drug Administration for shigellosis treatment in children aged <18 years. Macrolides, particularly azithromycin, also are recommended by the American Academy of Pediatrics for treatment of shigellosis, although data about clinical effectiveness are limited, and no standardized guidelines for monitoring azithromycin resistance among shigellae are currently available (*7*). In addition, azithromycin is excreted in stool over an extended period. Follow-up stool cultures will not yield accurate results until azithromycin is no longer being excreted; therefore, the time required for follow-up testing might be prolonged *(8)*.

The emergence of MDR shigellosis highlights the importance of prevention and rapid control of outbreaks. Appropriate handwashing and diapering practices are critical in minimizing the transmission of shigellosis in day care centers (*9*). Scheduling handwashing sessions on arrival at the day care center, before meals, or after playing outdoors; supervising handwashing among young children; and eliminating water play areas have been used to reduce the spread of shigellosis within day care centers and to the community (*10*). Forming cohorts of convalescing children (e.g., asymptomatic children who are culture-positive), by allowing them to attend the day care center but excluding them from interacting with other well children, also has been used to control outbreaks associated with day care centers; however, state regulations in these three states do not allow such measures. Given the current rates of resistance to ampicillin and TMP/SMX, the uncertain safety of administering fluoroquinolones to children, the difficulties in monitoring azithromycin resistance, the absence of an appropriate vaccine, and the unclear benefits of exclusion policies in day care centers, public health measures should focus on prevention of shigellosis outbreaks through appropriate hygiene practices and, where possible and allowed by state regulations, forming cohorts of convalescing children in day care centers.

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CDC's 60th Anniversary

Director's Perspective — William H. Foege, M.D., M.P.H., 1977–1983

Expansion of Public Health

Modern public health began 210 years ago, in 1796, when Edward Jenner, using material from a cowpox lesion on the hand of Sarah Nelmes, vaccinated James Phipps. A later attempt to give Phipps smallpox demonstrated his immunity, and the vaccination era had begun. Although Jenner lacked our understanding of viruses, the immune system, or vaccinology, his clinical observations had convinced him that milkmaids were protected from smallpox because of their previous exposure to cowpox, and he acted to see if nature could be replicated.

David Sencer reported on the conclusion to the smallpox saga in his Director's Perspective (*1*), describing how Jenner's actions were taken to their logical extension during the smallpox eradication program in the 1960s and 1970s. CDC contributed more than 300 workers to this global effort, many of them assigned to the World Health Organization for deployment throughout the world. The importance of this event in the collective energy that defined CDC in 1977 cannot be overstated. Workers at CDC believed they could make a difference. They thought globally, understood teamwork, and were proud to be part of the organization.

In commemoration of CDC's 60th Anniversary, MMWR *is departing from its usual report format. This is the second in a series of occasional commentaries by directors of CDC. The directors were invited to give their personal perspectives on the key public health achievements and challenges that occurred during their tenures.*

For much of the past 210 years, public health has been synonymous with combating infectious diseases. As Sencer points out, although public health had made excursions into occupational health and environmental health, nutrition, birth defects, smoking, and even family planning, the focus was predominantly on the prevention and control of infectious diseases. However, interest in the health of the public increasingly required concern over the toll of chronic diseases, exposure to chemical toxins, the role of intentional and unintentional injury, and the interaction of many risk factors beyond microbes. Public health was changing, and so were the demands on CDC.

Changing CDC Priorities and Structure

In 1977, an invitation went out to health workers in cities, counties, states, academic institutions, industry, government, and global organizations to provide suggestions regarding what CDC needed to do in its pursuit of three objectives: 1) reducing unnecessary suffering, 2) reducing premature mortality, and 3) improving life quality. Hundreds of responses and thousands of suggestions were received and assembled into categories by a team led by Seth Leibler.

Next, an outside committee, with J.D. Millar acting as liaison to CDC, was asked to consider these suggestions, along with patterns of morbidity and mortality in the United States and to provide guidance on the highest future priorities for CDC. The committee determined that mortality figures often were misleading in defining the importance of a health problem. At CDC this led to the use of "Years of Potential Life Lost," a concept used subsequently in many publications. Age 65 was accepted as the age for comparison, not because it defined the median or the desired, but because age 65 was commonly used in the reporting of global statistics. The committee recommended a dozen priorities for CDC.

During two retreats, managers at CDC considered the priorities to see whether they could support them. They accepted all 12 recommendations and, in the course of discussion, added an additional three for a total of 15 priorities for CDC to pursue.

Having agreed on objectives, priorities, and the need to expand CDC's activities, the difficult task of reorganizing the agency remained. In preceding years, every outbreak investigation had required matrix management, with experts drawn from epidemiology, statistics, laboratory sciences, and other disciplines to find the solution. With expanding priorities and the need for many additional forms of expertise, the solution of public health problems required a new structure. A new

structure, with all of its unknowns, was not easy to implement and required special attention to communications and suggestions from those affected by the changes. The crucial ingredient was a director in each center who defined a path that workers were eager to follow. CDC was reorganized into different centers (e.g., Infectious Diseases, Occupational Health, Professional Development and Training, and Environmental Health), each staffed with persons with the various skills needed to solve particular problems. Matrix management was still required (e.g., to determine whether an outbreak was infectious or toxic), but the majority of health problems now related to a given center, and the agency name was changed to *Centers* for Disease Control.

Solving New Problems

Solving health problems was and still is a daily task at CDC. Sometimes these problems emerge as new outbreaks or observations. In the late 1970s and early 1980s, dozens of outbreak solutions were chronicled in *MMWR*. Investigators determined that newly identified Legionnaires organisms actually were common and had been involved in previously unsolved outbreaks (*2*). New problems included toxic shock syndrome, which made headlines in 1980 when hundreds of previously healthy women of child-bearing age exhibited fever associated with shock, multi-organ failures, and high death rates (*3–5*). Rapid identification of tampons as a risk factor, and identification of a specific product as posing especially high risk, helped to reduce but not eliminate this problem.

During the late 1970s, the world appeared faced with a new, emerging infectious disease (e.g., Lassa fever, toxic shock syndrome, and Legionnaires disease) every year. CDC workers, during the course of some of the most difficult outbreak investigations in history, defined the dynamics of virus transmission and isolated the Ebola virus in Zaire and Sudan (*6,7*). However, increasingly, outbreak investigations involved noninfectious health problems such as those involving baby foods and diet preparations. The deaths of women attempting to lose weight while consuming liquid-protein diet products led to an understanding of the risk for physiological consequences on cardiac function posed by such products and resulted in their subsequent regulation.

Although outbreak investigations command much of the media attention, the more routine daily work of thousands of health workers throughout the United States is what ultimately moves morbidity and mortality numbers to lower levels. Monitoring hospital infection rates and their causes, daily maintenance of water supplies, monitoring food handling practices, and improving air quality are only a few of the tasks that, when performed correctly, never become known to the public. Lead poisoning in children provides an example of successful intervention for a problem not involving infectious disease. Leaded gasoline and paint exposed thousands of children to harmful levels of lead. The development of an inexpensive and rapid test in the 1970s made possible the screening of children, resulting in better surveillance, treatment, and prevention measures. The number of children with high lead levels was reduced, and the health and collective intelligence of subsequent cohorts of children was improved (*8*).

Redefining the Unacceptable

In the infectious disease field, immunizations have been both highly effective and cost effective and have resulted in the prevention of diseases that were leading causes of death a century ago. In 1977, with the support of the White House and the Department of Health, Education, and Welfare, new measures were taken to improve immunization rates. Many have noted that public health is constantly redefining the unacceptable. A quarter century ago, the objective of 90% school-age immunization coverage with common childhood vaccines was regarded by many as too ambitious. That objective proved achievable but still insufficient, as researchers determined that such levels of immunization coverage must be reached by age 2 to achieve optimal disease control.

In 1978, improvements in immunization rates led to the possibility of interrupting measles transmission in the United States. Some thought this unachievable and believed pursuing such an objective would only harm the reputation of CDC. Others felt the true barriers would not be determined unless this ultimate objective was selected; consequently, CDC set a goal of interrupting indigenous measles transmission. Month by month, every measles solution revealed a new problem, including transmission among military recruits (solved by vaccinating all recruits regardless of history), in day care centers, preschools, colleges, and even in unexpected settings such as stadiums or theme parks. Ultimately, when every other problem appeared solved, a final barrier was uncovered, namely the importation of measles into the United States on an average of twice a week. Today, implementation of measles immunization programs around the world continues to decrease the rate of importation into the United States. Meanwhile, in 2003, measles was declared no longer endemic in the Americas (*9*), and in the United States, rubella was declared no longer endemic in 2005 (*10*).

In 1981, the most devastating of the emerging infections, which would become known as human immunodeficiency virus (HIV) infection, was described in *MMWR*. During the following months, CDC investigators of sexually transmitted diseases under the leadership of Paul Weisner, and later agency-wide investigators headed by Jim Curran, devoted more resources to understanding HIV and acquired immuno-

deficiency syndrome (AIDS) than any other investigation in CDC history. Two years later, even before a virus had been isolated, the CDC team was able to outline in *MMWR*, on the basis of epidemiologic evidence, what was known about transmission and what could be done to reduce transmission rates. Their recommendations were remarkably accurate and reinforced by later findings. The frustration of the early years was gaining insight into transmission dynamics but having inadequate screening techniques for risk reduction. For example, with the second clinical report of HIV involving a person with hemophilia, the team knew the virus would pose risks for recipients of blood transfusions in general, yet no specific screening technique existed to identify contaminated units of blood. The only recourse was exclusion of groups as blood donors, based on risk factors. In later years, after a screening test for HIV infection was developed and implemented, frustration changed to disappointment as scientists found themselves able to understand HIV/AIDS transmission patterns but still faced with the difficulties of altering human behavior.

As CDC expanded beyond infectious diseases, new surveillance systems were developed for chronic diseases and risk factors that are followed inevitably by health impairments. CDC continued to document the impact of smoking on health but also worked on how best to educate the public and how to evaluate the value of school health curricula. In addition to smoking, work on heart disease, cancer, and obesity required expertise in nutrition, exercise, and human behavior, leading to a need for more public health workers trained in the social sciences. The methods used for infectious disease surveillance not only had relevance for determining risk factors for chronic diseases but also for violence and injuries. Three of the top five causes of years lost prematurely involved homicide, suicide, and unintentional injuries. Creative work was done to define measures for preventing violence and injuries. The groundwork was set for the future establishment of the National Center for Injury Prevention (*11*).

Science Versus Politics

Every public health decision involves political decisions. A price came with CDC's expansion beyond infectious diseases, which generally do not have a group of persons who benefit from the disease and are lobbying to reduce control efforts. With infectious diseases, public health decisions usually can be based on the best science available; this is not always true in the larger public health arena. Tobacco companies make their profit by selling cigarettes and will actively fight efforts to reduce tobacco consumption. The new reality at CDC involved groups disputing its findings, such as gun lobbyists, and political pressures from both congressional and administrative personnel regarding occupational health decisions, lead abatement recommendations, and tobacco statements. One Senate Committee demanded the names of persons investigated in the liquid-protein diet deaths so that it could perform its own investigation. The names were not provided. A congressman demanded the names of persons in CDC files who tested positive for HIV. Again, the demand was refused. But the time and effort required to counter such political intrusions increased and became a fact of life that continues to decrease the efficiency of public health workers. CDC needs to continue to base its decisions on the best available science, but factors beyond science continue to contribute to public policy decisions.

A final example involves Reye syndrome, a problem that had concerned CDC for some years. By 1979, CDC had the results of three case-control studies from Arizona, Michigan, and Ohio, indicating that salicylates (i.e., aspirin) were a risk factor under certain conditions. Michigan performed another study during the 1980–81 influenza season that also determined salicylates were a risk factor for Reye syndrome.

None of the studies had reached statistical significance, in an era when meta-analysis for combining studies for statistical analysis was in its infancy. The National Institutes of Health, Food and Drug Administration (FDA), and CDC all had made statements regarding the possible association of medications with Reye syndrome; however, those statements had fallen short of advising against use of salicylates in children with influenza or chickenpox. Outside consultants all agreed that the various shortcomings of the studies were insufficient to neutralize the consistency of the findings. The aspirin manufacturers were unrelenting in their arguments that CDC's scientific reputation would be ruined if the studies were reported without having achieved statistical significance. But CDC and FDA decided to report on the studies in a joint statement, making their shortcomings very clear, in the belief that pediatricians and parents should have all the information that the Public Health Service had. The night before publication, FDA called to say it had received new information from the aspirin manufacturers and that CDC should delay publication.

However, the next day, CDC decided to proceed with its publication plan. The report in *MMWR* detailed the shortcomings of the studies and concluded with the following statement: "Until definitive information is available, CDC advises physicians and parents of the possible increased risk of Reye syndrome associated with the use of salicylates for children with chickenpox or influenza-like illnesses (*12*)."

The very surprised aspirin manufacturers descended on the assistant secretary of health, who supported the statement. They went to the secretary of Health and Human Services, who supported the statement. They then went to the White House, which told CDC to start a new study. But the word

was already out. Salicylates were withheld in children with chickenpox and influenza, reports of Reye syndrome declined, lives were saved, and science had trumped politics. The challenge for the future is to continue making the best science available for the benefit of everyone.

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Notice to Readers

Domestic Violence Awareness Month — October 2006

October is Domestic Violence Awareness Month. During this month, CDC is helping raise awareness of the serious, but preventable, problem of intimate partner violence (IPV). IPV is physical, sexual, or psychological harm caused by a current or former dating partner or spouse. This violence can occur among heterosexual or same-sex couples and does not require sexual intimacy.

Research has indicated that IPV varies in frequency and severity, ranging from isolated violent acts to battering, which is more frequent and intensive and involves one partner maintaining control over the other (*1*). IPV is a serious public health problem affecting more than 32 million persons in the United States (*2*). In 2004, IPV resulted in 1,544 deaths (*3*).

The longer IPV continues, the more serious the consequences. Many victims suffer physical injuries (e.g., broken bones, internal injuries, or head trauma) that can lead to permanent disabilities. IPV also can have an emotional impact. Victims often struggle with low self-esteem, depression, anxiety, and posttraumatic stress disorder.

IPV increases health-care costs and interferes with the performance of daily activities, including going to work. CDC estimates that the economic cost of IPV against women exceeds $5.8 billion. This estimate includes nearly $4.1 billion in direct costs (medical and mental health care) and nearly $1.8 billion in indirect costs (lost productivity) (*4*).

This month, CDC is encouraging communities to plan activities that raise awareness of IPV and promote development of healthy relationships. More information on IPV is available at http://www.cdc.gov/ncipc/factsheets/ipvfacts.htm.

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Errata: Vol. 55, No. 26

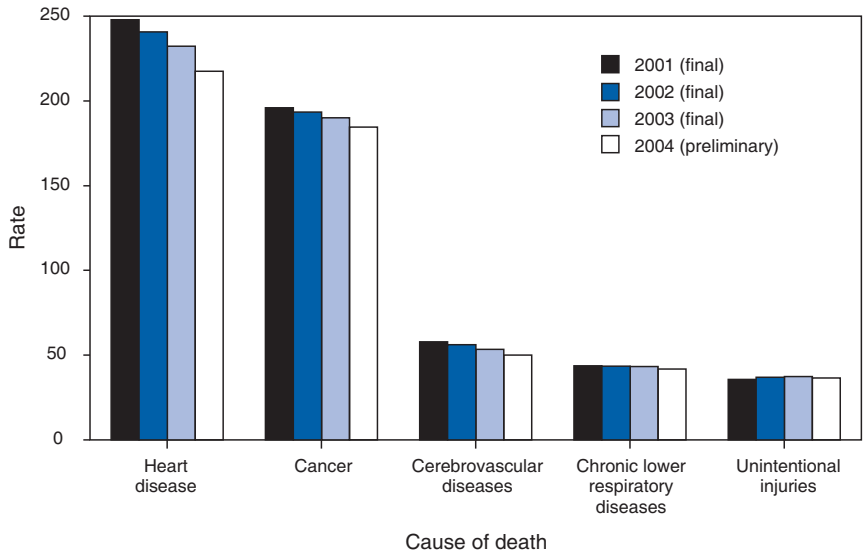
In the report, "Homicides and Suicides — National Violent Death Reporting System, United States, 2003–2004," the following errors occurred.

On page 723, in the first column, the first through fifth complete sentences should read as follows: "The most frequently reported mental health diagnoses were depression (**81.3%**), bipolar disorder (**9.9**%), and schizophrenia (3.3%) in 2004. Roughly half of victims were described by family or friends as being depressed before the time of death. Problems with a current or former intimate partner contributed to 27.9% of suicides. Physical health problems, most commonly in older adults, contributed to approximately **22.1**% of the suicides.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Age-Adjusted Death Rates* for the Five Leading Causes of Death — United States, 2001–2004



* Per 100,000 standard U.S. population.

The five leading causes of death account for approximately two thirds of all deaths in the United States. The two leading causes of death, heart disease and cancer, account for approximately half of all deaths. Both heart disease and cancer death rates declined substantially during 2001–2004.

SOURCE: Mortality data from the National Vital Statistics System, available at http://www.cdc.gov/nchs/deaths.htm.

Nearly **17.9**% of suicide victims had made previous attempts, and 16.5% had alcohol dependence problems."

On page 723, in the second column, the fourth sentence should read as follows: "In **78.7**% of these cases, suspects were known to victims, and 20.0% of homicides were directly associated with intimate partner conflict (i.e., one in which an intimate partner killed another partner)."

Erratum: Vol. 55, No. 10

In the report, "Evaluation of an Association Between Loratadine and Hypospadias — United States, 1997–2001," on page 220, in the first column, the second sentence of the second full paragraph should read, "Among the **1,990** mothers of infants in the case and control populations, 33 (1.7%) reported using loratadine during the exposure period."

Erratum: Vol. 55, No. RR-13

In the *MMWR Recommendations and Reports*, "Locally Acquired Mosquito-Transmitted Malaria: A Guide for Investigations in the United States," an error occurred on page 2 in Figure 2. Maine should read **Massachusetts**.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending September 30, 2006 (39th Week)*

Disease	Current week	Cum 2006	5-year weekly average†	Total cases reported for previous years 2005	2004	2003	2002	2001	States reporting cases during current week (No.)
Anthrax	—	1	0	—	—	—	2	23	
Botulism:									
foodborne	2	7	0	19	16	20	28	39	GA (2)
infant	—	61	2	90	87	76	69	97	
other (wound & unspecified)	—	42	1	33	30	33	21	19	
Brucellosis	1	73	2	122	114	104	125	136	MN (1)
Chancroid	—	23	1	17	30	54	67	38	
Cholera	—	6	0	8	5	2	2	3	
Cyclosporiasis§	—	89	2	734	171	75	156	147	
Diphtheria	—	—	—	—	—	1	1	2	
Domestic arboviral diseases§,¶:									
California serogroup	—	30	7	80	112	108	164	128	
eastern equine	—	6	0	21	6	14	10	9	
Powassan	—	1	—	1	1	—	1	N	
St. Louis	—	3	1	13	12	41	28	79	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	4	274	10	790	537	362	511	261	NY (3), FL (1)
human monocytic	4	262	9	522	338	321	216	142	NY (2), NC (2)
human (other & unspecified)	1	118	1	122	59	44	23	6	NY (1)
Haemophilus influenzae,**									
invasive disease (age <5 yrs):									
serotype b	1	7	0	9	19	32	34	—	MN (1)
nonserotype b	—	65	2	135	135	117	144	—	
unknown serotype	—	151	3	217	177	227	153	—	
Hansen disease§	1	50	1	88	105	95	96	79	FL (1)
Hantavirus pulmonary syndrome§	—	24	0	29	24	26	19	8	
Hemolytic uremic syndrome, postdiarrheal§	6	166	5	221	200	178	216	202	OH (2), GA (2), CO (1), CA (1)
Hepatitis C viral, acute	5	565	33	771	713	1,102	1,835	3,976	NY (1), MI (2), NE (1), FL (1)
HIV infection, pediatric (age <13 yrs)§,††	—	52	4	380	436	504	420	543	
Influenza-associated pediatric mortality§,§§,¶¶									

—: 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. Data for HIV/AIDS are available in Table IV quarterly.

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

¶¶ A total of 47 cases were reported since the beginning of the 2005-06 flu season (October 2, 2005 [week 40]).

*** 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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	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	13,082	18,896	35,170	706,434	719,096	76	149	1,643	6,197	3,177	112	68	594	3,247	5,408
New England	572	619	1,550	23,730	24,289	—	0	0	—	—	7	4	29	217	272
Connecticut	106	166	1,214	6,715	7,152	N	0	0	N	N	—	0	26	26	59
Maine§	65	43	74	1,672	1,640	N	0	0	N	N	—	0	3	25	24
Massachusetts	254	289	442	10,850	10,871	—	0	0	—	—	—	1	14	88	124
New Hampshire	28	36	65	1,431	1,382	—	0	0	—	—	—	1	4	30	29
Rhode Island	100	59	95	2,244	2,516	—	0	0	—	—	5	0	6	11	7
Vermont§	19	19	43	818	728	N	0	0	N	N	2	0	5	37	29
Mid. Atlantic	1,727	2,390	3,696	89,394	88,299	—	0	0	—	—	9	10	444	389	2,161
New Jersey	94	376	501	13,788	14,474	N	0	0	N	N	—	0	3	9	50
New York (Upstate)	746	499	1,727	18,065	17,470	N	0	0	N	N	6	3	441	128	1,788
New York City	260	746	1,570	28,409	28,562	N	0	0	N	N	—	1	10	44	115
Pennsylvania	627	726	1,075	29,132	27,793	N	0	0	N	N	3	5	21	208	208
E.N. Central	1,797	3,115	12,578	118,061	120,742	—	1	3	36	8	35	16	122	805	1,255
Illinois	628	963	1,691	38,278	37,670	—	0	0	—	—	—	2	9	72	133
Indiana	275	394	510	14,672	15,132	N	0	0	N	N	18	1	9	63	52
Michigan	615	635	9,888	25,702	20,027	—	0	3	32	8	2	2	7	98	88
Ohio	91	685	1,433	24,797	32,770	—	0	1	4	—	15	5	92	275	574
Wisconsin	188	399	531	14,612	15,143	N	0	0	N	N	—	5	47	297	408
W.N. Central	409	1,152	1,457	43,068	44,279	—	0	12	1	4	7	11	63	574	493
Iowa	—	154	225	5,730	5,341	N	0	0	N	N	1	1	27	143	107
Kansas	—	154	269	5,443	5,554	N	0	0	N	N	—	1	7	58	32
Minnesota	—	230	346	7,926	9,255	—	0	12	—	3	2	2	22	139	92
Missouri	316	439	597	16,939	16,986	—	0	1	1	1	3	2	11	112	215
Nebraska§	—	95	176	3,887	3,890	N	0	1	N	N	1	1	16	58	19
North Dakota	39	32	58	1,164	1,192	N	0	0	N	N	—	0	4	7	1
South Dakota	54	51	117	1,979	2,061	N	0	0	N	N	—	1	7	57	27
S. Atlantic	3,306	3,454	4,926	134,727	134,493	—	0	1	3	1	43	14	52	673	525
Delaware	62	69	92	2,651	2,498	N	0	0	N	N	—	0	3	10	3
District of Columbia	20	53	103	1,800	2,876	—	0	0	—	—	—	0	3	12	9
Florida	845	937	1,138	36,477	32,663	N	0	0	N	N	22	6	32	326	235
Georgia	19	635	2,142	21,970	23,599	—	0	0	—	—	8	3	11	148	107
Maryland§	292	331	486	13,098	13,846	—	0	1	3	1	—	0	3	12	25
North Carolina	867	562	1,772	24,903	24,468	N	0	0	N	N	11	0	10	71	67
South Carolina§	505	306	1,306	13,535	14,512	N	0	0	N	N	—	1	13	52	17
Virginia§	655	423	840	17,893	18,033	N	0	0	N	N	2	1	6	35	50
West Virginia	41	56	226	2,400	1,998	N	0	0	N	N	—	0	3	7	12
E.S. Central	602	1,419	1,943	54,502	52,030	—	0	0	—	—	1	3	20	116	153
Alabama§	43	391	756	15,314	11,638	N	0	0	N	N	—	1	6	48	21
Kentucky	24	160	402	6,423	6,707	N	0	0	N	N	1	1	19	30	98
Mississippi	518	374	802	14,273	16,126	—	0	0	—	—	—	0	1	9	1
Tennessee§	17	495	598	18,492	17,559	N	0	0	N	N	—	0	5	29	33
W.S. Central	1,834	2,150	3,605	81,574	83,256	—	0	1	1	—	1	4	24	152	176
Arkansas	164	158	333	6,088	6,508	—	0	0	—	—	1	0	2	17	4
Louisiana	99	265	761	11,053	12,955	—	0	1	1	N	—	0	7	38	68
Oklahoma	348	226	2,159	9,005	8,427	N	0	0	N	N	—	1	4	29	34
Texas§	1,223	1,398	1,774	55,428	55,366	N	0	0	N	N	—	2	19	68	70
Mountain	871	1,026	1,839	36,217	47,343	9	116	452	4,312	2,076	8	2	38	262	109
Arizona	474	354	642	13,239	16,273	9	113	448	4,241	1,998	—	0	2	19	9
Colorado	—	160	482	4,282	11,355	N	0	0	N	N	2	1	7	51	36
Idaho§	3	50	159	1,970	1,946	N	0	0	N	N	1	0	5	21	13
Montana	—	43	195	1,825	1,739	N	0	0	N	N	4	0	26	104	16
Nevada§	376	73	432	3,533	5,492	—	0	4	21	48	—	0	1	3	11
New Mexico§	—	166	339	6,809	6,366	—	0	3	10	16	—	0	3	12	10
Utah	—	93	136	3,547	3,338	—	1	3	38	11	1	0	3	14	11
Wyoming	18	27	55	1,012	834	—	0	2	2	3	—	0	11	38	3
Pacific	1,964	3,320	5,079	125,161	124,365	67	42	1,179	1,844	1,088	1	2	52	59	264
Alaska	50	85	152	3,148	3,163	—	0	0	—	—	—	0	1	4	3
California	1,368	2,578	4,231	98,604	96,487	67	42	1,179	1,844	1,088	—	0	14	—	149
Hawaii	—	103	135	3,796	4,142	N	0	0	N	N	—	0	1	4	1
Oregon§	—	174	315	6,362	6,607	N	0	0	N	N	1	1	6	51	60
Washington	546	350	604	13,251	13,966	N	0	0	N	N	—	0	38	—	51
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	—	615	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	76	161	2,945	3,133	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	5	16	178	196	—	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.
† 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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	325	315	1,029	11,866	14,142	4,514	6,496	14,136	244,951	246,772	22	38	142	1,515	1,747
New England	18	24	75	924	1,293	82	106	288	4,048	4,411	—	3	19	126	132
Connecticut	—	0	37	214	280	32	41	241	1,594	1,886	—	0	9	37	38
Maine†	—	2	13	118	163	4	2	6	96	104	—	0	4	17	8
Massachusetts	—	10	25	357	577	27	46	86	1,801	1,918	—	1	7	52	66
New Hampshire	—	0	9	23	49	5	3	9	148	126	—	0	2	7	7
Rhode Island	14	0	25	92	86	13	8	19	360	334	—	0	7	4	7
Vermont†	4	3	8	120	138	1	1	4	49	43	—	0	2	9	6
Mid. Atlantic	53	57	254	2,097	2,559	422	636	1,014	23,624	25,337	4	7	30	291	326
New Jersey	—	9	15	297	342	66	102	143	3,642	4,277	—	2	4	45	64
New York (Upstate)	38	24	227	883	879	128	123	455	4,680	5,081	3	2	27	101	96
New York City	—	8	32	350	689	78	177	357	7,070	7,640	—	1	4	31	60
Pennsylvania	15	15	29	567	649	150	210	393	8,232	8,339	1	3	8	114	106
E.N. Central	30	48	106	1,766	2,543	675	1,285	7,047	48,085	49,026	2	5	14	217	304
Illinois	—	9	23	317	600	195	375	709	14,663	14,800	—	1	6	47	102
Indiana	N	0	0	N	N	123	163	237	6,558	6,124	—	1	11	64	54
Michigan	7	13	22	478	615	258	252	5,880	10,762	8,303	—	0	3	18	19
Ohio	23	16	32	600	588	43	330	648	11,204	15,514	2	1	6	65	94
Wisconsin	—	10	40	371	740	56	131	172	4,898	4,285	—	0	4	23	35
W.N. Central	13	28	260	1,334	1,561	125	362	436	13,603	14,066	6	2	15	106	88
Iowa	—	5	14	213	208	—	34	46	1,199	1,200	—	0	1	1	—
Kansas	—	4	11	148	154	—	45	124	1,519	1,968	—	0	3	14	9
Minnesota	—	2	238	477	649	—	62	105	2,039	2,589	5	0	9	56	37
Missouri	11	9	32	353	349	112	190	251	7,482	7,086	1	0	6	25	29
Nebraska†	2	1	8	76	99	—	23	56	1,003	884	—	0	2	6	12
North Dakota	—	0	7	11	11	5	2	7	76	76	—	0	3	4	1
South Dakota	—	1	7	56	91	8	6	15	285	263	—	0	0	—	—
S. Atlantic	63	49	95	1,803	2,038	1,579	1,491	2,334	59,810	58,661	5	10	26	402	414
Delaware	—	1	4	30	43	30	26	44	1,105	642	—	0	1	1	—
District of Columbia	1	1	5	52	41	27	34	61	1,208	1,580	1	0	1	4	7
Florida	29	18	39	781	719	436	437	553	17,392	14,962	4	3	9	133	101
Georgia	7	10	44	380	546	13	305	1,014	10,611	11,006	—	2	12	79	88
Maryland†	—	4	11	141	151	67	128	186	4,900	5,201	—	1	5	50	58
North Carolina	N	0	0	N	N	568	283	766	12,761	11,680	—	0	9	46	67
South Carolina†	—	1	7	65	86	235	132	748	6,102	6,646	—	1	3	25	27
Virginia†	26	7	50	337	420	174	130	288	5,014	6,422	—	1	8	48	43
West Virginia	—	0	5	17	32	29	17	42	717	522	—	0	4	16	23
E.S. Central	12	8	40	330	319	278	563	863	22,122	20,627	—	2	7	78	93
Alabama†	12	4	29	177	143	28	183	310	7,110	6,698	—	0	5	20	17
Kentucky	N	0	0	N	N	6	55	132	2,294	2,273	—	0	1	4	10
Mississippi	—	0	0	—	—	240	139	435	5,605	5,223	—	0	1	3	—
Tennessee†	—	4	12	153	176	4	187	236	7,113	6,433	—	1	4	51	66
W.S. Central	8	5	31	198	238	652	879	1,430	35,274	33,951	3	1	15	51	93
Arkansas	4	2	6	86	65	102	79	142	3,140	3,446	—	0	2	7	7
Louisiana	—	0	3	18	48	70	161	354	6,766	7,167	—	0	2	5	32
Oklahoma	4	2	24	94	125	118	81	764	3,371	3,376	3	1	14	37	49
Texas†	N	0	0	N	N	362	548	836	21,997	19,962	—	0	2	2	5
Mountain	39	30	56	1,151	1,098	242	216	552	8,158	10,215	1	4	8	154	179
Arizona	—	3	36	116	102	109	90	201	3,343	3,698	1	1	7	73	90
Colorado	26	9	33	397	391	—	43	90	1,462	2,411	—	1	4	41	36
Idaho†	3	3	11	122	109	1	2	10	114	82	—	0	1	3	4
Montana	2	2	11	79	56	—	3	20	145	117	—	0	0	—	—
Nevada†	—	1	6	38	78	130	24	194	1,160	2,159	—	0	1	—	14
New Mexico†	—	1	6	44	62	—	30	64	1,242	1,179	—	0	4	19	21
Utah	7	7	19	326	281	—	17	24	603	513	—	0	4	15	7
Wyoming	1	1	4	29	19	2	2	6	89	56	—	0	1	3	7
Pacific	89	59	202	2,263	2,493	459	808	963	30,227	30,478	1	2	15	90	118
Alaska	12	1	7	68	82	3	11	23	434	437	—	0	2	9	25
California	48	43	105	1,606	1,769	325	664	830	24,950	25,397	—	0	9	21	49
Hawaii	—	1	3	37	52	—	18	29	683	772	—	0	1	13	8
Oregon†	10	7	15	299	330	—	28	58	979	1,147	1	1	6	45	36
Washington	19	6	90	253	260	131	74	142	3,181	2,725	—	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	—	6
Puerto Rico	1	1	12	53	203	—	5	16	188	284	—	0	1	1	3
U.S. Virgin Islands	—	0	0	—	—	—	0	5	30	45	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	Hepatitis (viral, acute), by type: A — Current week	A — Previous 52 weeks: Med	A — Previous 52 weeks: Max	A — Cum 2006	A — Cum 2005	B — Current week	B — Previous 52 weeks: Med	B — Previous 52 weeks: Max	B — Cum 2006	B — Cum 2005	Legionellosis — Current week	Legionellosis — Previous 52 weeks: Med	Legionellosis — Previous 52 weeks: Max	Legionellosis — Cum 2006	Legionellosis — Cum 2005
United States	28	70	245	2,379	3,137	44	94	597	3,463	3,933	43	41	127	1,551	1,519
New England	2	3	20	144	363	—	1	9	47	115	8	2	11	88	102
Connecticut	1	1	2	34	41	—	0	3	—	37	4	0	8	29	22
Maine†	—	0	2	6	3	—	0	2	13	12	—	0	2	7	5
Massachusetts	—	1	13	51	228	—	0	5	14	38	—	1	6	27	47
New Hampshire	—	0	16	36	75	—	0	2	11	23	—	0	1	1	7
Rhode Island	1	0	4	9	10	—	0	4	8	1	4	0	10	20	16
Vermont†	—	0	2	8	6	—	0	1	1	4	—	0	3	4	5
Mid. Atlantic	2	7	15	234	511	4	19	55	830	516	17	13	41	514	520
New Jersey	—	2	7	57	106	—	2	8	80	191	—	1	10	61	91
New York (Upstate)	—	1	14	63	77	2	1	43	49	42	15	5	29	219	132
New York City	—	2	10	64	245	—	13	29	580	108	—	1	9	29	81
Pennsylvania	2	1	5	50	83	2	3	9	121	175	2	4	17	205	216
E.N. Central	3	6	12	206	273	6	8	24	310	429	5	9	25	334	314
Illinois	—	1	4	40	100	—	2	7	57	121	—	1	4	21	44
Indiana	1	0	5	22	14	—	0	17	42	32	1	0	3	24	20
Michigan	2	2	8	77	87	—	3	7	105	139	—	2	7	87	87
Ohio	—	1	4	44	39	6	2	10	100	103	4	4	19	169	137
Wisconsin	—	1	5	23	33	—	0	4	6	34	—	0	5	33	26
W.N. Central	1	2	30	96	70	—	4	22	119	209	—	1	15	51	59
Iowa	—	0	2	8	18	—	0	3	13	20	—	0	3	10	4
Kansas	—	0	5	24	13	—	0	2	8	24	—	0	2	3	2
Minnesota	—	0	29	9	3	—	0	13	17	27	—	0	11	11	16
Missouri	—	1	3	34	28	—	2	7	69	110	—	0	3	17	23
Nebraska†	1	0	3	13	8	—	0	1	11	22	—	0	2	6	2
North Dakota	—	0	2	—	—	—	0	0	—	—	—	0	1	—	2
South Dakota	—	0	3	8	—	—	0	1	1	6	—	0	6	4	10
S. Atlantic	9	11	30	407	546	24	23	66	864	1,059	6	8	19	306	298
Delaware	—	0	2	10	5	—	1	4	34	24	—	0	2	8	13
District of Columbia	—	0	2	6	3	—	0	2	5	10	—	0	5	16	9
Florida	4	4	13	161	220	14	8	19	315	362	3	3	9	128	82
Georgia	2	1	7	53	104	1	3	7	126	162	1	0	4	14	26
Maryland†	—	1	6	45	55	—	3	10	120	114	—	1	5	53	87
North Carolina	—	0	20	67	65	8	0	23	124	128	1	0	5	29	23
South Carolina†	—	0	2	15	32	—	2	7	55	121	—	0	1	2	11
Virginia†	3	1	11	45	59	1	1	18	41	111	1	1	7	48	33
West Virginia	—	0	3	5	3	—	0	18	44	27	—	0	3	8	14
E.S. Central	—	2	8	91	213	1	6	14	236	274	2	1	9	59	60
Alabama†	—	0	3	12	40	—	2	8	75	62	—	0	2	7	11
Kentucky	—	0	5	29	22	1	1	5	54	54	2	0	4	20	20
Mississippi	—	0	1	5	17	—	0	2	10	44	—	0	1	1	3
Tennessee†	—	1	5	45	134	—	2	8	97	114	—	1	7	31	26
W.S. Central	—	4	77	133	362	2	14	315	521	452	—	1	32	43	36
Arkansas	—	0	9	33	16	—	1	4	34	52	—	0	3	3	5
Louisiana	—	0	4	13	55	—	0	3	16	61	—	0	2	4	1
Oklahoma	—	0	2	5	4	1	0	17	31	34	—	0	3	1	7
Texas†	—	3	73	82	287	1	12	295	440	305	—	0	26	35	23
Mountain	2	5	18	192	239	1	4	39	124	423	—	2	7	86	76
Arizona	1	2	16	108	123	—	1	23	32	276	—	1	4	32	16
Colorado	1	1	4	33	33	1	1	5	29	43	—	0	2	16	17
Idaho†	—	0	2	9	20	—	0	2	10	12	—	0	2	9	3
Montana	—	0	3	9	7	—	0	7	—	3	—	0	1	5	5
Nevada†	—	0	2	7	18	—	0	4	14	41	—	0	2	3	17
New Mexico†	—	0	3	12	19	—	0	3	15	15	—	0	1	4	3
Utah	—	0	2	11	18	—	0	5	24	31	—	0	1	17	11
Wyoming	—	0	1	3	1	—	0	1	—	2	—	0	0	—	4
Pacific	9	20	163	876	560	6	9	61	412	456	5	1	9	70	54
Alaska	—	0	0	—	4	1	0	1	5	7	—	0	1	—	—
California	8	15	162	793	462	5	7	41	317	303	5	1	9	70	52
Hawaii	—	0	2	9	21	—	0	1	5	6	—	0	1	—	2
Oregon†	—	0	5	37	38	—	1	5	52	83	N	0	0	N	N
Washington	1	1	13	37	35	—	0	18	33	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	21	57	—	1	8	24	38	—	0	1	1	—
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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max		
United States	235	247	2,153	12,740	17,385	16	23	125	885	1,072
New England	35	37	780	2,134	3,051	—	1	11	44	58
Connecticut	32	10	753	1,508	491	—	0	5	11	11
Maine†	—	1	34	132	209	—	0	1	4	5
Massachusetts	—	1	37	33	2,101	—	0	3	19	34
New Hampshire	2	5	54	392	183	—	0	3	9	5
Rhode Island	—	0	5	1	27	—	0	8	—	2
Vermont†	1	1	12	68	40	—	0	1	1	1
Mid. Atlantic	171	153	1,176	7,430	10,103	2	4	13	152	289
New Jersey	—	23	166	1,608	3,080	—	1	3	28	68
New York (Upstate)	161	75	1,150	3,199	2,969	1	1	11	34	38
New York City	—	1	15	54	345	—	2	8	55	154
Pennsylvania	10	40	220	2,569	3,709	1	1	3	35	29
E.N. Central	3	11	131	1,114	1,590	1	2	7	96	116
Illinois	—	0	2	—	119	—	1	4	40	65
Indiana	—	0	3	16	26	—	0	3	9	4
Michigan	2	1	6	40	46	—	0	2	16	19
Ohio	1	1	6	38	49	1	0	3	24	18
Wisconsin	—	9	126	1,020	1,350	—	0	3	7	10
W.N. Central	—	7	167	494	635	—	0	32	32	43
Iowa	—	1	8	75	83	—	0	1	1	8
Kansas	—	0	2	4	3	—	0	2	6	5
Minnesota	—	6	167	398	531	—	0	30	14	11
Missouri	—	0	3	8	13	—	0	1	5	16
Nebraska†	—	0	1	8	3	—	0	2	4	3
North Dakota	—	0	3	—	—	—	0	1	1	—
South Dakota	—	0	1	1	2	—	0	1	1	—
S. Atlantic	16	28	103	1,314	1,810	7	6	15	250	232
Delaware	—	7	28	384	560	—	0	1	5	3
District of Columbia	1	0	7	39	8	—	0	2	3	8
Florida	5	1	3	32	33	2	1	6	48	39
Georgia	—	0	1	2	5	—	1	6	66	42
Maryland†	—	14	60	609	964	—	1	5	51	86
North Carolina	1	0	4	24	42	4	0	8	24	24
South Carolina†	—	0	1	8	19	—	0	2	8	7
Virginia†	9	3	25	207	169	1	1	9	43	22
West Virginia	—	0	44	9	10	—	0	2	2	1
E.S. Central	—	0	3	20	31	—	0	3	19	23
Alabama†	—	0	1	5	2	—	0	2	8	4
Kentucky	—	0	2	7	5	—	0	2	3	8
Mississippi	—	0	0	—	—	—	0	1	3	—
Tennessee†	—	0	2	8	24	—	0	2	5	11
W.S. Central	—	0	3	10	66	1	2	31	53	102
Arkansas	—	0	1	—	4	1	0	1	2	5
Louisiana	—	0	0	—	3	—	0	1	2	3
Oklahoma	—	0	0	—	—	—	0	2	7	9
Texas†	—	0	3	10	59	—	1	29	42	85
Mountain	2	0	3	21	19	—	1	9	51	42
Arizona	—	0	2	4	7	—	0	9	17	10
Colorado	—	0	1	4	—	—	0	2	11	20
Idaho†	2	0	1	4	2	—	0	1	1	—
Montana	—	0	0	—	—	—	0	1	2	—
Nevada†	—	0	1	1	3	—	0	1	1	2
New Mexico†	—	0	1	1	2	—	0	1	3	3
Utah	—	0	1	6	2	—	0	2	16	5
Wyoming	—	0	1	1	3	—	0	0	—	2
Pacific	8	4	17	203	80	5	4	13	188	167
Alaska	—	0	1	2	4	—	0	4	23	5
California	8	4	16	190	50	3	4	10	127	124
Hawaii	N	0	0	N	N	—	0	2	4	14
Oregon†	—	0	2	8	18	—	0	1	9	9
Washington	—	0	3	3	8	2	0	5	25	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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	Meningococcal disease, invasive: All serogroups: Current week	Previous 52 weeks: Med	Previous 52 weeks: Max	Cum 2006	Cum 2005	Meningococcal disease, invasive: Serogroup unknown: Current week	Previous 52 weeks: Med	Previous 52 weeks: Max	Cum 2006	Cum 2005	Pertussis: Current week	Previous 52 weeks: Med	Previous 52 weeks: Max	Cum 2006	Cum 2005
United States	5	20	85	823	948	4	13	58	537	581	143	264	2,877	9,662	17,037
New England	—	1	3	35	60	—	0	2	25	22	9	28	83	938	1,026
Connecticut	—	0	2	9	12	—	0	2	2	1	—	1	5	35	51
Maine†	—	0	1	4	2	—	0	1	3	2	—	1	8	45	39
Massachusetts	—	0	2	15	27	—	0	2	15	5	—	19	43	594	782
New Hampshire	—	0	2	5	12	—	0	2	5	12	1	2	36	127	52
Rhode Island	—	0	1	—	2	—	0	0	—	—	8	0	17	45	29
Vermont†	—	0	1	2	5	—	0	0	—	2	—	1	14	92	73
Mid. Atlantic	—	3	14	119	116	—	2	11	88	90	41	33	137	1,348	1,034
New Jersey	—	0	2	11	27	—	0	2	11	27	—	4	13	152	140
New York (Upstate)	—	1	7	31	31	—	0	5	4	11	35	14	123	610	396
New York City	—	0	6	40	18	—	0	6	40	18	—	2	8	64	83
Pennsylvania	—	1	5	37	40	—	0	5	33	34	6	11	26	522	415
E.N. Central	1	2	11	93	119	1	1	6	64	98	38	40	133	1,377	2,894
Illinois	—	0	4	18	27	—	0	4	18	27	—	8	35	228	669
Indiana	—	0	5	19	18	—	0	1	6	8	14	4	75	184	241
Michigan	—	0	3	17	24	—	0	3	8	15	9	7	26	382	243
Ohio	1	1	5	36	31	1	1	4	29	29	15	14	30	445	886
Wisconsin	—	0	2	3	19	—	0	2	3	19	—	4	41	138	855
W.N. Central	1	1	4	44	62	—	0	3	14	27	13	28	552	902	2,766
Iowa	—	0	2	12	15	—	0	1	4	1	—	6	63	205	672
Kansas	—	0	1	1	9	—	0	1	1	9	—	7	28	226	309
Minnesota	1	0	2	11	11	—	0	1	3	4	9	0	485	146	934
Missouri	—	0	2	13	20	—	0	1	2	10	4	6	42	210	349
Nebraska†	—	0	2	5	4	—	0	1	3	3	—	2	9	72	228
North Dakota	—	0	1	1	—	—	0	1	1	—	—	0	26	26	106
South Dakota	—	0	1	1	3	—	0	0	—	—	—	0	4	17	168
S. Atlantic	—	3	14	144	179	—	2	7	57	76	10	20	46	726	1,094
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	4	7
Florida	—	1	6	57	68	—	0	5	19	26	8	4	9	169	163
Georgia	—	0	2	12	14	—	0	2	12	14	—	0	3	15	41
Maryland†	—	0	2	11	18	—	0	1	3	3	—	3	9	91	160
North Carolina	—	0	11	24	28	—	0	3	7	6	2	0	22	154	77
South Carolina†	—	0	2	15	13	—	0	1	5	8	—	3	22	109	314
Virginia†	—	0	4	15	23	—	0	3	6	9	—	2	27	155	278
West Virginia	—	0	2	5	6	—	0	0	—	2	—	0	9	26	39
E.S. Central	—	1	4	30	47	—	1	4	24	36	—	7	16	255	424
Alabama†	—	0	1	5	5	—	0	1	4	3	—	1	7	54	68
Kentucky	—	0	2	7	16	—	0	2	7	16	—	2	5	53	126
Mississippi	—	0	1	3	5	—	0	1	3	5	—	1	4	35	47
Tennessee†	—	0	2	15	21	—	0	2	10	12	—	2	10	113	183
W.S. Central	—	1	23	50	93	—	0	6	21	23	3	15	360	496	1,800
Arkansas	—	0	3	9	12	—	0	2	6	3	—	1	21	45	244
Louisiana	—	0	2	5	28	—	0	1	2	5	—	0	3	9	44
Oklahoma	—	0	4	8	14	—	0	0	—	2	—	0	124	18	1
Texas†	—	1	16	28	39	—	0	4	13	13	3	14	215	424	1,511
Mountain	—	1	5	55	78	—	0	4	27	21	26	62	230	2,054	3,187
Arizona	—	0	3	16	31	—	0	3	16	10	—	9	177	399	806
Colorado	—	0	2	18	17	—	0	1	2	—	11	20	40	632	1,004
Idaho†	—	0	2	3	4	—	0	2	2	3	—	2	11	64	174
Montana	—	0	1	4	—	—	0	1	2	—	—	2	9	96	548
Nevada†	—	0	1	2	11	—	0	0	—	2	—	0	9	39	43
New Mexico†	—	0	1	3	5	—	0	1	1	4	—	2	6	59	149
Utah	—	0	1	5	10	—	0	0	—	2	15	15	39	703	421
Wyoming	—	0	2	4	—	—	0	2	4	—	—	1	8	62	42
Pacific	3	5	29	253	194	3	5	25	217	188	3	44	1,334	1,566	2,812
Alaska	—	0	1	2	2	—	0	1	2	2	2	2	15	61	103
California	2	3	14	156	127	2	3	14	156	127	—	27	1,136	1,099	1,308
Hawaii	1	0	1	7	10	1	0	1	7	5	—	2	4	64	138
Oregon†	—	1	7	60	36	—	1	4	41	36	—	2	8	93	596
Washington	—	0	25	28	19	—	0	11	11	18	1	7	195	249	667
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	6	—	0	1	4	6	—	0	1	1	5
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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	Rabies, animal					Rocky Mountain spotted fever					Salmonellosis				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	67	106	166	4,310	4,700	69	35	246	1,483	1,315	769	809	2,291	28,962	32,186
New England	12	11	26	511	566	—	0	2	2	7	14	31	363	1,494	1,730
Connecticut	10	3	14	156	156	—	0	0	—	—	—	0	355	355	380
Maine†	—	1	6	73	49	N	0	0	N	N	—	2	10	86	135
Massachusetts	—	4	17	178	284	—	0	1	1	5	—	18	53	782	913
New Hampshire	1	0	5	38	12	—	0	1	1	1	5	2	24	151	142
Rhode Island	1	0	4	20	19	—	0	2	—	1	4	0	17	73	81
Vermont†	—	1	4	46	46	—	0	0	—	—	5	1	5	47	79
Mid. Atlantic	14	20	50	831	763	2	1	6	48	76	85	84	272	3,255	3,960
New Jersey	N	0	0	N	N	—	0	2	7	25	—	14	39	589	790
New York (Upstate)	14	11	22	416	423	2	0	1	4	1	58	22	233	928	933
New York City	—	0	3	—	23	—	0	2	7	6	3	15	34	528	921
Pennsylvania	—	8	35	415	317	—	1	3	30	44	24	28	67	1,210	1,316
E.N. Central	—	2	17	138	161	—	0	6	32	37	95	98	172	3,822	4,472
Illinois	—	0	7	42	45	—	0	1	3	11	—	26	45	854	1,491
Indiana	—	0	2	11	11	—	0	1	5	—	42	14	67	673	457
Michigan	—	0	5	40	35	—	0	1	2	5	6	18	32	729	729
Ohio	—	0	9	45	70	—	0	4	21	19	46	23	56	949	1,029
Wisconsin	N	0	0	N	N	—	0	1	1	2	1	15	26	617	766
W.N. Central	2	4	20	234	274	1	2	14	157	139	28	43	107	1,880	1,970
Iowa	—	0	7	52	—	—	0	1	4	5	1	7	21	328	328
Kansas	—	1	5	61	68	—	0	1	2	5	—	7	16	259	286
Minnesota	—	1	6	36	59	—	0	2	4	2	12	10	60	522	429
Missouri	2	1	4	48	63	1	2	10	126	115	13	13	35	515	608
Nebraska†	—	0	0	—	—	—	0	5	21	7	1	4	9	137	164
North Dakota	—	0	7	16	28	—	0	1	—	—	—	0	46	19	26
South Dakota	—	0	4	21	56	—	0	0	—	5	1	3	7	100	129
S. Atlantic	16	36	118	1,548	1,684	65	16	94	875	660	259	206	450	7,670	8,822
Delaware	—	0	0	—	—	—	0	3	18	7	—	2	9	107	100
District of Columbia	—	0	0	—	—	—	0	1	1	2	4	1	7	48	45
Florida	—	0	99	131	201	1	0	3	15	13	142	95	228	3,311	3,387
Georgia	—	3	9	100	210	2	0	3	26	82	36	26	100	1,188	1,390
Maryland†	—	7	13	254	297	—	1	4	46	58	—	11	30	480	628
North Carolina	16	9	22	397	381	61	10	87	663	356	56	32	130	1,146	1,168
South Carolina†	—	3	10	125	172	—	0	6	22	55	—	16	51	572	1,094
Virginia†	—	11	27	458	377	1	2	13	81	82	21	20	55	727	886
West Virginia	—	1	13	83	46	—	0	2	3	5	—	2	19	91	124
E.S. Central	4	4	16	189	121	—	4	25	228	241	56	50	148	1,964	2,231
Alabama†	1	1	7	61	65	—	1	7	74	62	38	14	70	691	537
Kentucky	3	0	5	23	11	—	0	1	1	3	18	8	21	335	378
Mississippi	—	0	2	4	5	—	0	1	2	13	—	11	47	435	682
Tennessee†	—	2	9	101	40	—	3	18	151	163	—	14	31	503	634
W.S. Central	1	14	34	548	728	—	1	161	93	128	58	85	922	2,801	3,094
Arkansas	1	0	4	25	29	—	0	10	46	92	31	14	45	659	554
Louisiana	—	0	0	—	—	—	0	1	1	6	1	12	38	369	699
Oklahoma	—	1	9	52	66	—	0	154	35	7	26	7	48	368	315
Texas†	—	12	29	471	633	—	0	3	11	23	—	49	839	1,405	1,526
Mountain	10	3	16	146	230	1	0	6	41	25	28	50	84	1,820	1,805
Arizona	10	2	11	113	147	—	0	6	8	12	4	15	67	581	490
Colorado	—	0	1	—	16	—	0	1	2	4	11	12	30	503	466
Idaho†	—	0	12	—	—	1	0	3	11	3	4	3	9	132	113
Montana	—	0	2	13	15	—	0	2	2	1	3	3	16	107	69
Nevada†	—	0	1	1	14	—	0	0	—	—	—	2	17	72	143
New Mexico†	—	0	2	7	9	—	0	2	6	3	—	4	12	165	205
Utah	—	0	1	8	14	—	0	2	6	—	6	5	15	223	250
Wyoming	—	0	2	4	15	—	0	1	6	2	—	1	5	37	69
Pacific	8	4	10	165	173	—	0	1	7	2	146	110	426	4,256	4,102
Alaska	—	0	4	14	1	—	0	0	—	—	—	1	7	61	44
California	8	3	10	135	166	—	0	1	5	—	139	88	292	3,369	3,106
Hawaii	—	0	0	—	—	—	0	0	—	—	—	5	10	171	228
Oregon†	—	0	4	16	6	—	0	1	2	2	3	7	16	315	321
Washington	U	0	0	U	U	N	0	0	N	N	4	8	124	340	403
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	1	U	6
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	55	N	0	0	N	N	—	6	35	164	493
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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	Shiga toxin-producing *E. coli* (STEC)†					Shigellosis					Streptococcal disease, invasive, group A				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	59	56	297	2,141	2,310	235	236	1,013	8,382	10,910	20	87	283	3,743	3,576
New England	2	3	58	210	180	3	4	56	204	251	—	4	15	173	230
Connecticut	—	0	57	57	49	—	0	50	50	46	U	0	3	U	82
Maine§	—	0	8	29	28	—	0	2	3	12	—	0	2	15	12
Massachusetts	—	1	9	82	68	—	3	11	128	151	—	2	6	101	102
New Hampshire	—	0	3	19	14	—	0	4	7	12	—	0	9	41	16
Rhode Island	—	0	2	8	5	1	0	6	11	14	—	0	3	5	9
Vermont§	—	0	2	2	16	2	0	1	5	16	—	0	2	11	9
Mid. Atlantic	8	4	107	148	276	6	14	72	549	1,025	7	15	43	691	724
New Jersey	—	0	3	3	59	—	4	25	199	262	—	3	8	122	149
New York (Upstate)	—	0	103	12	106	4	5	60	184	216	3	4	32	247	206
New York City	—	0	4	21	13	2	3	12	100	339	—	1	9	72	142
Pennsylvania	—	0	5	5	98	—	2	24	66	208	4	6	13	250	227
E.N. Central	13	11	51	488	479	29	20	38	692	858	2	14	43	660	746
Illinois	—	1	7	59	117	—	7	16	229	289	—	4	11	144	247
Indiana	1	1	7	62	45	18	2	18	110	116	—	2	11	90	83
Michigan	1	1	7	69	76	1	3	10	117	187	1	3	12	182	177
Ohio	10	3	18	143	117	10	3	11	128	81	1	4	19	202	160
Wisconsin	1	2	38	155	124	—	3	9	108	185	—	1	4	42	79
W.N. Central	8	8	35	321	372	29	33	77	1,164	1,187	1	5	57	264	220
Iowa	—	2	8	108	77	—	2	10	74	67	N	0	0	N	N
Kansas	—	0	3	—	36	—	3	20	103	162	—	1	5	46	35
Minnesota	7	3	27	178	108	6	2	10	102	68	—	0	52	127	82
Missouri	3	2	13	127	78	16	12	69	541	773	—	1	5	50	56
Nebraska§	—	1	7	48	42	7	2	14	99	77	1	0	4	24	18
North Dakota	—	0	15	—	5	—	0	18	61	2	—	0	5	9	9
South Dakota	—	0	5	29	26	—	4	21	184	38	—	0	3	8	20
S. Atlantic	7	7	39	327	308	50	54	122	2,014	1,612	5	22	43	905	708
Delaware	—	0	2	7	8	—	0	2	7	10	—	0	2	9	5
District of Columbia	1	0	1	2	—	—	0	2	13	9	1	0	2	11	7
Florida	3	2	29	74	75	26	27	66	991	775	3	6	16	225	183
Georgia	1	1	6	68	39	13	17	41	664	415	1	5	11	175	150
Maryland§	—	1	6	52	64	—	2	10	90	65	—	4	12	163	139
North Carolina	5	1	10	83	43	10	1	21	125	149	—	0	26	138	103
South Carolina§	—	0	2	6	8	—	1	9	67	83	—	1	6	51	30
Virginia§	—	0	8	—	69	1	1	8	55	105	—	2	11	110	69
West Virginia	—	0	2	7	2	—	0	2	2	1	—	0	6	23	22
E.S. Central	2	3	14	154	129	17	12	31	456	997	—	3	11	158	141
Alabama§	2	0	5	24	25	17	3	14	153	193	N	0	0	N	N
Kentucky	2	1	8	64	48	—	4	12	163	245	—	0	5	33	28
Mississippi	—	0	1	—	7	—	1	6	42	70	—	0	0	—	—
Tennessee§	—	0	4	24	49	—	3	9	98	489	—	3	9	125	113
W.S. Central	2	1	52	26	80	11	32	596	1,027	2,735	3	7	58	293	251
Arkansas	—	0	2	10	10	4	1	7	80	48	—	0	5	24	15
Louisiana	—	0	1	—	18	4	0	25	83	119	—	0	1	4	5
Oklahoma	2	0	8	16	21	3	3	286	95	514	2	2	14	81	91
Texas§	—	1	44	55	31	—	25	308	769	2,054	1	4	43	184	140
Mountain	2	5	16	219	235	23	22	54	841	609	2	11	78	516	478
Arizona	—	1	8	76	23	2	12	30	462	323	—	6	57	277	200
Colorado	2	1	8	79	60	9	3	18	162	98	1	3	8	107	148
Idaho§	3	1	7	55	32	—	0	4	14	10	—	0	2	8	3
Montana	—	0	1	—	14	6	0	1	12	5	—	0	0	—	—
Nevada§	—	0	3	9	17	—	0	8	30	44	—	0	6	—	8
New Mexico§	—	0	1	4	22	—	2	10	97	92	—	1	7	62	68
Utah	4	1	14	98	60	6	1	4	57	33	1	1	7	59	48
Wyoming	—	0	3	16	7	—	0	3	7	4	—	0	1	3	3
Pacific	15	7	55	248	251	67	40	148	1,435	1,636	—	2	9	83	78
Alaska	—	0	1	—	9	—	0	2	9	11	—	0	0	—	—
California	14	4	18	161	97	65	32	104	1,189	1,405	—	0	0	—	—
Hawaii	—	0	2	12	10	—	1	4	33	27	—	2	9	83	78
Oregon§	—	2	47	91	70	1	2	31	106	102	N	0	0	N	N
Washington	1	2	32	75	65	1	2	43	98	91	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	11	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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease Drug resistant, all ages					Syphilis, primary and secondary					Varicella (chickenpox)				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	27	51	334	1,880	2,003	120	172	334	6,551	6,293	323	802	3,204	30,539	20,698
New England	—	1	24	30	174	3	4	17	155	151	7	41	144	1,115	3,958
Connecticut	U	0	7	U	73	—	0	11	33	30	U	0	58	U	1,152
Maine†	—	0	2	8	N	—	0	2	7	1	—	5	20	151	234
Massachusetts	—	0	6	—	75	3	2	6	96	96	—	1	54	94	1,789
New Hampshire	—	0	0	—	—	—	0	2	10	12	4	6	47	363	225
Rhode Island	—	0	11	10	17	—	0	6	7	11	—	0	0	—	—
Vermont†	—	0	2	12	9	—	0	1	2	1	3	12	50	507	558
Mid. Atlantic	—	3	15	122	167	17	21	35	826	780	76	105	183	3,550	3,525
New Jersey	N	0	0	N	N	3	3	7	127	104	—	0	0	—	—
New York (Upstate)	—	1	10	44	65	8	2	14	112	60	—	0	0	—	—
New York City	U	0	0	U	U	3	10	23	394	474	—	0	0	—	—
Pennsylvania	—	2	9	78	102	3	5	9	193	142	76	105	183	3,550	3,525
E.N. Central	4	11	41	435	496	9	18	38	667	685	100	237	587	11,077	4,308
Illinois	—	0	3	15	25	3	8	23	312	388	—	2	7	64	76
Indiana	1	2	21	116	159	2	1	4	65	49	—	0	475	475	251
Michigan	—	0	4	17	31	—	2	19	89	62	38	102	174	3,207	2,549
Ohio	3	6	32	287	281	2	4	8	155	162	62	93	420	6,728	1,091
Wisconsin	N	0	0	N	N	2	1	4	46	24	—	12	52	603	341
W.N. Central	—	1	191	34	33	—	5	10	192	188	11	23	84	1,085	335
Iowa	N	0	0	N	N	—	0	2	11	7	N	0	0	N	N
Kansas	N	0	0	N	N	—	0	2	16	15	—	0	8	20	—
Minnesota	—	0	191	—	—	—	1	3	21	55	—	0	0	—	—
Missouri	—	1	3	33	26	—	3	8	130	106	11	19	82	983	227
Nebraska†	—	0	0	—	2	—	0	1	3	4	—	0	0	—	—
North Dakota	—	0	1	—	2	—	0	1	—	—	—	0	25	44	20
South Dakota	—	0	1	1	3	—	0	3	11	1	—	1	12	38	88
S. Atlantic	22	26	53	1,018	818	35	42	186	1,558	1,537	56	90	860	3,245	1,591
Delaware	—	0	2	—	1	—	0	2	16	9	—	1	5	48	23
District of Columbia	1	0	3	22	13	2	2	9	97	83	—	0	5	28	24
Florida	16	13	36	562	446	13	15	29	564	520	—	0	0	—	—
Georgia	5	8	29	340	262	2	7	147	248	324	—	0	0	—	—
Maryland†	—	0	0	—	—	3	5	19	221	240	—	0	0	—	—
North Carolina	N	0	0	N	N	5	5	17	224	205	—	0	0	—	—
South Carolina†	—	0	0	—	—	—	1	7	52	51	—	15	53	765	430
Virginia†	N	0	0	N	N	10	3	12	132	103	13	30	812	1,264	334
West Virginia	—	1	14	94	96	—	0	1	4	2	43	26	70	1,140	780
E.S. Central	—	3	13	147	142	3	13	25	529	346	—	1	70	90	36
Alabama†	N	0	0	N	N	1	4	19	238	111	—	1	70	89	36
Kentucky	—	0	5	29	26	—	1	8	55	34	N	0	0	N	N
Mississippi	—	0	0	—	1	2	0	6	47	39	—	0	1	1	—
Tennessee†	—	3	13	118	115	—	5	13	189	162	N	0	0	N	N
W.S. Central	1	0	4	17	99	36	27	43	1,141	922	30	181	1,757	8,374	4,957
Arkansas	1	0	3	12	12	3	1	5	59	38	—	7	110	590	—
Louisiana	—	0	4	5	87	14	4	17	180	195	—	0	8	43	109
Oklahoma	N	0	0	N	N	2	1	6	56	29	—	0	0	—	—
Texas†	N	0	0	N	N	17	21	36	846	660	30	167	1,647	7,741	4,848
Mountain	—	1	27	77	74	10	7	24	299	327	43	52	138	2,003	1,988
Arizona	N	0	0	N	N	5	3	16	137	130	—	0	0	—	—
Colorado	N	0	0	N	N	—	1	3	30	36	35	32	76	1,075	1,365
Idaho†	N	0	0	N	N	—	0	1	2	20	—	0	0	—	—
Montana	—	0	1	—	—	—	0	1	1	5	—	0	2	2	—
Nevada†	—	0	27	4	29	5	1	12	78	89	—	0	2	4	—
New Mexico†	—	0	1	1	—	—	1	5	45	40	—	3	34	304	171
Utah	—	0	8	33	23	—	0	1	6	7	8	10	55	585	403
Wyoming	—	1	4	39	22	—	0	0	—	—	—	0	8	33	49
Pacific	—	0	0	—	—	7	33	49	1,184	1,357	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	4	8	6	—	0	0	—	—
California	N	0	0	N	N	6	28	39	1,007	1,212	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	2	15	8	N	0	0	N	N
Oregon†	N	0	0	N	N	—	0	6	13	24	N	0	0	N	N
Washington	N	0	0	N	N	1	3	10	141	107	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	—	382
Puerto Rico	N	0	0	N	N	—	3	10	86	164	4	8	47	280	538
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 September 30, 2006, and October 1, 2005 (39th Week)*

Reporting area	West Nile virus disease†									
	Neuroinvasive					Non-neuroinvasive				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max		
United States	—	1	160	1,067	1,212	1	1	339	1,817	1,632
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	45	—	0	3	6	21
New Jersey	—	0	2	2	3	—	0	1	2	3
New York (Upstate)	—	0	1	—	18	—	0	1	—	4
New York City	—	0	4	7	10	—	0	2	3	3
Pennsylvania	—	0	2	7	14	—	0	1	1	11
E.N. Central	—	0	35	176	250	—	0	18	70	152
Illinois	—	0	21	105	133	—	0	16	49	113
Indiana	—	0	4	11	10	—	0	2	5	11
Michigan	—	0	8	27	52	—	0	1	2	8
Ohio	—	0	11	23	45	—	0	3	6	14
Wisconsin	—	0	2	10	10	—	0	2	8	6
W.N. Central	—	0	29	182	158	—	0	72	368	458
Iowa	—	0	2	15	13	—	0	4	12	23
Kansas	—	0	3	14	12	—	0	3	9	N
Minnesota	—	0	6	28	17	—	0	7	34	27
Missouri	—	0	9	37	16	—	0	3	10	13
Nebraska§	—	0	7	33	53	—	0	24	123	129
North Dakota	—	0	4	19	12	—	0	26	113	74
South Dakota	—	0	7	36	35	—	0	21	67	192
S. Atlantic	—	0	3	8	29	—	0	2	5	26
Delaware	—	0	0	—	1	—	0	1	—	—
District of Columbia	—	0	1	—	3	—	0	1	1	1
Florida	—	0	2	3	8	—	0	0	—	11
Georgia	—	0	1	2	7	—	0	2	4	10
Maryland§	—	0	1	2	4	—	0	0	—	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	86	61	—	0	14	75	32
Alabama§	—	0	1	4	6	—	0	2	—	2
Kentucky	—	0	1	2	4	—	0	1	1	—
Mississippi	—	0	9	73	38	—	0	14	73	28
Tennessee§	—	0	3	7	13	—	0	1	1	2
W.S. Central	—	1	52	266	235	—	0	25	134	143
Arkansas	—	0	4	18	12	—	0	2	5	15
Louisiana	—	0	14	66	102	—	0	8	49	53
Oklahoma	—	0	6	19	12	—	0	2	9	10
Texas§	—	0	32	163	109	—	0	14	71	65
Mountain	—	0	59	261	128	1	0	196	973	223
Arizona	—	0	8	15	40	—	0	5	14	47
Colorado	—	0	10	54	20	—	0	43	219	82
Idaho§	—	0	29	94	3	—	0	128	542	10
Montana	—	0	3	10	8	—	0	7	19	17
Nevada§	—	0	9	34	13	—	0	13	73	17
New Mexico§	—	0	1	1	18	—	0	1	2	13
Utah	—	0	8	42	21	—	0	17	77	31
Wyoming	—	0	5	11	5	1	0	6	27	6
Pacific	—	0	15	64	297	—	0	42	183	573
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	15	62	296	—	0	33	162	567
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon§	—	0	1	2	1	—	0	9	19	6
Washington	—	0	0	—	—	—	0	2	2	—
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	—	—

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.
† 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 September 30, 2006 (39th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
New England	481	329	94	34	15	9	37
Boston, MA	137	78	37	11	6	5	7
Bridgeport, CT	40	28	6	4	2	—	2
Cambridge, MA	18	17	—	1	—	—	4
Fall River, MA	20	16	2	—	—	2	3
Hartford, CT	41	26	11	3	1	—	3
Lowell, MA	25	18	4	1	1	1	2
Lynn, MA	8	5	1	2	—	—	—
New Bedford, MA	21	16	4	1	—	—	1
New Haven, CT	21	15	4	1	1	—	4
Providence, RI	54	41	11	1	—	1	2
Somerville, MA	7	5	2	—	—	—	—
Springfield, MA	27	19	4	4	—	—	1
Waterbury, CT	19	15	2	2	—	—	1
Worcester, MA	43	30	6	3	4	—	7
Mid. Atlantic	1,932	1,348	383	124	41	36	106
Albany, NY	38	29	5	2	2	—	2
Allentown, PA	23	21	2	—	—	—	2
Buffalo, NY	64	36	21	6	1	—	3
Camden, NJ	26	14	9	1	1	1	—
Elizabeth, NJ	13	8	5	—	—	—	1
Erie, PA	43	38	5	—	—	—	3
Jersey City, NJ	27	20	4	3	—	—	3
New York City, NY	950	660	198	66	14	12	34
Newark, NJ	38	16	11	5	2	4	1
Paterson, NJ	11	8	3	—	—	—	2
Philadelphia, PA	278	171	58	22	14	13	10
Pittsburgh, PA§	38	25	9	4	—	—	9
Reading, PA	24	19	3	1	1	—	1
Rochester, NY	124	104	12	4	1	3	12
Schenectady, NY	15	12	—	2	1	—	1
Scranton, PA	37	31	3	3	—	—	2
Syracuse, NY	133	98	27	3	3	2	17
Trenton, NJ	19	15	1	2	—	1	—
Utica, NY	12	9	2	—	1	—	2
Yonkers, NY	19	14	5	—	—	—	1
E.N. Central	2,010	1,275	488	153	46	46	144
Akron, OH	47	29	10	3	1	4	9
Canton, OH	28	18	7	2	—	1	3
Chicago, IL	366	199	108	36	14	7	24
Cincinnati, OH	77	54	14	4	5	—	10
Cleveland, OH	209	148	49	10	2	—	—
Columbus, OH	235	151	56	21	2	5	14
Dayton, OH	108	80	17	9	1	1	7
Detroit, MI	168	76	63	23	1	5	11
Evansville, IN	36	24	9	3	—	—	3
Fort Wayne, IN	49	40	7	1	—	1	5
Gary, IN	U	U	U	U	U	U	U
Grand Rapids, MI	58	44	12	1	—	1	4
Indianapolis, IN	199	127	48	10	4	10	19
Lansing, MI	46	32	8	4	1	1	5
Milwaukee, WI	81	51	24	3	2	1	11
Peoria, IL	50	32	10	5	1	2	6
Rockford, IL	52	33	11	8	—	—	—
South Bend, IN	63	44	12	3	3	1	5
Toledo, OH	96	64	14	6	7	5	4
Youngstown, OH	42	29	9	1	2	1	4
W.N. Central	702	480	142	49	14	16	53
Des Moines, IA	110	91	12	3	2	1	18
Duluth, MN	47	39	8	—	—	—	2
Kansas City, KS	26	17	8	1	—	—	3
Kansas City, MO	83	61	15	2	2	3	6
Lincoln, NE	47	35	6	5	1	—	4
Minneapolis, MN	77	45	17	11	1	3	2
Omaha, NE	74	58	10	3	1	2	8
St. Louis, MO	110	50	33	17	6	4	4
St. Paul, MN	52	33	13	3	—	3	3
Wichita, KS	76	51	20	4	1	—	3
S. Atlantic	1,146	711	267	106	32	29	65
Atlanta, GA	114	66	31	10	3	4	7
Baltimore, MD	164	76	52	26	6	4	10
Charlotte, NC	100	66	21	9	4	—	8
Jacksonville, FL	147	100	31	9	3	3	7
Miami, FL	131	86	25	14	4	2	12
Norfolk, VA	46	29	10	2	2	3	2
Richmond, VA	56	33	14	7	1	1	1
Savannah, GA	56	35	12	7	2	—	1
St. Petersburg, FL	40	25	5	4	1	5	5
Tampa, FL	169	123	32	8	4	2	9
Washington, D.C.	105	60	31	7	2	5	2
Wilmington, DE	18	12	3	3	—	—	1
E.S. Central	812	511	202	64	23	12	49
Birmingham, AL	159	100	37	16	3	3	16
Chattanooga, TN	84	59	18	5	1	1	2
Knoxville, TN	104	65	24	10	4	1	3
Lexington, KY	22	11	9	1	1	—	—
Memphis, TN	168	108	35	15	7	3	14
Mobile, AL	84	57	20	6	1	—	4
Montgomery, AL	43	27	9	6	—	1	3
Nashville, TN	148	84	50	5	6	3	7
W.S. Central	1,530	962	364	120	40	44	64
Austin, TX	93	55	26	7	2	3	4
Baton Rouge, LA	73	44	17	6	3	3	—
Corpus Christi, TX	44	30	11	3	—	—	3
Dallas, TX	188	102	50	23	6	7	10
El Paso, TX	95	68	21	4	—	2	4
Fort Worth, TX	133	91	28	8	—	6	2
Houston, TX	334	187	85	37	17	8	15
Little Rock, AR	70	36	23	5	3	3	1
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	267	176	64	12	6	9	14
Shreveport, LA	66	50	8	6	2	—	4
Tulsa, OK	167	123	31	9	1	3	7
Mountain	1,031	691	223	66	28	23	59
Albuquerque, NM	140	98	29	9	2	2	7
Boise, ID	31	22	6	—	1	2	3
Colorado Springs, CO	83	60	15	6	1	1	5
Denver, CO	92	56	21	8	2	5	—
Las Vegas, NV	233	155	57	13	7	1	12
Ogden, UT	31	26	4	—	1	—	—
Phoenix, AZ	158	92	39	15	6	6	12
Pueblo, CO	37	30	7	—	—	—	3
Salt Lake City, UT	126	84	27	6	7	2	8
Tucson, AZ	100	68	18	9	1	4	9
Pacific	1,414	946	294	104	44	25	106
Berkeley, CA	21	13	3	2	—	3	3
Fresno, CA	U	U	U	U	U	U	U
Glendale, CA	9	5	4	—	—	—	1
Honolulu, HI	78	52	17	6	2	1	8
Long Beach, CA	63	37	19	4	1	2	8
Los Angeles, CA	163	118	27	10	5	3	10
Pasadena, CA	24	16	5	1	1	1	4
Portland, OR	127	86	29	3	4	5	7
Sacramento, CA	235	162	50	13	8	2	17
San Diego, CA	128	78	30	14	3	2	11
San Francisco, CA	101	61	28	9	—	3	12
San Jose, CA	178	131	24	17	5	1	11
Santa Cruz, CA	35	24	6	3	2	—	2
Seattle, WA	100	58	24	11	6	1	9
Spokane, WA	48	33	7	3	4	1	2
Tacoma, WA	104	72	21	8	3	—	1
Total	11,058**	7,253	2,457	820	283	240	683

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.

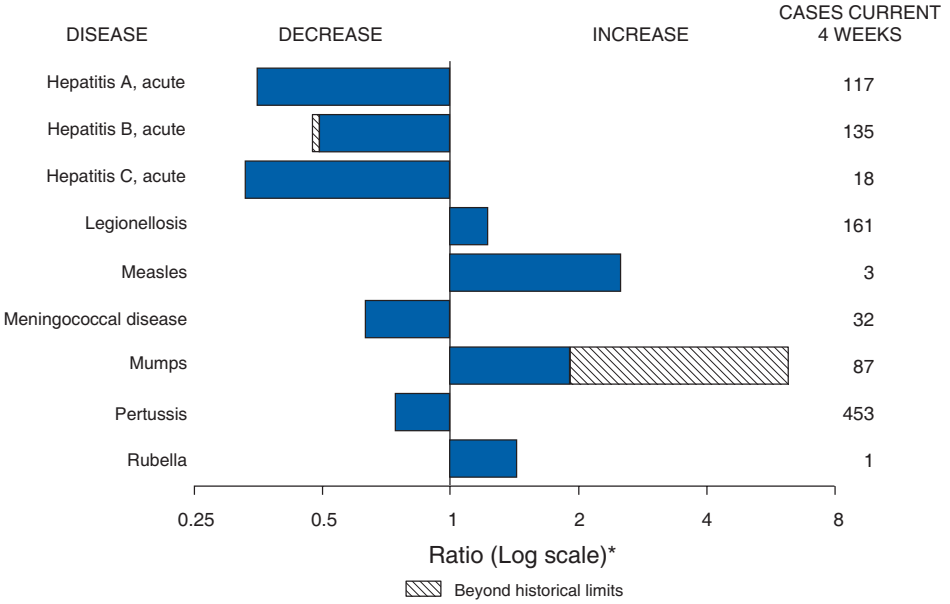
† Pneumonia and influenza.

§ 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 September 30, 2006, with historical data



* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

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☆U.S. Government Printing Office: 2006-523-056/40078 Region IV ISSN: 0149-2195