

National and State Vaccination Coverage Among Adolescents Aged 13 Through 17 Years — United States, 2010

The Advisory Committee on Immunization Practices (ACIP) recommends that adolescents routinely receive meningococcal conjugate (MenACWY, 2 doses); tetanus, diphtheria, acellular pertussis (Tdap, 1 dose); and human papillomavirus (HPV, 3 doses) vaccines (influenza vaccine is recommended annually for all persons aged 6 months and older) (1). CDC tracks vaccination coverage among adolescents aged 13 through 17 years through the National Immunization Survey–Teen (NIS-Teen). To provide updated vaccination coverage estimates, CDC analyzed 2010 NIS-Teen data and compared results with 2009 NIS-Teen estimates (2). This report summarizes the results of that analysis, which found that coverage increased for all three of the routinely administered adolescent vaccines: Tdap from 55.6% to 68.7%, MenACWY from 53.6% to 62.7%, (among females) ≥ 1 dose of HPV from 44.3% to 48.7%, and ≥ 3 doses of HPV from 26.7% to 32.0%. Vaccination coverage varied widely among states; three states (Massachusetts, Rhode Island, and Washington) had coverage of $>65\%$ for ≥ 1 dose of all three vaccines (Tdap, MenACWY, and HPV). Continued evaluation of vaccination-promoting initiatives, including state vaccination-financing policies, is needed to understand their impact on adolescent vaccination and to promote effective practices.

Since 2006, NIS-Teen has collected vaccination and sociodemographic information from parents or guardians regarding adolescents aged 13 through 17 years* in the 50 states, the District of Columbia, selected local areas,[†] and the U.S. Virgin Islands, using a random-digit-dialed sample of telephone numbers of households. After securing permission to contact vaccination providers, survey staff members mail

questionnaires to obtain vaccination histories from the medical record. In 2010, the Council of American Survey Research Organizations (CASRO) response rate[§] for NIS-Teen was 58.0%. A total of 19,488 adolescents with provider-verified vaccination records were included in this analysis, representing 59.2% of all adolescents with completed household interviews. A total of 19,257 adolescents (10,037 males and 9,220 females) were included in the national estimates; 231 adolescents from the U.S. Virgin Islands were excluded. NIS-Teen methods, including weighting procedures, have been described previously.[¶] Differences in vaccination coverage were evaluated using t-tests and were considered statistically significant at $p \leq 0.05$.

Vaccination coverage among adolescents aged 13 through 17 years has increased since 2006, although the rate of increase

[§] The CASRO response rate is the product of three other rates: 1) the resolution rate, which is the proportion of telephone numbers that can be identified as either for a business or residence; 2) the screening rate, which is the proportion of qualified households that complete the screening process; and 3) the cooperation rate, which is the proportion of contacted eligible households for which a completed interview is obtained.

[¶] Information available at ftp://ftp.cdc.gov/pub/health_statistics/nchs/dataset_documentation/nis/nisteenuf09_dug.pdf.

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* Eligible participants were born during January 1992–February 1998.

[†] Six local areas that received federal immunization grants were sampled separately: District of Columbia; Chicago, Illinois; New York, New York; Philadelphia County, Pennsylvania; Bexar County, Texas; and Houston, Texas. Two other local areas were chosen for oversampling: Dallas County, Texas; and El Paso County, Texas.

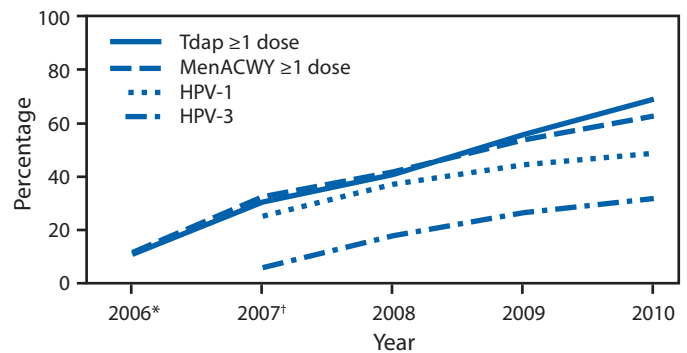


has differed among the three routinely administered vaccines. From 2007 to 2010, the average annual percentage-point increases for ≥ 1 dose of Tdap (12.8 points, 95% confidence interval [CI] = 12.1–13.4) and ≥ 1 dose of MenACWY (10.1 points, CI = 9.5–10.7) were significantly greater than that for ≥ 1 dose of HPV (7.9 points, CI = 7.0–8.7) ($p \leq 0.05$) (Figure).

From 2009 to 2010, vaccination coverage increased for all three vaccines. Tdap coverage increased from 55.6% to 68.7%, MenACWY from 53.6% to 62.7%, (among females) ≥ 1 dose of HPV from 44.3% to 48.7%, and ≥ 3 doses of HPV from 26.7% to 32.0% (Table 1). At least 24 weeks between the first and third doses of the HPV vaccine are needed to complete the series (1). Among females who initiated the HPV series, 94.3% met the minimum period needed to complete the series before the interview. Of these, 69.6% received ≥ 3 doses. Among adolescent males, 1.4% (CI = 1.1–1.8) received ≥ 1 dose of HPV. Aside from vaccination with HPV, no significant differences in vaccination coverage were observed between males and females. Among vaccines either administered during childhood or as catch-up vaccinations, coverage among adolescents aged 13 through 17 years with ≥ 2 doses of measles, mumps, and rubella; ≥ 3 doses of hepatitis B; and ≥ 2 doses of varicella vaccine (in persons with no history of disease) increased from 2009 to 2010.

By race/ethnicity, no differences were observed in coverage with ≥ 1 dose of Tdap; however, differences were observed by poverty status (Table 2). For ≥ 1 dose of MenACWY, coverage was higher among Hispanics than among whites; however, no

FIGURE. Estimated vaccination coverage among adolescents aged 13 through 17 years, National Immunization Survey–Teen (NIS-Teen), 2006–2010



Abbreviations: Tdap = tetanus, diphtheria, acellular pertussis vaccine; MenACWY = meningococcal conjugate vaccine; HPV-1 = human papillomavirus vaccine, ≥ 1 dose; HPV-3 = human papillomavirus, ≥ 3 doses.

* Tdap and MenACWY vaccination recommendations were published in March and October 2006, respectively.

† HPV vaccination recommendations were published in March 2007.

differences were observed in coverage by poverty status. For HPV, patterns differed by racial/ethnic group and poverty status depending on the measure of HPV vaccination coverage used. HPV initiation among whites was lower than among Hispanics and American Indian/Alaskan Natives; receipt of ≥ 3 HPV doses among those who initiated the series was lower among blacks and Hispanics than among whites. A difference was not observed in coverage by poverty status for ≥ 1 dose of HPV; however, coverage with ≥ 3 doses of HPV was lower

The *MMWR* series of publications is published by the Office of Surveillance, Epidemiology, and Laboratory Services, 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* 2011;60:[inclusive page numbers].

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TABLE 1. Estimated vaccination coverage among adolescents aged 13 through 17 years,* by age at interview and selected vaccines and doses — National Immunization Survey–Teen (NIS-Teen), United States, 2010

Vaccine and dose	Age at interview (yrs)										Overall			
	13 (n = 3,914)		14 (n = 3,918)		15 (n = 3,942)		16 (n = 3,959)		17 (n = 3,524)		2010 (N = 19,257)		2009 (N = 20,066)	
	%	(95% CI) [†]	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Td or Tdap[§]														
≥1 dose Td or Tdap since age 10 yrs	78.0	(75.5–80.3)	82.5	(80.4–84.4) [¶]	82.2	(80.1–84.2) [¶]	82.2	(80.1–84.2) [¶]	81.0	(78.7–83.2)	81.2	(80.2–82.2) ^{**}	76.2	(75.1–77.2)
≥1 dose Tdap since age 10 yrs	73.7	(71.2–76.2)	77.2	(74.8–79.3) [¶]	72.0	(69.5–74.3)	65.4	(62.6–68.1) [¶]	54.6	(51.7–57.4) [¶]	68.7	(67.5–69.8) ^{**}	55.6	(54.3–56.8)
MenACWY^{††} ≥1 dose	63.8	(61.1–66.5)	66.6	(64.0–69.1)	64.0	(61.4–66.5)	61.8	(58.9–64.5)	57.1	(54.2–60.0) [¶]	62.7	(61.5–63.9) ^{**}	53.6	(52.4–54.9)
HPV^{§§}														
≥1 dose	38.9	(34.9–43.1)	48.5	(44.5–52.6) [¶]	51.1	(47.0–55.3) [¶]	51.7	(47.8–55.7) [¶]	53.1	(49.1–57.1) [¶]	48.7	(46.9–50.5) ^{**}	44.3	(42.4–46.1)
≥3 doses	23.2	(20.1–26.6)	30.5	(26.9–34.3) [¶]	31.9	(28.3–35.6) [¶]	36.9	(33.2–40.8) [¶]	37.5	(33.7–41.5) [¶]	32.0	(30.3–33.6) ^{**}	26.7	(25.2–28.3)
3-dose series completion ^{¶¶}	64.1	(55.9–71.5)	68.2	(61.7–74.0)	65.6	(59.4–71.3)	74.3	(69.4–78.7) [¶]	74.6	(68.8–79.6) [¶]	69.6	(66.8–72.2)	67.5	(64.4–70.5)
MMR^{***} ≥2 doses	93.2	(91.9–94.3)	91.0	(88.9–92.8)	90.3	(88.4–92.0) [¶]	89.2	(86.8–91.1) [¶]	88.6	(86.3–90.5) [¶]	90.5	(89.6–91.3) ^{**}	89.1	(88.3–89.9)
Hepatitis B ≥3 doses	94.8	(93.7–95.8)	93.0	(91.0–94.6)	91.6	(89.7–93.1) [¶]	90.1	(87.7–92.0) [¶]	88.6	(86.5–90.4) [¶]	91.6	(90.8–92.4) ^{**}	89.9	(89.2–90.6)
Varicella														
History of varicella disease ^{†††}	28.5	(25.9–31.2)	34.5	(31.9–37.3) [¶]	44.3	(41.6–47.1) [¶]	53.8	(50.8–56.9) [¶]	62.6	(59.7–65.4) [¶]	44.7	(43.5–46.0) ^{**}	52.7	(51.4–54.0)
≥1 dose vaccine if had no history of disease	96.4	(95.4–97.2)	93.2	(91.5–94.6) [¶]	90.0	(87.5–92.0) [¶]	85.0	(80.5–88.5) [¶]	82.2	(78.4–85.4) [¶]	90.5	(89.4–91.5) ^{**}	87.0	(85.7–88.3)
≥2 doses vaccine if had no history of disease	65.8	(62.8–68.8)	64.3	(61.0–67.5)	56.4	(52.8–59.9) [¶]	50.7	(45.8–55.6) [¶]	44.2	(39.5–49.0) [¶]	58.1	(56.4–59.8) ^{**}	48.6	(46.6–50.6)
History of disease or received ≥2 doses varicella vaccination	75.6	(73.2–77.8)	76.6	(74.3–78.8)	75.7	(73.3–78.0)	77.2	(74.4–79.8)	79.1	(76.4–81.7) [¶]	76.8	(75.7–77.9)	75.7	(74.6–76.8)

* Adolescents (N = 19,257) in 2010 NIS-Teen were born during January 1992–February 1998.

[†] Confidence interval. Estimates with confidence interval widths >20 might not be reliable.[§] Includes percentages receiving tetanus and diphtheria toxoid vaccine (Td) since age 10 years, or tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap), or tetanus–unknown type vaccine since age 10 years.[¶] Statistically significant difference at p≤0.05 in estimated vaccination coverage. Reference group was age 13 years.^{**} Statistically significant difference compared with 2009 NIS-Teen overall estimates (p≤0.05).^{††} Includes percentages receiving meningococcal conjugate vaccine (MenACWY) or meningococcal-unknown type vaccine.^{§§} ≥1 dose of human papillomavirus vaccine, either quadrivalent or bivalent. Percentage reported among females only (n = 9,220).^{¶¶} Percentage of females who received 3 doses among those who had at least 1 HPV dose and at least 24 weeks between the first dose and the interview date.^{***} ≥2 doses of measles, mumps, and rubella vaccine.^{†††} By parent/guardian report or provider records.

among those living below the poverty level than those living at or above the poverty level.

Coverage estimates varied by state and reporting area (Table 3), with rates ranging from 29.0% (Mississippi) to 87.9% (New Hampshire) for ≥1 dose of Tdap and from 26.0% (Mississippi) to 89.5% (District of Columbia) for ≥1 dose of MenACWY. Among females, coverage estimates ranged from 28.8% (Idaho) to 73.0% (Rhode Island) for ≥1 dose of HPV and from 17.6% (Idaho) to 55.1% (Rhode Island) for ≥3 doses of HPV. Three states (Massachusetts, Rhode Island, and Washington) had coverage of >65% for ≥1 dose of all three routinely administered adolescent vaccines (Tdap, MenACWY, and HPV). Coverage for the three adolescent vaccines was significantly lower among adolescents living in the southeastern United States compared with adolescents living in other regions.

Reported by

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Editorial Note

In 2010, vaccination coverage among adolescents aged 13 through 17 years increased from coverage in 2009; however, the percentage-point increase in ≥1 dose of HPV among females (4.4 points) was less than half the increase observed for ≥1 dose of Tdap (13.1) and ≥1 dose of MenACWY (9.1). As in previous years, coverage with ≥1 dose of HPV was higher among older compared with younger adolescent females. Among females with adequate time to complete the series, 30.4% had not done so. HPV completion rates were lower among certain populations (i.e., blacks, Hispanics, and those living below poverty) known to have higher cervical cancer rates (3). Although HPV vaccination is only universally recommended for females aged 9 through 26 years, 2009 ACIP guidance states that HPV vaccination may be administered to males aged 9

TABLE 2. Estimated vaccination coverage among adolescents aged 13 through 17 years,* by race/ethnicity,[†] poverty status,[§] and selected vaccines and doses — National Immunization Survey–Teen (NIS-Teen), United States, 2010

Vaccine	Race/Ethnicity								Poverty status							
	White, non-Hispanic (n = 13,223)		Black, non-Hispanic (n = 1,982)		Hispanic (n = 2,469)		American Indian/ Alaska Native, non-Hispanic (n = 253)		Asian, non-Hispanic (n = 516)		Other (n = 814)		Below poverty level (n = 2,723)		At or above poverty level (n = 15,731)	
	%	(95% CI) [¶]	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Td or Tdap**																
≥1 dose Td or Tdap since age 10 yrs	80.9	(79.8–81.9)	80.5	(77.8–83.0)	82.4	(79.4–85.1)	82.7	(74.9–88.4)	85.8	(77.9–91.2)	79.4	(73.8–84.1)	76.8	(73.7–79.6) ^{††}	82.2	(81.2–83.2)
≥1 dose Tdap since age 10 yrs	68.6	(67.3–69.9)	66.9	(63.5–70.2)	69.6	(66.1–73.0)	68.4	(58.4–76.9)	74.4	(66.2–81.2)	66.8	(61.0–72.1)	64.7	(61.3–68.0) ^{††}	69.5	(68.3–70.7)
MenACWY 1 dose^{§§}	61.2	(59.8–62.5)	63.4	(59.8–66.8)	66.1	(62.5–69.6) ^{††}	62.4	(52.1–71.6)	71.6	(62.2–79.4)	58.8	(52.9–64.4)	62.0	(58.5–65.2)	62.9	(61.6–64.2)
HPV^{¶¶}																
≥1 dose	45.8	(43.8–47.9)	48.9	(43.8–54.1)	56.2	(50.6–61.6) ^{††}	64.8	(46.6–79.5) ^{††}	50.1	(38.2–61.9)	52.3	(44.0–60.5)	51.8	(46.8–56.8)	47.7	(45.7–49.6)
≥3 doses	32.4	(30.6–34.2)	30.2	(25.5–35.4)	29.5	(25.0–34.4)	40.5	(26.7–56.0)	39.8	(28.3–52.5)	37.3	(29.9–45.3)	28.2	(24.2–32.4) ^{††}	32.9	(31.1–34.7)
3-dose series completion***	74.7	(71.6–77.5)	65.4	(57.5–72.5) ^{††}	56.1	(48.5–63.5) ^{††}	64.0	(45.6–79.1)	86.0	(75.4–92.5) ^{††}	75.4	(62.7–84.8)	57.3	(50.1–64.2) ^{††}	73.2	(70.3–76.0)
≥2 MMR^{†††}	91.6	(90.7–92.4)	90.8	(88.7–92.6)	86.2	(82.9–88.9) ^{††}	92.1	(86.2–95.6)	93.8	(90.8–95.9)	89.9	(85.2–93.2)	87.8	(84.9–90.1) ^{††}	91.1	(90.3–92.0)
Hepatitis B ≥3 doses	92.7	(91.8–93.4)	90.9	(88.8–92.6)	88.9	(85.8–91.3) ^{††}	92.8	(87.2–96.1)	93.6	(90.2–95.8)	90.0	(85.3–93.3)	89.0	(86.2–91.3) ^{††}	92.4	(91.6–93.1)
Varicella																
History of varicella disease ^{§§§}	47.0	(45.6–48.3)	40.0	(36.4–43.7) ^{††}	42.9	(39.2–46.7) ^{††}	51.3	(40.8–61.6)	35.9	(27.8–44.9) ^{††}	43.3	(37.7–49.0)	43.9	(40.4–47.5)	45.1	(43.7–46.4)
Among adolescents without history of disease:																
≥1 dose vaccine	91.2	(90.1–92.1)	89.2	(85.8–91.9)	90.6	(86.7–93.4)	88.0	(75.2–94.6)	89.7	(81.4–94.5)	85.9	(76.8–91.8)	86.7	(82.7–89.9) ^{††}	91.2	(90.2–92.2)
≥2 dose vaccine	59.2	(57.3–61.0)	55.3	(50.2–60.3)	56.2	(51.0–61.2)	58.7	(43.9–72.1)	62.9	(52.7–72.2)	59.2	(51.4–66.6)	53.8	(48.7–58.7)	58.9	(57.1–60.7)
History of disease or received ≥2 dose varicella vaccination	78.3	(77.2–79.4)	73.2	(69.8–76.4) ^{††}	75.0	(71.4–78.2)	79.9	(69.5–87.3)	76.3	(68.3–82.7)	76.9	(71.4–81.6)	74.1	(70.8–77.1) ^{††}	77.4	(76.3–78.5)

* Adolescents (N = 19,257) in the 2010 NIS-Teen were born during January 1992–February 1998.

[†] Respondents who self-identified as Hispanic were of any race. Respondents who self-identified as white, black, Asian, or American Indian/Alaska Native were all considered non-Hispanic. Native Hawaiian, other Pacific Islanders and persons of multiple races were categorized as Other.[§] Adolescents were classified as below poverty level if their total family income was less than the federal poverty level specified for the applicable family size and number of children aged <18 years. All others were classified as at or above the poverty level. Additional information available at <http://www.census.gov/hhes/www/poverty.html>. Poverty status was unknown for 792 adolescents.[¶] Confidence interval. Estimates with confidence interval widths >20 might not be reliable.^{**} Includes ≥1 dose of tetanus toxoid-diphtheria vaccine (Td) since age 10 years, or tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since age 10 years.^{††} Statistically significant difference at p≤0.05 in estimated vaccination coverage. For race/ethnicity, referent group was white, non-Hispanic adolescents; for poverty status, referent group was at or above poverty level.^{§§} Includes percentages receiving meningococcal conjugate vaccine (MenACWY) and meningococcal-unknown type vaccine.^{¶¶} ≥1 dose of human papillomavirus vaccine, either quadrivalent or bivalent. Percentage reported among females only (n = 9,220).^{***} Percentage of females who received 3 doses among those who had at least 1 HPV dose and at least 24 weeks between the first dose and the interview date.^{†††} Includes ≥2 doses of measles, mumps, rubella vaccine.^{§§§} By parent/guardian report or provider records.

through 26 years. Only 1.4% of males aged 13 through 17 years received the vaccine in 2010.

As in previous years, adolescent vaccination coverage varied widely among states and other reporting areas, which could reflect differing vaccination-promotion initiatives among local health agencies and communities. Common initiatives among the three states with the highest vaccination coverage (Massachusetts, Rhode Island, and Washington) included strong working relationships and communication between state immunization programs and vaccination providers, local professional organizations, and schools; school vaccination requirements; and promotion of the use of reminder/recall systems (CDC, unpublished data, 2011). Additional factors that might play an important role in vaccination coverage

include vaccine financing, health-care infrastructure, local outbreaks, and communication efforts leading to increased consumer demand.

Analysis of 2009 NIS-Teen data found that middle school vaccination requirements for Tdap or MenACWY were associated with higher coverage for these vaccines; however, adolescents living in states with a middle school vaccination requirement for at least one adolescent vaccine did not have significantly higher coverage with all three recommended adolescent vaccines compared with adolescents living in states with no vaccination requirements (4). The number of states with middle school requirements increased from the 2009–10 to the 2010–11 school year (i.e., 37 required a tetanus

TABLE 3. Estimated vaccination coverage among adolescents aged 13 through 17 years,* by state and selected area and selected vaccines and doses — National Immunization Survey–Teen (NIS-Teen), United States, 2010

State/Area	Vaccine doses routinely recommended for adolescents									Vaccine doses routinely recommended during childhood (adolescent catch-up vaccines)							
	≥1 Td or Tdap since age 10 years [†]	≥1 Tdap since age 10 years	≥1 MenACWY [§]	≥1 HPV [¶]	≥3 HPV ^{**}	3-dose series completion ^{††}	≥2 MMR ^{§§}	≥3 HepB ^{¶¶}	≥1 VAR ^{***}	≥2 VAR ^{†††}							
	% (95% CI) ^{§§§}	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)							
United States	81.2 (±1.0)	68.7 (±1.2)	62.7 (±1.2)	48.7 (±1.8)	32.0 (±1.6)	69.6 (±2.7)	90.5 (±0.8)	91.6 (±0.8)	90.5 (±1.1)	58.1 (±1.7)							
Alabama	79.4 (±5.1)	68.4 (±6.2)	47.7 (±6.5)	45.8 (±9.2)	20.0 (±7.0)	47.4 (±13.6)	93.5 (±3.3)	89.3 (±4.1)	88.7 (±5.9)	43.5 (±8.7)							
Alaska	76.2 (±5.4)	63.9 (±6.2)	40.9 (±6.4)	40.8 (±9.2)	25.0 (±8.1)	63.4 (±13.5)	87.8 (±4.5)	89.0 (±4.2)	76.6 (±8.1)	44.7 (±9.2)							
Arizona	88.1 (±4.1)	76.5 (±5.7)	78.9 (±5.3)	52.8 (±9.4)	33.1 (±9.1)	67.0 (±12.4)	84.5 (±4.6)	85.4 (±5.0)	91.0 (±5.3)	64.5 (±8.3)							
Arkansas	55.0 (±6.5)	43.0 (±6.6)	30.9 (±6.2)	37.9 (±10.0)	19.6 (±7.5)	63.4 (±20.7)	89.2 (±3.8)	90.6 (±3.7)	89.3 (±4.9)	27.4 (±7.4)							
California	81.2 (±4.9)	71.2 (±5.7)	66.7 (±6.0)	56.1 (±9.1)	32.0 (±8.1)	61.0 (±12.3)	87.9 (±4.8)	89.0 (±4.6)	90.8 (±5.2)	57.3 (±8.4)							
Colorado	89.6 (±3.7)	85.7 (±4.3)	59.6 (±6.4)	52.5 (±9.0)	40.9 (±8.8)	81.6 (±9.9)	92.6 (±3.3)	93.1 (±2.9)	94.8 (±3.2)	65.3 (±7.8)							
Connecticut	91.1 (±3.7)	76.2 (±5.0)	72.0 (±5.4)	57.9 (±8.3)	45.5 (±8.5)	83.2 (±9.6)	97.6 (±2.0)	97.1 (±2.4)	98.1 (±1.8)	79.5 (±6.7)							
Delaware	81.6 (±4.9)	65.5 (±5.9)	71.2 (±5.9)	63.9 (±8.7)	40.4 (±9.1)	68.6 (±12.3)	94.1 (±3.1)	92.1 (±3.6)	88.2 (±6.2)	67.8 (±7.7)							
District of Columbia	89.7 (±3.6)	71.6 (±5.6)	89.5 (±3.8)	57.5 (±8.8)	33.8 (±8.2)	62.7 (±11.4)	98.4 (±1.2)	98.5 (±1.2)	97.5 (±1.8)	84.9 (±5.3)							
Florida	89.8 (±4.2)	61.9 (±6.4)	55.1 (±6.6)	41.1 (±10.1)	24.9 (±9.1)	62.0 (±15.6)	94.2 (±3.5)	96.8 (±2.3)	89.4 (±6.9)	44.5 (±8.7)							
Georgia	78.8 (±4.7)	62.2 (±5.9)	63.5 (±5.8)	43.5 (±7.9)	22.8 (±6.0)	56.2 (±12.7)	94.8 (±2.4)	95.1 (±2.4)	93.9 (±4.1)	75.0 (±7.1)							
Hawaii	78.6 (±5.4)	58.1 (±6.2)	64.5 (±5.9)	62.7 (±9.5)	39.9 (±9.2)	70.9 (±10.9)	93.7 (±2.9)	93.9 (±2.9)	95.6 (±3.1)	65.2 (±7.3)							
Idaho	58.0 (±6.1)	49.2 (±6.2)	40.8 (±6.0)	28.8 (±7.9)	17.6 (±6.8)	66.1 (±15.5)	84.2 (±4.6)	90.0 (±3.7)	76.6 (±8.5)	42.8 (±10.1)							
Illinois	78.4 (±4.1)	66.2 (±4.7)	56.6 (±4.9)	39.7 (±6.6)	26.0 (±5.8)	72.2 (±9.1)	93.7 (±2.2)	95.3 (±1.8)	87.2 (±4.7)	52.5 (±6.8)							
City of Chicago	76.6 (±5.7)	69.5 (±6.0)	63.8 (±6.2)	50.6 (±9.2)	28.4 (±8.8)	62.0 (±13.9)	88.8 (±4.1)	89.0 (±4.1)	86.4 (±5.7)	62.4 (±8.1)							
Rest of state	78.9 (±5.0)	65.4 (±5.7)	54.7 (±5.9)	36.8 (±7.8)	25.3 (±7.0)	75.8 (±11.2)	95.0 (±2.6)	97.0 (±1.9)	87.4 (±5.7)	49.8 (±8.4)							
Indiana	79.8 (±5.1)	72.3 (±5.8)	70.6 (±5.9)	37.0 (±8.2)	24.8 (±7.2)	77.6 (±12.5)	92.6 (±3.2)	93.9 (±3.0)	85.8 (±6.7)	58.1 (±9.9)							
Iowa	70.8 (±6.1)	64.2 (±6.4)	53.7 (±6.6)	48.2 (±9.5)	36.2 (±8.9)	79.4 (±11.0)	83.0 (±5.2)	87.4 (±4.4)	84.2 (±7.9)	38.5 (±10.0)							
Kansas	81.9 (±4.4)	76.8 (±4.7)	50.2 (±5.7)	40.2 (±8.5)	25.1 (±7.2)	62.9 (±14.5)	91.3 (±3.2)	88.2 (±3.7)	88.4 (±5.1)	65.6 (±7.9)							
Kentucky	86.1 (±4.3)	53.1 (±6.3)	44.8 (±6.2)	40.1 (±9.2)	27.3 (±7.9)	75.5 (±14.1)	93.0 (±3.3)	94.4 (±3.1)	86.1 (±6.1)	40.7 (±8.7)							
Louisiana	84.9 (±4.2)	69.3 (±5.6)	78.6 (±5.0)	54.2 (±9.2)	39.3 (±9.1)	74.4 (±10.9)	92.6 (±3.5)	94.1 (±3.0)	84.4 (±6.8)	63.9 (±8.5)							
Maine	78.4 (±5.6)	63.2 (±6.3)	56.4 (±6.4)	54.6 (±9.5)	32.9 (±8.8)	65.2 (±12.5)	93.7 (±3.3)	89.3 (±4.3)	91.7 (±5.5)	58.0 (±8.6)							
Maryland	79.0 (±5.5)	61.2 (±6.4)	68.9 (±6.1)	41.6 (±9.4)	30.8 (±8.6)	76.5 (±12.3)	95.1 (±2.5)	96.9 (±1.9)	97.6 (±1.8)	59.4 (±7.8)							
Massachusetts	95.8 (±2.8)	82.4 (±5.2)	82.9 (±5.3)	65.9 (±8.9)	46.8 (±10.0)	71.1 (±13.0)	93.7 (±4.5)	95.7 (±2.8)	98.6 (±1.4)	74.7 (±7.4)							
Michigan	81.6 (±5.0)	66.2 (±6.3)	70.9 (±6.0)	49.4 (±10.0)	25.2 (±7.9)	52.7 (±14.5)	93.6 (±3.7)	94.6 (±3.3)	97.4 (±2.5)	64.3 (±8.4)							
Minnesota	93.2 (±3.2)	70.3 (±5.9)	57.0 (±6.3)	51.3 (±9.4)	37.8 (±9.0)	80.1 (±11.8)	93.5 (±3.5)	92.8 (±3.5)	92.7 (±4.0)	68.0 (±8.0)							
Mississippi	34.6 (±5.7)	29.0 (±5.5)	26.0 (±5.4)	34.0 (±8.3)	20.0 (±7.2)	62.8 (±15.1)	87.8 (±4.5)	83.2 (±4.7)	69.4 (±8.2)	24.7 (±7.8)							
Missouri	76.3 (±5.3)	66.0 (±5.8)	49.2 (±5.9)	41.4 (±8.2)	25.5 (±6.9)	66.0 (±13.7)	88.1 (±3.9)	90.9 (±3.3)	76.9 (±6.9)	44.3 (±7.8)							
Montana	84.5 (±4.2)	76.1 (±5.1)	40.2 (±5.9)	45.5 (±8.9)	33.2 (±8.7)	77.3 (±10.7)	88.8 (±4.0)	84.4 (±4.6)	82.9 (±6.9)	41.4 (±9.0)							
Nebraska	82.7 (±5.0)	70.3 (±5.9)	65.7 (±6.2)	52.3 (±9.5)	42.5 (±9.5)	84.0 (±8.8)	92.8 (±3.2)	92.8 (±3.3)	92.5 (±4.8)	59.8 (±9.6)							
Nevada	80.6 (±4.8)	68.3 (±5.9)	54.2 (±6.2)	47.4 (±8.7)	25.9 (±7.6)	60.2 (±13.5)	88.8 (±4.2)	92.2 (±3.0)	86.0 (±5.9)	53.6 (±8.3)							
New Hampshire	95.9 (±2.2)	87.9 (±3.9)	73.8 (±5.4)	49.6 (±8.2)	42.2 (±8.1)	87.1 (±7.8)	97.2 (±1.9)	96.9 (±2.0)	97.5 (±2.6)	76.8 (±7.0)							
New Jersey	85.3 (±4.6)	68.9 (±6.0)	81.7 (±5.2)	35.4 (±9.0)	25.4 (±7.5)	76.2 (±16.6)	92.6 (±3.5)	95.4 (±3.2)	91.0 (±5.4)	62.2 (±8.1)							
New Mexico	88.8 (±4.0)	71.8 (±5.7)	52.9 (±6.2)	48.4 (±8.4)	31.1 (±7.9)	67.6 (±12.7)	85.8 (±4.8)	86.4 (±4.7)	83.6 (±7.0)	55.7 (±8.6)							
New York	90.9 (±2.7)	82.9 (±3.5)	71.2 (±4.5)	56.2 (±6.6)	39.7 (±6.6)	76.9 (±9.1)	94.4 (±2.6)	94.9 (±2.2)	94.8 (±2.9)	61.6 (±5.8)							
City of New York	92.9 (±2.7)	82.0 (±4.6)	75.5 (±5.4)	62.7 (±8.1)	42.4 (±8.7)	72.7 (±11.1)	94.5 (±3.0)	93.8 (±3.1)	95.0 (±3.2)	66.7 (±7.3)							
Rest of state	89.6 (±4.2)	83.6 (±4.8)	68.4 (±6.5)	52.0 (±9.6)	37.9 (±9.3)	80.4 (±13.8)	94.4 (±3.8)	95.6 (±3.0)	94.6 (±4.5)	58.0 (±8.5)							
North Carolina	77.8 (±5.1)	67.7 (±5.7)	52.4 (±6.0)	51.9 (±9.1)	39.3 (±9.1)	80.2 (±10.6)	85.7 (±4.3)	89.2 (±3.6)	80.0 (±6.1)	52.1 (±8.0)							
North Dakota	88.4 (±4.0)	83.1 (±4.7)	76.8 (±5.1)	41.7 (±8.4)	26.3 (±7.2)	67.4 (±13.2)	94.2 (±2.9)	96.6 (±1.9)	90.7 (±5.3)	63.6 (±9.1)							

See table footnotes on page 1122.

booster, 31 specified Tdap, and 10 required MenACWY) and likely contributed to increases in Tdap and MenACWY coverage (5). The District of Columbia and Virginia are the only reporting areas with middle school HPV vaccination requirements (4), which might have contributed to the increase in HPV vaccination in those areas over the past 2 years. Missed vaccination opportunities occur when adolescents receive middle school–required vaccines but not other ACIP-recommended vaccines. Further study is needed to understand and address barriers to providing all recommended vaccines during the same visit.

The findings in this report are subject to at least four limitations. First, NIS-Teen is a landline telephone survey,

although studies have shown no evidence of bias after adjusting sampling weights for noncoverage of households without landline telephones (6). During the fourth quarter of 2010, NIS-Teen sampled telephone numbers from a cellular-telephone sampling frame.** Differences between landline only and dual-frame coverage estimates ranged from -0.6 to 0.6 percentage points. Second, the household response rate was 58.0%, and only 59.2% of those with completed household interviews also

** Participants were eligible for interview from the cellular-telephone sampling frame if their household was cellular-telephone-only (i.e., household with access to a cellular telephone but not a landline telephone) or cellular-telephone-mainly (i.e., household containing both a cellular telephone and a landline telephone, but not at all likely or somewhat unlikely to answer the landline telephone if it rang).

TABLE 3. (Continued) Estimated vaccination coverage among adolescents aged 13 through 17 years,* by state and selected area and selected vaccines and doses — National Immunization Survey–Teen (NIS-Teen), United States, 2010

State/Area	Vaccine doses routinely recommended for adolescents									Vaccine doses routinely recommended during childhood (adolescent catch-up vaccines)							
	≥1 Td or Tdap since age 10 years [†]	≥1 Tdap since age 10 years	≥1 MenACWY [§]		≥1 HPV [¶]		≥3 HPV ^{**}		3 dose series completion ^{††}	≥2 MMR ^{§§}		≥3 HepB ^{¶¶}		≥1 VAR ^{***}		≥2 VAR ^{†††}	
	% (95% CI) ^{§§§}	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	
Ohio	69.3 (±5.8)	60.3 (±6.2)	61.6 (±6.1)	44.0 (±9.0)	31.1 (±8.1)	72.0 (±13.9)	90.7 (±3.6)	90.3 (±3.8)	92.4 (±4.3)	48.0 (±8.6)							
Oklahoma	66.4 (±6.1)	54.8 (±6.5)	42.6 (±6.4)	47.4 (±8.8)	31.1 (±8.3)	68.7 (±12.8)	87.9 (±4.1)	91.7 (±3.4)	95.4 (±3.3)	42.9 (±8.8)							
Oregon	75.9 (±5.6)	66.6 (±6.1)	52.4 (±6.4)	54.1 (±9.6)	38.2 (±9.5)	74.3 (±12.8)	88.6 (±4.4)	88.0 (±4.5)	87.8 (±5.9)	60.1 (±8.3)							
Pennsylvania	84.7 (±4.3)	74.0 (±4.9)	79.8 (±4.5)	52.3 (±7.6)	41.7 (±7.5)	82.8 (±7.5)	96.2 (±1.6)	93.7 (±3.1)	96.0 (±2.8)	80.5 (±5.0)							
Philadelphia County	86.1 (±4.1)	70.4 (±5.4)	84.5 (±4.4)	60.2 (±8.2)	38.5 (±8.3)	66.9 (±10.6)	90.9 (±3.4)	93.2 (±3.0)	96.4 (±2.3)	77.3 (±6.2)							
Rest of state	84.5 (±4.9)	74.5 (±5.6)	79.1 (±5.1)	51.1 (±8.6)	42.2 (±8.5)	85.6 (±8.6)	97.0 (±1.8)	93.8 (±3.5)	95.9 (±3.2)	81.0 (±5.7)							
Rhode Island	96.6 (±2.0)	79.5 (±5.0)	83.5 (±4.7)	73.0 (±7.7)	55.1 (±9.0)	79.6 (±9.3)	97.0 (±2.4)	93.6 (±3.4)	99.7 (±0.5)	85.3 (±5.3)							
South Carolina	60.1 (±6.5)	48.1 (±6.6)	44.7 (±6.5)	41.5 (±9.3)	29.5 (±8.8)	74.6 (±12.7)	89.4 (±3.8)	95.3 (±2.4)	81.9 (±7.5)	32.3 (±7.9)							
South Dakota	60.8 (±6.2)	52.5 (±6.3)	30.9 (±5.9)	68.8 (±7.8)	54.5 (±8.9)	85.5 (±7.9)	84.6 (±5.3)	78.3 (±5.8)	74.0 (±9.3)	19.7 (±8.7)							
Tennessee	66.6 (±6.1)	58.7 (±6.2)	50.6 (±6.2)	33.1 (±7.9)	26.3 (±7.3)	83.1 (±10.7)	91.6 (±3.5)	94.6 (±2.9)	86.1 (±5.8)	54.7 (±8.2)							
Texas	83.2 (±3.6)	71.9 (±4.3)	65.4 (±4.8)	47.5 (±7.1)	27.0 (±6.2)	62.3 (±10.8)	84.3 (±3.5)	87.2 (±3.3)	92.2 (±3.4)	60.2 (±6.3)							
Bexar County	86.1 (±4.2)	72.1 (±5.3)	72.0 (±5.4)	44.2 (±8.0)	26.7 (±6.8)	65.7 (±12.4)	85.6 (±4.1)	88.7 (±3.7)	93.3 (±3.4)	57.2 (±7.9)							
City of Houston	82.1 (±4.9)	71.3 (±5.8)	75.9 (±5.5)	55.1 (±8.9)	31.9 (±8.4)	59.9 (±12.8)	82.3 (±5.0)	83.4 (±5.0)	91.2 (±5.1)	68.4 (±7.6)							
Dallas County	80.6 (±6.4)	72.5 (±6.8)	72.9 (±6.9)	34.4 (±10.7)	18.6 (±7.8)	65.1 (±17.1)	81.4 (±6.5)	83.2 (±6.3)	93.7 (±3.7)	58.8 (±8.7)							
El Paso County	87.9 (±3.9)	79.5 (±4.8)	80.8 (±4.6)	67.4 (±8.1)	39.4 (±8.7)	60.7 (±11.3)	87.5 (±4.2)	91.1 (±3.4)	94.4 (±3.6)	65.2 (±7.8)							
Rest of state	83.1 (±4.8)	71.5 (±5.9)	61.9 (±6.5)	47.7 (±9.6)	27.0 (±8.4)	62.3 (±14.6)	84.6 (±4.7)	87.8 (±4.4)	91.8 (±4.8)	59.4 (±8.9)							
Utah	77.3 (±5.6)	68.8 (±6.1)	48.8 (±6.3)	39.2 (±8.6)	22.2 (±7.4)	59.1 (±13.7)	86.7 (±4.1)	87.5 (±4.1)	87.2 (±7.0)	50.3 (±9.5)							
Vermont	89.6 (±4.4)	82.7 (±5.1)	54.1 (±6.5)	49.6 (±9.3)	38.6 (±8.8)	82.6 (±13.1)	96.8 (±2.0)	95.8 (±2.5)	93.8 (±4.0)	81.2 (±7.6)							
Virginia	82.9 (±5.4)	72.0 (±6.3)	54.5 (±6.8)	54.0 (±9.7)	41.5 (±9.8)	78.2 (±10.0)	86.0 (±5.1)	89.6 (±4.7)	87.7 (±5.5)	43.1 (±8.5)							
Washington	82.8 (±4.5)	70.6 (±5.4)	67.6 (±5.5)	69.3 (±7.4)	45.5 (±8.4)	66.5 (±10.1)	85.2 (±4.3)	86.1 (±4.1)	84.8 (±7.0)	64.3 (±8.5)							
West Virginia	56.3 (±6.0)	49.9 (±6.1)	45.7 (±6.1)	42.4 (±8.5)	25.3 (±7.0)	63.9 (±13.8)	79.7 (±5.0)	77.4 (±5.2)	74.2 (±8.1)	40.2 (±8.8)							
Wisconsin	91.6 (±3.5)	81.3 (±5.5)	69.4 (±6.4)	54.4 (±9.8)	44.1 (±9.7)	85.8 (±9.5)	90.3 (±4.0)	89.9 (±4.2)	93.8 (±4.9)	78.1 (±7.5)							
Wyoming	88.6 (±4.0)	65.0 (±6.3)	51.5 (±6.5)	53.2 (±9.1)	40.3 (±8.8)	81.0 (±10.6)	90.0 (±3.8)	92.9 (±3.0)	85.4 (±6.5)	47.6 (±9.7)							
U.S. Virgin Islands ^{¶¶¶}	78.7 (±6.4)	62.8 (±7.3)	31.9 (±7.4)	22.5 (±9.3)	NA ^{****}	NA ^{****}	NA	NA	90.9 (±4.2)	92.9 (±3.9)	92.9 (±4.4)	61.3 (±7.8)					

* Adolescents (N = 19,257) in the 2010 NIS-Teen were born during January 1992–February 1998.

[†] Tetanus and diphtheria toxoids vaccine (Td), or tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap), or tetanus-unknown vaccine since age 10 years.[§] ≥1 dose of meningococcal conjugate vaccine or meningococcal-unknown type vaccine.[¶] ≥1 dose of human papillomavirus vaccine, either quadrivalent or bivalent. Percentage reported among females only (n = 9,220).^{**} ≥3 doses of human papillomavirus vaccine, either quadrivalent or bivalent. Percentage reported among females only.^{††} Percentage of females who received 3 doses among those who had at least 1 HPV dose and at least 24 weeks between the first dose and the interview date.^{§§} ≥2 doses of measles, mumps, and rubella vaccine.^{¶¶} ≥3 doses of hepatitis B vaccine.^{***} ≥1 dose of varicella vaccine among adolescents without a reported history of varicella disease.^{†††} ≥2 doses of varicella vaccine among adolescents without a reported history of varicella disease.^{§§§} Confidence interval. Estimates with confidence interval half-widths >10 might not be reliable.^{¶¶¶} St. Croix, St. Thomas, St. John, and Water Island.^{****} Estimate not reported because unweighted sample size for the denominator was <30 or CI half-width/Estimate greater than 0.588.

had adequate provider data. Noncoverage and nonresponse bias might remain after weighting adjustments, leading to underestimation or overestimation of coverage rates. Third, underestimates of vaccination coverage might have resulted from the exclusive use of provider-verified vaccination histories because the completeness of these records is unknown. Finally, estimates for particular states and reporting areas and for racial/ethnic populations should be interpreted with caution because of smaller sample sizes and wider confidence intervals.

Healthy People 2020 targets for adolescents aged 13 through 15 years are as follows: 80% coverage for ≥1 dose of Tdap, ≥1 dose of MenACWY, and ≥3 doses of HPV (among females) and 90% coverage for ≥2 doses of varicella vaccine (among adolescents without a reported history of varicella disease); no target has been set for HepB (7). Although adolescent

vaccination is increasing, additional strategies are needed to meet *Healthy People 2020* vaccination objectives for adolescents, particularly for HPV vaccination, because the increase in HPV coverage significantly lags behind other adolescent vaccines. A new 2012 Healthcare Effectiveness Data and Information Set (HEDIS) measure requiring health plans to track the number of females who receive 3 HPV doses by age 13 years is expected to lead to increased HPV vaccination rates (8). Evaluation of vaccination policies and practices associated with higher coverage in certain states and areas can help characterize effective methods. Promoting provider recommendations and parental awareness of adolescent vaccines, urging consideration of every health visit as an opportunity for vaccination, reducing out-of-pocket costs, and using immunization information systems and reminder/recall systems can increase vaccination

References

What is already known on this topic?

Since 2006, U.S. coverage with routinely recommended vaccinations among adolescents aged 13 through 17 years has increased, but adolescent coverage still remains low.

What is added by this report?

From 2009 to 2010, vaccination coverage among adolescents in the United States increased for ≥ 1 dose of tetanus, diphtheria, acellular pertussis (Tdap) vaccine; ≥ 1 dose of meningococcal conjugate vaccine (MenACWY); and for ≥ 1 dose and ≥ 3 doses of human papillomavirus vaccine (HPV) (females only). The increase in HPV 1-dose coverage was significantly lower than the increases in Tdap and MenACWY vaccination.

What are the implications for public health practice?

Coverage with routine adolescent vaccines is increasing, although the increase in HPV coverage among adolescent females is lagging, with only one third having received the full 3-dose series. Stronger provider recommendations for HPV vaccination, implementing reminder-recall systems, eliminating missed opportunities, and educating parents of adolescents regarding the risk for HPV infection and the benefits of vaccination, are needed to effectively protect adolescent girls against cervical cancer.

among adolescents (9,10). Providing additional and convenient access to adolescent vaccination services through pharmacies or school-associated programs might increase coverage in some communities. Finally, state and local immunization programs should make adolescent vaccination a priority to protect adolescents from vaccine-preventable diseases.

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State Preemption of Local Tobacco Control Policies Restricting Smoking, Advertising, and Youth Access — United States, 2000–2010

Preemptive state tobacco control legislation prohibits localities from enacting tobacco control laws that are more stringent than state law. State preemption provisions can preclude any type of local tobacco control policy. The three broad types of state preemption tracked by CDC include preemption of local policies that restrict 1) smoking in workplaces and public places, 2) tobacco advertising, and 3) youth access to tobacco products. A *Healthy People 2020* objective (TU-16) calls for eliminating state laws that preempt any type of local tobacco control law (1). A previous study reported that the number of states that preempt local smoking restrictions in one or more of three settings (government worksites, private-sector worksites, and restaurants) has decreased substantially in recent years (2). To measure progress toward achieving *Healthy People 2020* objectives, this study expands on the previous analysis to track changes in state laws that preempt local advertising and youth access restrictions and to examine policy changes from December 31, 2000, to December 31, 2010. This new analysis found that, in contrast with the substantial progress achieved during the past decade in reducing the number of states that preempt local smoking restrictions, no progress has been made in reducing the number of states that preempt local advertising restrictions and youth access restrictions. Increased progress in removing state preemption provisions will be needed to achieve the relevant *Healthy People 2020* objective.

Data on state preemption provisions were obtained from CDC's State Tobacco Activities Tracking and Evaluation (STATE) System database for the 50 states and the District of Columbia.* The STATE System contains tobacco-related epidemiologic and economic data and information on state tobacco-related legislation. In determining whether state laws preempt local smoking restrictions, the STATE System considers statutes and examines relevant case law, because rulings by state courts sometimes have been decisive in determining whether local policies were preempted. Because litigation has been less common with regard to state preemption of local advertising and youth access restrictions, the STATE System analyzes state statutes but not case law in these areas. Data are collected quarterly from an online legal research database of state laws and are analyzed, coded, and included in the STATE System.

The number of states that preempt local smoking restrictions decreased from 18 at the end of 2000 to 12 at the end of

2010 (Figure). During this period, Delaware, Illinois, Iowa, Louisiana, Mississippi, Nevada, New Jersey, Oregon, and South Carolina completely rescinded preemptive provisions or had such provisions overturned by state courts.[†] In addition, North Carolina rescinded preemption for certain settings, but left it in place for others. Conversely, state courts interpreted ambiguous provisions in New Hampshire and Washington laws as preempting local smoking restrictions. The number of states preempting local advertising restrictions remained constant over the decade at 18. The number of states that preempt local youth access restrictions increased from 21 to 22 during this period, with Pennsylvania enacting a new preemptive provision in 2002.

The number of states with preemptive provisions in any of the three policy categories decreased by one, from 28 states at the end of 2000 to 27 states at the end of 2010. The number of states that preempted local action in all three categories decreased from 11 states at the end of 2000 to seven states at the end of 2010. Those seven states were Michigan, North Carolina, Oklahoma, South Dakota, Tennessee, Utah, and Washington (Table).

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Editorial Note

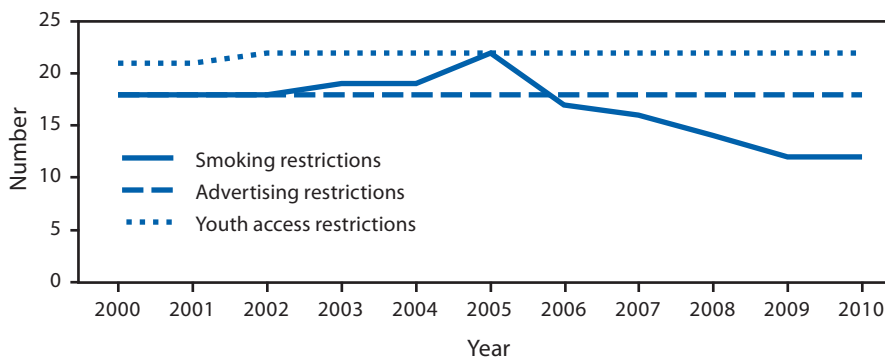
The results of this analysis indicate that no progress has been achieved during the past decade in reducing the number of states with laws preempting local restrictions on tobacco advertising and youth access to tobacco products. This situation contrasts with the significant strides made in reducing the number of states preempting local smoking restrictions.

Like smoke-free laws, restrictions on advertising and youth access are components of a comprehensive approach to tobacco control (3–5). Evidence from other countries shows that comprehensive restrictions on tobacco advertising can reduce tobacco consumption (3). Restrictions on youth

[†] Oregon both introduced and rescinded preemption of local smoking restrictions during the study period. In addition, Montana and Rhode Island introduced preemptive provisions during this period, but allowed those provisions to expire at predetermined dates, in accordance with sunset clauses in the legislation.

* Available at <http://www.cdc.gov/tobacco/statesystem>.

FIGURE. Number of states with laws in effect that preempt local tobacco control laws restricting smoking, advertising, and youth access, by year — United States, 2000–2010



access to tobacco products that are implemented as part of a comprehensive approach with a strong community mobilization component can reduce underage tobacco sales and youth tobacco use (4). The findings in this report indicate that substantial efforts will be required to meet the relevant *Healthy People 2020* objective, which calls for eliminating state preemptive provisions in all three areas.

In addition to the objective to eliminate state preemptive laws, *Healthy People 2020* includes objectives calling for 1) implementing state laws in all states to eliminate smoking in public places and worksites (TU-13), 2) reducing the proportion of adolescents and young adults in grades 6 through 12 who are exposed to tobacco advertising and promotion (TU-18), and 3) reducing the illegal tobacco sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors (TU-19) (1). Preemptive provisions in state law can prevent local adoption of evidence-based policies in all three of these areas. Moreover, the strongest, most innovative tobacco control policies typically have originated at the local level before eventually being adopted at the state level (2,4–7). For example, comprehensive smoke-free laws completely prohibiting smoking in workplaces, restaurants, and bars were initially adopted by local jurisdictions, beginning in the 1990s, before being adopted by numerous states during the past decade (6,7). Similarly, several types of youth access policies, including restrictions on self-service displays and vending machines, were introduced at the local level before being adopted widely among states and, more recently, at the federal level (5,6). State preemptive laws can impede this diffusion of successful policy interventions (7,8).

The number of states adopting new preemptive provisions in any of the three areas considered in this report has decreased in recent years after peaking in the 1990s (2,9). The decrease in the number of new state preemptive laws enacted during the past decade might reflect growing awareness on the part of tobacco control programs and advocacy groups of the negative

public health effects of preemption (7,8). In addition, nine states[§] have completely rescinded state laws preempting local smoking restrictions since 2000 through legislative action, ballot measures, or court decisions (2). State preemptive provisions typically have been sought by tobacco manufacturers and other interests seeking to counter increased adoption of certain tobacco control policies (6–8). As a result, patterns of state preemption activity often reflect patterns in local and state tobacco control policy activity (6–8).

In the 1990s, local and state policy activity was broad in scope, encompassing smoking restrictions, advertising restrictions, and youth access restrictions (5,6). State preemption provisions enacted during this decade generally also were broad in scope, in many cases covering all three areas (8,9). In contrast, during the 2000s, local and state policy efforts emphasized smoke-free laws over restrictions on advertising and youth access (7). New state preemptive provisions enacted during the past decade reflect this pattern, with most of these provisions focusing solely on precluding local smoking restrictions.[¶] Similarly, removal of state preemptive provisions during the past decade has been limited to this area.

Recent experience has shown that preemptive state laws can be rescinded. However, by the time this became evident, local efforts to address tobacco advertising and youth access to tobacco products had waned somewhat, and the rollback of state preemptive provisions did not carry over to these areas.

A major factor contributing to the decreased enactment of local and state laws restricting tobacco advertising during the past decade was a 2001 U.S. Supreme Court decision** which suggested that several types of state and local advertising restrictions might be barred by federal preemption or the First Amendment (3). The 2009 Family Smoking Prevention and Tobacco Control Act^{††} partially rescinded federal preemption of state and local restrictions on cigarette advertising and promotion. This, combined with the adoption of advertising restrictions in a number of other countries (10), has led to

[§] Delaware, Illinois, Iowa, Louisiana, Mississippi, Nevada, New Jersey, Oregon, and South Carolina.

[¶] For example, Mississippi, Montana, Oregon, and Rhode Island enacted preemptive provisions in this area during the past decade that subsequently were repealed (in the case of Mississippi and Oregon) or allowed to expire through sunset provisions (in the case of Montana and Rhode Island).

** *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525 (2001).

†† Family Smoking Prevention and Tobacco Control Act. Pub. L. No. 111-31 (June 22, 2009). Available at <http://www.gpo.gov/fdsys/pkg/PLAW-111publ31/content-detail.html>.

TABLE. States with provisions preempting local restrictions on smoking in workplaces and public places, tobacco advertising, and youth access to tobacco products — United States, December 31, 2000 and December 31, 2010

State	Any preemption		Smoking restrictions		Advertising restrictions		Youth access restrictions	
	2000	2010	2000	2010	2000	2010	2000	2010
Alabama								
Alaska								
Arizona								
Arkansas								
California	X	X					X	X
Colorado								
Connecticut	X	X	X	X				
Delaware	X	X	X		X	X	X	X
District of Columbia								
Florida	X	X	X	X				
Georgia								
Hawaii								
Idaho								
Illinois	X		X					
Indiana	X	X			X	X	X	X
Iowa	X	X	X				X	X
Kansas								
Kentucky	X	X			X	X	X	X
Louisiana	X	X	X		X	X	X	X
Maine								
Maryland								
Massachusetts								
Michigan	X	X	X	X	X	X	X	X
Minnesota								
Mississippi	X	X	X		X	X	X	X
Missouri								
Montana	X	X			X	X	X	X
Nebraska								
Nevada	X	X	X		X	X	X	X
New Hampshire		X		X				
New Jersey	X		X					
New Mexico	X	X			X	X	X	X
New York								
North Carolina	X	X	X	X	X	X	X	X
North Dakota								
Ohio								
Oklahoma	X	X	X	X	X	X	X	X
Oregon	X	X					X	X
Pennsylvania	X	X	X	X				X
Rhode Island								
South Carolina	X	X	X		X	X	X	X
South Dakota	X	X	X	X	X	X	X	X
Tennessee	X	X	X	X	X	X	X	X
Texas								
Utah	X	X	X	X	X	X	X	X
Vermont								
Virginia	X	X	X	X				
Washington	X	X		X	X	X	X	X
West Virginia	X	X			X	X		
Wisconsin	X	X			X	X	X	X
Wyoming	X	X					X	X

What is already known on this topic?

The strongest, most innovative tobacco control policies typically have originated at the local level, but preemptive provisions in state law can prevent local adoption of such policies. A *Healthy People 2020* objective calls for eliminating state laws that preempt stronger local tobacco control laws.

What is added by this report?

The number of states that preempt local smoking restrictions decreased from 18 at the end of 2000 to 12 at the end of 2010. In contrast, the number of states preempting local advertising restrictions remained constant at 18 during that period, while the number of states preempting local youth access restrictions increased from 21 to 22.

What are the implications for public health practice?

The Family Smoking Prevention and Tobacco Control Act has renewed interest in local efforts to restrict tobacco marketing. Increased progress in removing state preemption provisions will be needed to achieve the relevant *Healthy People 2020* objective.

renewed interest in local and state efforts to restrict tobacco marketing and sales. These efforts could focus attention on state preemption provisions that impede local action to restrict tobacco advertising. As a result, community attempts to restrict tobacco marketing and changes in relevant state preemptive provisions will need to be monitored.

The findings in this report are subject to at least two limitations. First, the language of preemption provisions in state statutes can be ambiguous, and interpretation can be difficult. Ultimately, courts interpret preemption language in statutes, but many provisions never are contested in court. However, this type of ambiguity appears to have been less evident with provisions in state law preempting local advertising and youth access restrictions than with provisions preempting local smoking restrictions. Finally, this analysis does not consider all types of state preemption of local tobacco control laws; for example, it does not address state preemption of local licensing and labeling requirements, although plans are under way to track this information in the STATE System.

Policies restricting smoking in workplaces and public places, tobacco advertising, and youth access to tobacco products are components of a comprehensive, evidence-based approach to tobacco control (3–5). Accordingly, state preemptive provisions that prevent local action in any of these three areas impede local and state efforts to reduce tobacco use. Increased progress in rescinding state preemption provisions will be needed to remove this barrier and to achieve the relevant *Healthy People 2020* objective.

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Prevention and Control of Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2011

On August 18, 2011, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

This document provides updated guidance for the use of influenza vaccines in the United States for the 2011–12 influenza season. In 2010, the Advisory Committee on Immunization Practices (ACIP) first recommended annual influenza vaccination for all persons aged ≥ 6 months in the United States (1,2). Vaccination of all persons aged ≥ 6 months continues to be recommended. Information is presented in this report regarding vaccine strains for the 2011–12 influenza season, the vaccination schedule for children aged 6 months through 8 years, and considerations regarding vaccination of persons with egg allergy. Availability of a new Food and Drug Administration (FDA)–approved intradermally administered influenza vaccine formulation for adults aged 18 through 64 years is reported. For issues related to influenza vaccination that are not addressed in this update, refer to the 2010 ACIP statement on prevention and control of influenza with vaccines and associated updates (1,2).

Methodology for the formulation of the ACIP annual influenza statement has been described previously (1). The ACIP Influenza Work Group meets every 2–4 weeks throughout the year. Work Group membership includes several voting members of the ACIP, as well as representatives from ACIP Liaison Organizations. Meetings are held by teleconference and include discussion of influenza-related issues, such as vaccine effectiveness and safety, coverage in groups recommended for vaccination, feasibility, cost-effectiveness, and anticipated vaccine supply. Presentations are requested from invited experts, and published and unpublished data are discussed. CDC's Influenza Division provides influenza surveillance and antiviral resistance data, and the Immunization Safety Office and Immunization Services Division provide information on vaccine safety and distribution and coverage, respectively.

Vaccine Strains for the 2011–12 Influenza Season

The 2011–12 U.S. seasonal influenza vaccine virus strains are identical to those contained in the 2010–11 vaccine. These include A/California/7/2009 (H1N1)-like, A/Perth/16/2009 (H3N2)-like, and B/Brisbane/60/2008-like antigens. The influenza A (H1N1) vaccine virus strain is derived from a 2009 pandemic influenza A (H1N1) virus (3).

Recommendations for Vaccination

Routine annual influenza vaccination is recommended for all persons aged ≥ 6 months (1). To permit time for production of

protective antibody levels (4,5), vaccination should optimally occur before onset of influenza activity in the community, and providers should offer vaccination as soon as vaccine is available. Vaccination also should continue to be offered throughout the influenza season.

Although influenza vaccine strains for the 2011–12 season are unchanged from those of 2010–11, annual vaccination is recommended even for those who received the vaccine for the previous season. Although in one study of children vaccinated against A/Hong Kong/68 (H3N2) virus, vaccine efficacy remained high against this strain 3 years later, the estimated efficacy of vaccine decreased over the seasons studied (6). Moreover, several studies have demonstrated that postvaccination antibody titers decline over the course of a year (7–10). Thus, annual vaccination is recommended for optimal protection against influenza.

Vaccine Doses for Children Aged 6 Months Through 8 Years

Children aged 6 months through 8 years require 2 doses of influenza vaccine (administered a minimum of 4 weeks apart) during their first season of vaccination to optimize immune response. In a study of children aged 5 through 8 years who received trivalent inactivated vaccine (TIV) for the first time, the proportion of children with protective antibody responses was significantly higher after 2 doses than after 1 dose (11).

The importance of vaccine priming might depend more on the similarity of the antigenic composition between the priming and second dose than the temporal interval between doses. From the 2003–04 to 2004–05 influenza seasons, the A(H1N1) virus antigen remained unchanged; however, the A(H3N2) virus antigen changed to a drifted strain, and the B virus antigen changed more substantially to a different lineage. In a study conducted over those two seasons, influenza-vaccine naïve children aged 6 through 23 months who received 1 dose of TIV in the spring of their first year of vaccination followed by a second dose in the fall were less likely to have protective antibody responses to the A(H3N2) and B virus antigens when compared with children who received 2 doses of identical vaccine in the fall (12). Response to the unchanged A(H1N1) virus antigen was comparable between the groups. In another study conducted over the same two seasons, unprimed children aged 10 through 24 months who received 1 dose of TIV during the fall of each season had similar responses to the unchanged A(H1N1) virus antigen as well as to the drifted A(H3N2) virus antigen when compared with children aged 6 through 24

months who received 2 doses of the same TIV during the latter season; however, the first group had significantly lower response to the B virus antigen (13). During two seasons in which all influenza vaccine virus antigens were identical, unprimed children aged 6 through 23 months had similar responses when they received 1 dose in the spring followed by a second dose in the fall, as compared with 2 doses received 1 month apart in the fall (14). Studies of inactivated monovalent pandemic 2009 (H1N1) vaccine in children aged <9 years also have demonstrated improved response to this antigen when 2 doses are administered (15–17).

Vaccination providers should note that, in previous seasons, children aged 6 months through 8 years who received only 1 dose of influenza vaccine in their first year of vaccination required 2 doses the following season. However, because the 2011–12 vaccine strains are unchanged from the 2010–11 season, children in this age group who received at least 1 dose of the 2010–11 seasonal vaccine will require only 1 dose of the 2011–12 vaccine. Children in this age group who did not receive at least 1 dose of the 2010–11 seasonal influenza vaccine, or for whom it is not certain whether the 2010–11 seasonal vaccine was received, should receive 2 doses of the 2011–12 seasonal influenza vaccine (Figure 1). Recommendations regarding the number of doses for this age group might change for the 2012–13 season if vaccine antigens change.

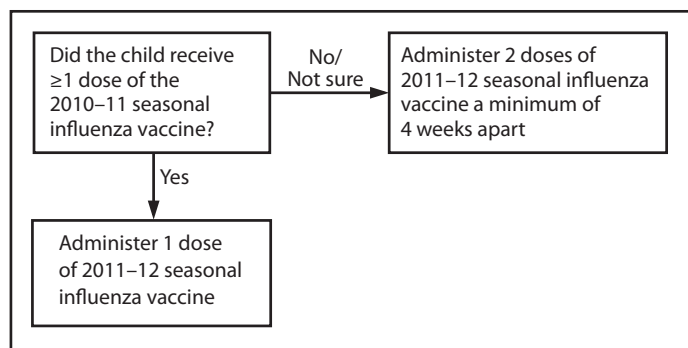
Available Vaccine Products and Indications

Multiple influenza vaccines are expected to be available during the 2011–12 season (Table). All contain the same antigenic composition. Package inserts should be consulted for information regarding additional components of various vaccine formulations.

TIV preparations, with the exception of Fluzone Intradermal (Sanofi Pasteur), should be administered intramuscularly. For adults and older children, the deltoid is the preferred site. Infants and younger children should be vaccinated in the anterolateral thigh. Specific guidance regarding site and needle length can be found in the ACIP's *General Recommendations on Immunization* (18).

A new intradermally administered TIV preparation, Fluzone Intradermal, was licensed in May 2011. This vaccine is indicated for persons aged 18 through 64 years and contains less antigen than intramuscular TIV preparations (9 μ g rather than 15 μ g of each strain per dose) in a smaller volume (0.1 mL rather than 0.5 mL). The vaccine is administered intradermally via a single-dose, prefilled microinjection syringe. The preferred site for administration is over the deltoid muscle (19). The most common adverse reactions include injection-site erythema, induration, swelling, pain, and pruritus. With the exception

FIGURE 1. Influenza vaccine dosing algorithm for children aged 6 months through 8 years — Advisory Committee on Immunization Practices (ACIP), 2011–12 influenza season



of pain, these reactions occurred more frequently than with intramuscular vaccine, but generally resolved within 3–7 days. This vaccine is an alternative to other TIV preparations for those in the indicated age range, with no preferential recommendation.

As during the 2010–11 season, a vaccine containing 60 μ g of hemagglutinin per vaccine strain (rather than 15 μ g per strain as in other intramuscular TIV preparations), Fluzone High-Dose (Sanofi Pasteur), is available as an alternative TIV for persons aged ≥ 65 years. No preference is indicated for this TIV versus other TIV preparations (1).

The intranasally administered live attenuated influenza vaccine (LAIV), FluMist (MedImmune) is indicated for healthy, nonpregnant persons aged 2 through 49 years. Within the indicated groups specified for each vaccine in the package inserts, no preference is indicated for LAIV versus TIV (1).

Vaccination of Persons Reporting Allergy to Eggs

Allergy to eggs must be distinguished from allergy to influenza vaccine. Severe allergic and anaphylactic reactions can occur in response to a number of influenza vaccine components, but such reactions are rare. A review of reports to the Vaccine Adverse Events Reporting System (VAERS) of adverse events in adults noted four reports of death caused by anaphylaxis following influenza vaccine during 1990–2005; the vaccine components potentially responsible for these reactions were not reported (20). A prior severe allergic reaction to influenza vaccine, regardless of the component suspected to be responsible for the reaction, is a contraindication to receipt of influenza vaccine.

All currently available influenza vaccines are prepared by inoculation of virus into chicken eggs. Hypersensitivity to eggs has been listed as a contraindication to receipt of influenza vaccine on most package inserts. However, several recent studies have documented safe receipt of TIV in persons with egg allergy (21–29), and recent revisions of some TIV

TABLE. Influenza vaccine information, by age group — United States, 2011–12 influenza season*

Vaccine	Trade name	Manufacturer	Presentation	Mercury content (μg Hg/0.5 mL dose)	Ovalbumin content (μg /0.5mL dose)	Age group	No. of doses	Route
TIV	Fluzone	Sanofi Pasteur	0.25 mL prefilled syringe	0.0	— [†]	6–35 mos	1 or 2 [§]	IM [¶]
			0.5 mL prefilled syringe	0.0	— [†]	≥36 mos	1 or 2 [§]	IM [¶]
			0.5 mL vial	0.0	— [†]	≥36 mos	1 or 2 [§]	IM [¶]
			5.0 mL multidose vial	25.0	— [†]	≥6 mos	1 or 2 [§]	IM [¶]
TIV	Fluvirin	Novartis Vaccines	0.5 mL prefilled syringe	≤1	≤1	≥4 yrs	1 or 2 [§]	IM [¶]
			5.0 mL multidose vial	25.0	≤1			
TIV	Fluarix	GlaxoSmithKline	0.5 mL prefilled syringe	0	≤0.05	≥3 yrs	1 or 2 [§]	IM [¶]
TIV	FluLaval	ID Biomedical Corporation of Quebec (distributed by GlaxoSmithKline)	5.0 mL multidose vial	25.0	≤1	≥18 yrs	1	IM [¶]
TIV	Afluria	CSL Biotherapies (distributed by Merck)	0.5 mL prefilled syringe	0.0	≤1	≥9 yrs**	1	IM [¶]
			5.0 mL multidose vial	24.5	≤1			
TIV High-Dose ^{††}	Fluzone High-Dose	Sanofi Pasteur	0.5 mL prefilled syringe	0.0	— [†]	≥65 yrs	1	IM [¶]
TIV Intradermal	Fluzone Intradermal	Sanofi Pasteur	0.1 mL prefilled microinjection system	0.0	— [†]	18–64 yrs	1	ID
LAIV	FluMist ^{§§}	MedImmune	0.2 mL prefilled intranasal sprayer	0.0	— ^{¶¶}	2–49 yrs***	1 or 2 [§]	IN

Abbreviations: TIV = trivalent inactivated vaccine; LAIV = live attenuated influenza vaccine; IM = intramuscular; ID = intradermal; IN = intranasal.

* Vaccination providers should check Food and Drug Administration–approved prescribing information for 2011–12 influenza vaccines for the most updated information.

[†] Information not included in package insert but is available upon request from the manufacturer, Sanofi Pasteur, by telephone, 1-800-822-2463, or e-mail, MIS.Emails@sanofipasteur.com.

[§] Children aged 6 months through 8 years who did not receive seasonal influenza vaccine during the 2010–11 influenza season should receive 2 doses at least 4 weeks apart for the 2011–12 season. Those children aged 6 months through 8 years who received ≥1 dose of the 2010–11 seasonal vaccine require 1 dose for the 2011–12 season.

[¶] For adults and older children, the recommended site of vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh.

** Age indication per package insert is ≥5 years; however, the Advisory Committee on Immunization Practices recommends Afluria not be used in children aged 6 months through 8 years because of increased reports of febrile reactions in this age group. If no other age-appropriate, licensed inactivated seasonal influenza vaccine is available for a child aged 5–8 years who has a medical condition that increases the child's risk for influenza complications, Afluria can be used; however, providers should discuss with the parents or caregivers the benefits and risks of influenza vaccination with Afluria before administering this vaccine. Afluria may be used in persons aged ≥9 years.

^{††} TIV high-dose: A 0.5-mL dose contains 60 μg each of A/California/7/2009 (H1N1)-like, A/Perth/16/2009 (H3N2)-like, and B/Brisbane/60/2008-like antigens.

^{§§} FluMist is shipped refrigerated and stored in the refrigerator at 35°F–46°F (2°C–8°C) after arrival in the vaccination clinic. The dose is 0.2 mL divided equally between each nostril. Health-care providers should consult the medical record, when available, to identify children aged 2–4 years with asthma or recurrent wheezing that might indicate asthma. In addition, to identify children who might be at greater risk for asthma and possibly at increased risk for wheezing after receiving LAIV, parents or caregivers of children aged 2–4 years should be asked: "In the past 12 months, has a health-care provider ever told you that your child had wheezing or asthma?" Children whose parents or caregivers answer "yes" to this question and children who have asthma or who had a wheezing episode noted in the medical record within the past 12 months should not receive FluMist.

^{¶¶} Insufficient data available for use of LAIV in egg-allergic persons.

*** FluMist is indicated for healthy, nonpregnant persons aged 2–49 years.

package inserts note that only a severe allergic reaction (e.g., anaphylaxis) to egg protein is a contraindication. In general, these studies include relatively fewer persons reporting a history of anaphylactic reaction to egg, compared with less severe reactions. Several documents providing guidance on use of influenza vaccine in persons with egg allergy have been published recently (30–32).

The quantity of egg protein in vaccine is expressed as the concentration of ovalbumin per dose or unit volume. Among studies in which the ovalbumin content of the administered

vaccine was reported, up to 1.4 $\mu\text{g}/\text{mL}$ (0.7 $\mu\text{g}/0.5$ mL dose) was tolerated without serious reactions (22,23,25–29); however, a safe maximum threshold of ovalbumin, below which no anaphylactic reactions would be expected, is not known.

Although ovalbumin content is not required to be disclosed on package inserts for vaccines used in the United States, manufacturers either report maximum albumin content in the package inserts or will provide this information on request. Ovalbumin concentration can vary from season to season and from lot to lot for a given vaccine. Independent assessments of

ovalbumin content of commercially available vaccines have noted lower concentrations than those listed on package inserts (33,34).

In several studies evaluating influenza vaccine in persons with egg allergy, additional safety measures have been taken, such as skin prick testing with vaccine (21–24,26,28,29) and administering the vaccine in 2 doses (e.g., 10% of the dose initially, followed by the remaining 90% if no reaction has occurred during a 30-minute observation period) (22,24–29). Skin prick testing with vaccine was poorly predictive of allergic reactions in these studies (22–24,26). In general, administration of both full doses and split doses have been well-tolerated without serious reactions, although systemic reactions (e.g., wheezing, eczema exacerbation, and hives on face/chest) were observed with the initial 10% dose among six (3.5%) of 171 participants in one study (24).

Recommendations Regarding Persons with Egg Allergy

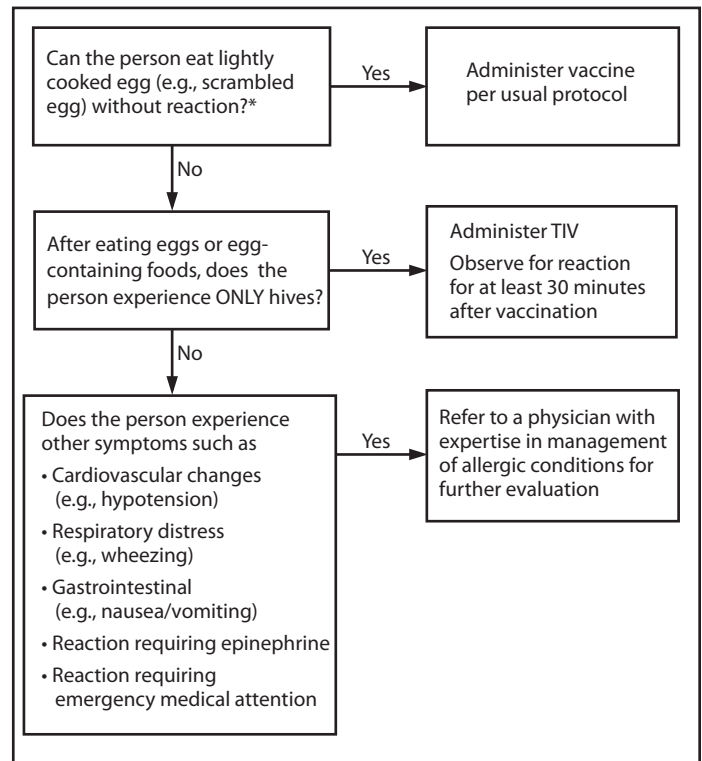
Each of the following recommendations applies when considering influenza vaccination of persons who have or report a history of egg allergy.

1. Persons who have experienced only hives following exposure to egg should receive influenza vaccine with the following additional measures (Figure 2):
 - a) Because studies published to date involved use of TIV, TIV rather than LAIV should be used.
 - b) Vaccine should be administered by a health-care provider who is familiar with the potential manifestations of egg allergy.
 - c) Vaccine recipients should be observed for at least 30 minutes for signs of a reaction following administration of each vaccine dose.

Other measures, such as dividing and administering the vaccine by a two-step approach and skin testing with vaccine, are not necessary.

2. Persons who report having had reactions to egg involving angioedema, respiratory distress, lightheadedness, or recurrent emesis, or persons who required epinephrine or other emergency medical intervention, particularly those that occurred immediately or within minutes to hours after egg exposure are more likely to have a serious systemic or anaphylactic reaction upon reexposure to egg proteins. Before receipt of vaccine, such persons should be referred to a physician with expertise in the management of allergic conditions for further risk assessment (Figure 2).
3. All vaccines should be administered in settings in which personnel and equipment for rapid recognition and treatment of anaphylaxis are available. ACIP recommends that all vaccination providers be familiar with the office emergency plan (18).

FIGURE 2. Recommendations regarding influenza vaccination for persons who report allergy to eggs — Advisory Committee on Immunization Practices (ACIP), 2011–12 influenza season



* Persons with egg allergy might tolerate egg in baked products (e.g., bread or cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy.

4. Some persons who report allergy to egg might not be egg allergic. Those who are able to eat lightly cooked egg (e.g., scrambled eggs) without reaction are unlikely to be allergic. Conversely, egg-allergic persons might tolerate egg in baked products (e.g., bread or cake); tolerance to egg-containing foods does not exclude the possibility of egg allergy (35). Egg allergy can be confirmed by a consistent medical history of adverse reactions to eggs and egg-containing foods, plus skin and/or blood testing for immunoglobulin E antibodies to egg proteins.
5. A previous severe allergic reaction to influenza vaccine, regardless of the component suspected to be responsible for the reaction, is a contraindication to receipt of influenza vaccine.

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Acknowledgments

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* Roster available at <http://www.cdc.gov/vaccines/recs/acip/members-archive.htm>.

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Notes from the Field

Mortality Among Refugees Fleeing Somalia — Dadaab Refugee Camps, Kenya, July–August 2011

Refugee camps in Dadaab, Kenya, currently are receiving Somali refugees fleeing famine and armed conflict at a rate of approximately 1,400 refugees per day. New arrivals are at an elevated risk for mortality because of severe famine in Somalia (1), the dangerous journey, and overcrowding in the camps.

During July 24–August 3, 2011, the United Nations High Commissioner for Refugees (UNHCR) and CDC conducted a rapid, retrospective assessment of mortality among new arrivals to the Dadaab camps. Consenting heads of households answered a standardized questionnaire on family size and births, deaths, and migrations in and out of the household occurring during three periods: 1) April 1 to departure (“predeparture”) (median: 85 days); 2) journey to the camps (“journey”) (median: 8 days); and 3) from arrival to camp registration (“postarrival”) (median: 24 days). Families with even-numbered ration cards were selected for participation on the day of registration.

Among the 753 families interviewed, 44 deaths were reported; 33 (75%) persons were reported by the heads of household to have been malnourished at the time of death. Of the 29 children aged <5 years who died, 26 (90%) were reported to have been malnourished. During the predeparture period, the estimated crude mortality rate (CMR) was 0.86 deaths per 10,000 persons per day and the under 5 mortality rate (U5MR) was 2.21 deaths per 10,000 children aged <5 years per day (Table). The CMR during the journey (1.94) doubled compared with the predeparture period (rate ratio: 2.20; $p=0.05$) and mortality estimates during the journey appear to have exceeded emergency thresholds (CMR ≥ 1 and U5MR ≥ 2). Overall mortality during the postarrival period (CMR = 0.44) was lower than during the journey (rate ratio: 0.23; $p=0.03$).

Mortality estimates approached or exceeded emergency thresholds predeparture, then doubled to surpass emergency thresholds during the journey. However, precision is limited by the short period measured, and comparison with emergency

thresholds should be interpreted with caution. Although mortality decreased during the first month in the camp, previous assessments have noted a risk for deterioration in health status during the following months, which might impact mortality. For example, rates of acute malnutrition (indicated by mid-upper arm circumference <125 mm) based on measurements obtained during a mass screening in one Dadaab camp among refugees who had arrived during the preceding 3 months were higher (42%) than rates measured on the day of arrival (23%) or among longer-term residents of the camp (23%) (2; UNHCR, unpublished data, 2011). This assessment highlights the desperate conditions faced by the population fleeing Somalia, particularly during their journey, and identifies a need for additional aid efforts to minimize mortality.

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TABLE. Mortality rates among newly arriving Somali refugees — Dadaab refugee camps, Kenya, July–August 2011

Period	CMR* (95% CI)	Rate ratio (p-value)	U5MR† (95% CI)	Rate ratio (p-value)	Median no. of days (IQR)
Predeparture	0.86 (0.57–1.15)	—	2.21 (1.24–3.17)	—	85 (74–94)
Journey	1.94 (0.50–3.37)	2.20 ($p=0.05$) [§]	3.95 (0.08–7.81)	1.79 ($p=0.29$) [§]	8 (4–18)
Postarrival	0.44 (0–0.93)	0.23 ($p=0.03$) [¶]	1.53 (0–3.25)	0.39 ($p=0.21$) [¶]	24 (16–30)

Abbreviations: CMR = crude mortality rate; CI = confidence interval; U5MR = under 5 mortality rate; IQR = interquartile range.

* Deaths per 10,000 persons per day.

† Deaths per 10,000 children aged <5 year per day.

[§] Referent is “Predeparture” group.

[¶] Referent is “Journey” group.

Announcement

Clinical Vaccinology Course — November 4–6, 2011

CDC and eight other national organizations are collaborating with the National Foundation for Infectious Diseases (NFID), Emory University School of Medicine, and the Emory Vaccine Center to sponsor a Clinical Vaccinology Course November 4–6, 2011, at the Grand Hyatt Atlanta in Atlanta, Georgia. Through lectures and interactive case presentations, the course will focus on new developments and concerns related to the use of vaccines in pediatric, adolescent, and adult populations. Leading infectious disease experts, including pediatricians, internists, and family physicians, will present the latest information on newly available vaccines and vaccines in development, as well as established vaccines whose continued administration is essential to improving disease prevention efforts.

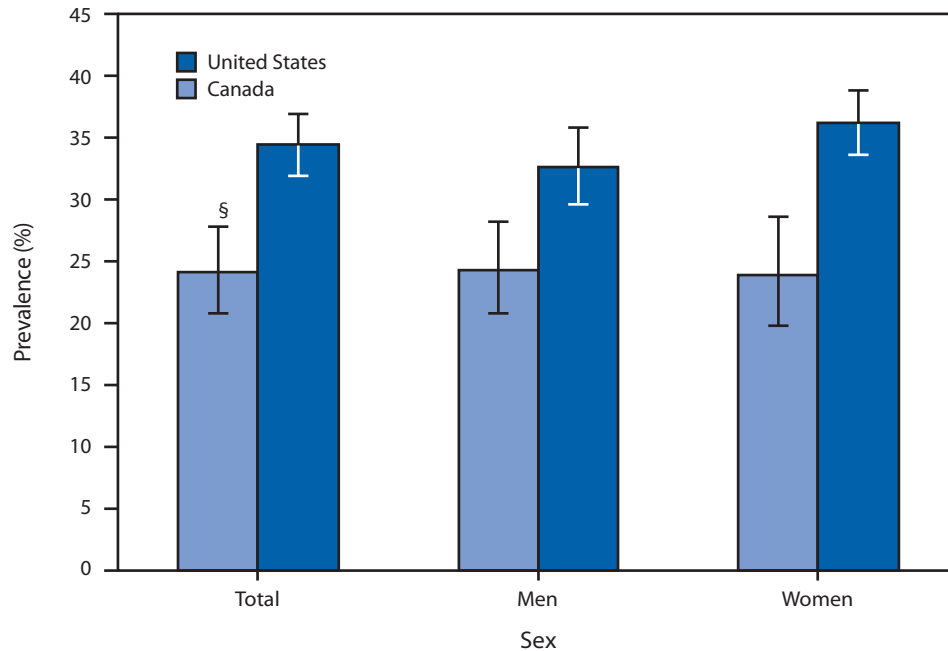
This course is designed specifically for physicians, nurses, nurse practitioners, physician assistants, pharmacists, vaccine program administrators, and other health professionals involved with or interested in the clinical use of vaccines. The course also will be of interest to health-care professionals involved in the prevention and control of infectious diseases, such as federal, state, and local public health officials. Course participants should have a knowledge of or interest in vaccines and vaccine-preventable diseases.

Continuing education credits will be offered. Information regarding the program, registration, and hotel accommodations is available at <http://www.nfid.org>, or by e-mail (idcourse@nfid.org), fax (301-907-0878), telephone (301-656-0003, ext. 19), or mail (NFID, 4733 Bethesda Avenue, Suite 750, Bethesda, MD 20814-5228).

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Prevalence of Obesity* Among Persons Aged 20–79 Years, by Sex — Canada, 2007–2009, and United States, 2007–2008†



* Defined as body mass index (weight [kg] / height [m²]) ≥ 30.0 . Both U.S. and Canadian estimates were age-standardized by the direct method to the 2000 U.S. Census population using age groups 20–39, 40–59, and 60–79 years. Pregnant women were excluded.

† Based on data from standardized physical examinations conducted as part of the 2007–2008 National Health and Nutrition Examination Survey and the 2007–2009 Canadian Health Measures Survey.

§ 95% confidence interval.

Based on the most recent comparable data available, the prevalence of obesity among U.S. adults (34.4%) aged 20–79 years was greater than for Canadian adults (24.1%). The prevalence of obesity among U.S. men (32.6%) was greater than for Canadian men (24.3%), and the prevalence among U.S. women (36.2%) was greater than for Canadian women (23.9%).

Source: Shields M, Carroll MD, Ogden CL. Adult obesity prevalence in Canada and the United States. NCHS data brief, no. 56. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2011. Available at <http://www.cdc.gov/nchs/data/databriefs/db56.htm>.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 20, 2011 (33rd week)*

Disease	Current week	Cum 2011	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	0	—	1	—	1	1	
Arboviral diseases ^{§, ¶} :									
California serogroup virus disease	—	15	5	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	1	1	10	4	4	4	8	
Powassan virus disease	—	6	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	1	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	42	314	1	NN	NN	NN	NN	NN	NY (42)
Botulism, total	—	60	3	112	118	145	144	165	
foodborne	—	6	1	7	10	17	32	20	
infant	—	47	2	80	83	109	85	97	
other (wound and unspecified)	—	7	1	25	25	19	27	48	
Brucellosis	2	52	3	115	115	80	131	121	MO (1), FL (1)
Chancroid	1	12	0	24	28	25	23	33	CA (1)
Cholera	—	21	0	13	10	5	7	9	
Cyclosporiasis [§]	2	118	4	179	141	139	93	137	FL (1), TX (1)
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	5	0	23	35	30	22	29	
nonserotype b	—	75	2	200	236	244	199	175	
unknown serotype	4	160	3	223	178	163	180	179	PA (2), MO (1), ID (1)
Hansen disease [§]	—	28	2	98	103	80	101	66	
Hantavirus pulmonary syndrome [§]	—	16	0	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal [§]	6	92	8	266	242	330	292	288	MO (1), NC (1), TN (2), AR (1), OR (1)
Influenza-associated pediatric mortality ^{§, ††}	—	110	1	61	358	90	77	43	
Listeriosis	14	312	22	821	851	759	808	884	NY (1), PA (1), OH (2), FL (1), TX (1), CO (2), WA (1), CA (5)
Measles ^{§§}	—	162	1	63	71	140	43	55	
Meningococcal disease, invasive ^{¶¶} :									
A, C, Y, and W-135	—	125	3	280	301	330	325	318	
serogroup B	—	65	2	135	174	188	167	193	
other serogroup	—	7	0	12	23	38	35	32	
unknown serogroup	—	272	7	406	482	616	550	651	
Novel influenza A virus infections***	—	—	2	4	43,774	2	4	NN	
Plague	—	1	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic [§]	—	—	—	—	—	—	—	NN	
Psittacosis [§]	—	1	0	4	9	8	12	21	
Q fever, total [§]	—	60	3	131	113	120	171	169	
acute	—	44	1	106	93	106	—	—	
chronic	—	16	0	25	20	14	—	—	
Rabies, human	—	1	—	2	4	2	1	3	
Rubella ^{†††}	—	4	—	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV [§]	—	—	—	—	—	—	—	—	
Smallpox [§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome [§]	1	81	2	142	161	157	132	125	OH (1)
Syphilis, congenital (age <1 yr) ^{§§§}	—	119	10	377	423	431	430	349	
Tetanus	—	5	1	26	18	19	28	41	
Toxic-shock syndrome (staphylococcal) [§]	2	54	2	82	74	71	92	101	TN (1), CO (1)
Trichinellosis	—	7	0	7	13	39	5	15	
Tularemia	1	75	4	124	93	123	137	95	MO (1)
Typhoid fever	2	220	12	467	397	449	434	353	NY (1), OH (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	—	37	1	91	78	63	37	6	
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	0	2	1	—	2	1	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	13	358	25	846	789	588	549	NN	OH (1), VA (2), GA (1), FL (4), TX (1), CA (4)
Viral hemorrhagic fever ^{¶¶¶}	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 20, 2011 (33rd week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.

* Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf.

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

§ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.

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

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

†† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 114 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.

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

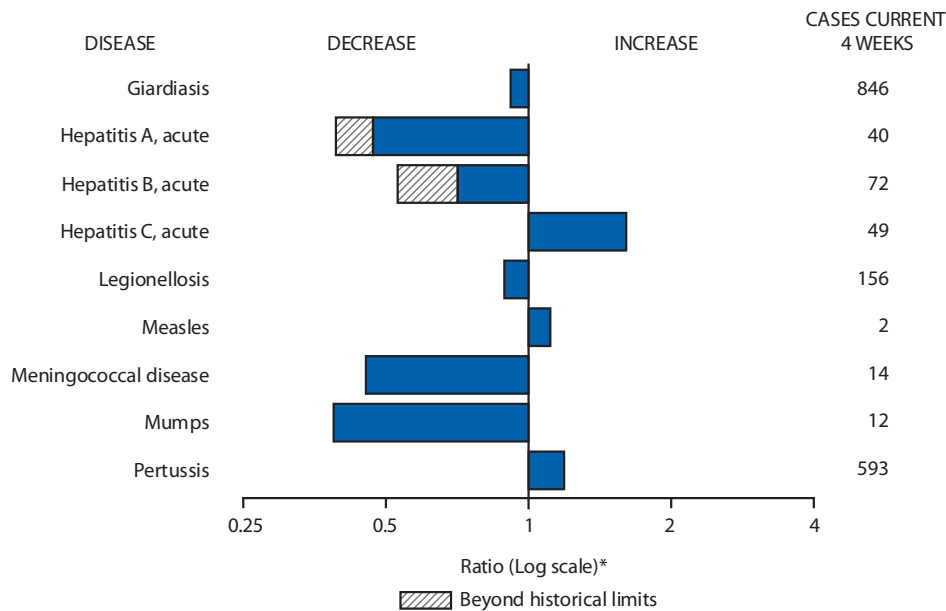
¶¶ Data for meningococcal disease (all serogroups) are available in Table II.

*** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the two cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).

††† No rubella cases were reported for the current week.

§§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

¶¶¶ There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 20, 2011, 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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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	<i>Chlamydia trachomatis</i> infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	12,479	25,885	31,142	809,675	814,166	76	148	567	10,802	NN	192	134	416	4,499	5,304
New England	766	839	2,043	27,371	25,706	—	0	1	1	NN	2	5	47	229	352
Connecticut	251	218	1,557	6,080	6,658	—	0	0	—	NN	—	0	41	41	77
Maine†	—	58	100	1,926	1,591	—	0	0	—	NN	1	1	5	34	69
Massachusetts	455	406	860	14,092	13,057	—	0	0	—	NN	—	3	9	89	104
New Hampshire	4	53	81	1,740	1,468	—	0	1	1	NN	—	1	4	36	42
Rhode Island†	31	73	154	2,609	2,118	—	0	0	—	NN	—	0	1	1	14
Vermont†	25	27	84	924	814	—	0	0	—	NN	1	1	4	28	46
Mid. Atlantic	1,998	3,352	5,069	100,870	106,109	—	0	1	3	NN	17	17	38	549	516
New Jersey	141	528	905	16,953	16,482	—	0	0	—	NN	—	1	4	20	24
New York (Upstate)	725	712	2,099	22,597	20,787	—	0	0	—	NN	11	4	13	121	115
New York City	193	1,130	2,612	29,007	39,216	—	0	0	—	NN	—	2	6	40	50
Pennsylvania	939	957	1,239	32,313	29,624	—	0	1	3	NN	6	9	26	368	327
E.N. Central	1,243	3,985	7,039	123,061	129,335	1	0	4	35	NN	79	32	121	1,151	1,514
Illinois	27	1,084	1,320	30,830	38,155	—	0	0	—	NN	—	3	20	84	212
Indiana	231	457	3,376	16,530	12,396	—	0	0	—	NN	—	4	14	153	191
Michigan	610	917	1,404	29,964	31,635	—	0	3	20	NN	3	5	18	188	223
Ohio	207	1,002	1,134	31,617	32,473	1	0	3	15	NN	67	9	39	465	275
Wisconsin	168	455	559	14,120	14,676	—	0	0	—	NN	9	8	65	261	613
W.N. Central	598	1,436	1,645	44,730	45,591	—	0	2	6	NN	41	19	132	709	1,078
Iowa	9	212	254	6,556	6,619	—	0	0	—	NN	1	7	29	235	236
Kansas	20	192	288	6,312	6,156	—	0	0	—	NN	—	0	5	4	74
Minnesota	—	285	367	7,418	9,849	—	0	0	—	NN	—	0	21	—	268
Missouri	486	528	759	17,722	16,356	—	0	0	—	NN	33	4	57	209	295
Nebraska†	48	106	218	3,893	3,220	—	0	2	6	NN	7	4	26	133	110
North Dakota	7	33	90	744	1,420	—	0	0	—	NN	—	0	9	16	16
South Dakota	28	63	93	2,085	1,971	—	0	0	—	NN	—	2	13	112	79
S. Atlantic	2,755	5,105	6,531	170,029	163,822	—	0	2	3	NN	18	21	57	731	658
Delaware	59	83	220	2,695	2,675	—	0	0	—	NN	1	0	1	6	5
District of Columbia	—	105	180	2,844	3,365	—	0	0	—	NN	—	0	1	5	2
Florida	654	1,492	1,706	48,019	48,014	—	0	0	—	NN	15	8	23	291	242
Georgia	698	971	2,384	32,943	27,910	—	0	0	—	NN	—	5	11	177	179
Maryland†	—	451	1,125	12,910	15,097	—	0	2	3	NN	1	1	6	41	25
North Carolina	531	774	1,477	29,153	28,606	—	0	0	—	NN	—	0	17	36	47
South Carolina†	465	528	946	17,928	16,500	—	0	0	—	NN	—	2	8	79	70
Virginia†	348	659	965	20,989	19,350	—	0	0	—	NN	1	2	8	80	76
West Virginia	—	78	121	2,548	2,305	—	0	0	—	NN	—	0	5	16	12
E.S. Central	957	1,805	3,314	59,507	58,496	—	0	0	—	NN	4	7	24	185	165
Alabama†	312	539	1,564	17,914	16,566	—	0	0	—	NN	—	3	15	84	71
Kentucky	335	261	2,352	9,931	10,045	—	0	0	—	NN	—	1	4	27	50
Mississippi	—	398	614	12,722	14,012	—	0	0	—	NN	—	0	2	16	9
Tennessee†	310	591	795	18,940	17,873	—	0	0	—	NN	4	1	5	58	35
W.S. Central	2,575	3,327	4,338	110,353	113,037	—	0	1	1	NN	13	7	62	234	244
Arkansas†	325	311	440	10,447	9,895	—	0	0	—	NN	1	0	3	11	22
Louisiana	—	526	1,052	13,302	16,448	—	0	1	1	NN	—	0	9	29	35
Oklahoma	668	224	850	6,899	9,158	—	0	0	—	NN	3	2	34	58	51
Texas†	1,582	2,380	3,107	79,705	77,536	—	0	0	—	NN	9	4	28	136	136
Mountain	667	1,628	2,155	52,556	52,618	69	106	432	8,557	NN	13	12	30	387	374
Arizona	315	511	698	15,998	17,256	69	102	427	8,453	NN	—	1	4	25	23
Colorado	226	412	847	14,672	12,162	—	0	0	—	NN	6	3	12	109	85
Idaho†	—	57	179	1,630	2,558	—	0	0	—	NN	1	2	9	78	61
Montana†	74	60	83	2,088	1,909	—	0	1	2	NN	5	1	6	50	33
Nevada†	—	199	380	6,661	6,461	—	1	5	60	NN	—	0	7	3	23
New Mexico†	—	197	1,183	6,174	6,819	—	0	4	31	NN	—	2	12	76	82
Utah	52	130	175	4,151	4,149	—	0	2	8	NN	—	1	5	27	49
Wyoming†	—	38	90	1,182	1,304	—	0	2	3	NN	1	0	5	19	18
Pacific	920	3,882	6,559	121,198	119,452	6	47	142	2,196	NN	5	11	29	324	403
Alaska	—	109	157	3,432	3,948	—	0	0	—	NN	—	0	3	7	2
California	448	2,957	5,763	93,231	91,131	6	46	142	2,191	NN	3	6	19	194	216
Hawaii	—	108	138	2,936	3,898	—	0	0	—	NN	—	0	0	—	1
Oregon	189	264	524	8,616	7,152	—	0	1	5	NN	1	3	20	78	130
Washington	283	430	522	12,983	13,323	—	0	0	—	NN	1	1	9	45	54
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	NN	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	5	81	189	615	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	—	104	349	3,516	4,003	—	0	0	—	NN	N	0	0	N	N
U.S. Virgin Islands	—	14	27	359	373	—	0	0	—	NN	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Dengue Virus Infection [†]									
	Dengue Fever [§]					Dengue Hemorrhagic Fever [¶]				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max		
United States	—	3	55	64	450	—	0	2	—	6
New England	—	0	3	1	5	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island**	—	0	1	—	—	—	0	0	—	—
Vermont**	—	0	1	1	2	—	0	0	—	—
Mid. Atlantic	—	1	25	19	153	—	0	1	—	3
New Jersey	—	0	3	—	19	—	0	0	—	—
New York (Upstate)	—	0	5	—	23	—	0	1	—	1
New York City	—	0	17	10	94	—	0	1	—	2
Pennsylvania	—	0	2	9	17	—	0	0	—	—
E.N. Central	—	0	7	4	37	—	0	1	—	1
Illinois	—	0	2	1	9	—	0	0	—	—
Indiana	—	0	2	1	9	—	0	0	—	—
Michigan	—	0	2	—	5	—	0	0	—	—
Ohio	—	0	2	—	11	—	0	0	—	—
Wisconsin	—	0	2	2	3	—	0	1	—	1
W.N. Central	—	0	6	1	21	—	0	1	—	—
Iowa	—	0	1	—	1	—	0	0	—	—
Kansas	—	0	1	1	3	—	0	0	—	—
Minnesota	—	0	1	—	12	—	0	0	—	—
Missouri	—	0	1	—	4	—	0	0	—	—
Nebraska**	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	17	20	164	—	0	1	—	1
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	13	16	127	—	0	1	—	1
Georgia	—	0	2	3	9	—	0	0	—	—
Maryland**	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	1	1	4	—	0	0	—	—
South Carolina**	—	0	1	—	12	—	0	0	—	—
Virginia**	—	0	3	—	10	—	0	0	—	—
West Virginia	—	0	0	—	2	—	0	0	—	—
E.S. Central	—	0	1	—	5	—	0	0	—	—
Alabama**	—	0	1	—	2	—	0	0	—	—
Kentucky	—	0	1	—	2	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	0	—	1	—	0	0	—	—
W.S. Central	—	0	4	4	21	—	0	0	—	1
Arkansas**	—	0	0	—	—	—	0	0	—	1
Louisiana	—	0	2	1	4	—	0	0	—	—
Oklahoma	—	0	1	—	4	—	0	0	—	—
Texas**	—	0	2	3	13	—	0	0	—	—
Mountain	—	0	2	3	13	—	0	0	—	—
Arizona	—	0	2	2	5	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	1	—	0	0	—	—
Montana**	—	0	1	—	3	—	0	0	—	—
Nevada**	—	0	1	—	3	—	0	0	—	—
New Mexico**	—	0	0	—	1	—	0	0	—	—
Utah	—	0	1	1	—	—	0	0	—	—
Wyoming**	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	7	12	31	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	5	2	22	—	0	0	—	—
Hawaii	—	0	4	5	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	5	8	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	21	530	387	6,870	—	0	17	4	158
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

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

§ Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.

¶ DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.

** Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis				Anaplasma phagocytophilum				Undetermined						
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	5	7	109	461	479	18	16	40	323	1,324	1	1	13	56	71
New England	—	0	2	3	3	1	2	15	84	65	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	6	—	25	—	0	0	—	—
Maine§	—	0	1	1	2	—	0	2	11	13	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	10	49	—	—	0	0	—	—
New Hampshire	—	0	1	1	1	1	0	4	9	10	—	0	1	1	2
Rhode Island§	—	0	1	1	—	—	0	6	12	16	—	0	0	—	—
Vermont§	—	0	0	—	—	—	0	1	3	1	—	0	0	—	—
Mid. Atlantic	3	1	7	42	68	16	4	27	166	174	—	0	2	7	8
New Jersey	—	0	1	—	44	—	0	3	—	54	—	0	0	—	1
New York (Upstate)	3	0	7	38	18	16	3	25	145	110	—	0	2	7	5
New York City	—	0	1	4	5	—	0	5	19	10	—	0	0	—	—
Pennsylvania	—	0	1	—	1	—	0	1	2	—	—	0	1	—	2
E.N. Central	—	0	3	18	32	1	1	13	9	414	—	0	4	22	39
Illinois	—	0	2	9	11	—	0	1	2	4	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	17	14
Michigan	—	0	2	4	1	—	0	1	—	2	—	0	1	1	—
Ohio	—	0	1	5	5	1	0	1	4	2	—	0	1	1	—
Wisconsin	—	0	1	—	15	—	0	13	3	406	—	0	1	1	22
W.N. Central	—	1	17	122	106	—	1	20	23	609	1	0	11	15	8
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	1	2	6	—	0	0	—	1	—	0	0	—	—
Minnesota	—	0	12	—	—	—	0	20	1	598	—	0	11	—	—
Missouri	—	0	17	119	99	—	0	6	21	10	1	0	7	14	8
Nebraska§	—	0	1	—	1	—	0	0	—	—	—	0	1	1	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	1	1	—	—	0	1	1	—	—	0	0	—	—
S. Atlantic	1	3	32	160	183	—	1	8	32	45	—	0	1	4	3
Delaware	—	0	2	14	15	—	0	1	1	4	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	—	0	3	13	7	—	0	1	3	2	—	0	0	—	—
Georgia	—	0	3	15	19	—	0	2	7	1	—	0	1	1	1
Maryland§	—	0	3	19	17	—	0	1	2	12	—	0	0	—	2
North Carolina	—	0	17	38	61	—	0	6	14	18	—	0	0	—	—
South Carolina§	—	0	1	—	4	—	0	1	—	—	—	0	0	—	—
Virginia§	1	1	12	61	58	—	0	2	5	8	—	0	1	2	—
West Virginia	—	0	1	—	2	—	0	0	—	—	—	0	1	1	—
E.S. Central	1	0	7	51	69	—	0	2	9	16	—	0	1	5	8
Alabama§	—	0	1	—	10	—	0	1	3	6	N	0	0	N	N
Kentucky	—	0	2	9	11	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	3	3	—	0	1	—	2	—	0	0	—	1
Tennessee§	1	0	5	39	45	—	0	1	6	8	—	0	1	5	6
W.S. Central	—	0	87	65	17	—	0	9	—	1	—	0	0	—	1
Arkansas§	—	0	10	31	2	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	82	33	11	—	0	7	—	1	—	0	0	—	—
Texas§	—	0	1	1	3	—	0	1	—	—	—	0	0	—	1
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	2	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	2	—
Colorado	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Idaho§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Montana§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Nevada§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
New Mexico§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	0	—	—	—	0	0	—	2
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	1	—	1	—	0	0	—	—	—	0	0	—	2
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	191	283	549	8,530	11,940	3,070	5,804	7,484	182,209	191,016	25	64	141	2,087	1,995
New England	8	25	50	719	1,045	104	100	206	3,272	3,375	—	4	12	134	118
Connecticut	—	4	12	104	186	51	43	150	1,403	1,545	—	1	6	33	25
Maine [§]	3	3	11	98	124	—	3	10	120	117	—	0	2	15	9
Massachusetts	—	12	23	343	440	45	49	80	1,436	1,419	—	2	6	62	60
New Hampshire	—	2	5	60	122	1	2	7	81	93	—	0	2	10	8
Rhode Island [§]	—	1	7	29	47	7	7	16	203	155	—	0	2	9	10
Vermont [§]	5	2	10	85	126	—	0	8	29	46	—	0	3	5	6
Mid. Atlantic	38	57	106	1,687	1,973	438	721	1,121	22,298	21,689	8	12	32	451	380
New Jersey	—	7	20	132	293	27	124	199	4,297	3,515	—	2	7	71	67
New York (Upstate)	32	20	72	606	652	119	114	271	3,542	3,283	2	3	18	122	100
New York City	—	17	28	508	563	50	235	497	6,204	7,431	—	3	6	92	62
Pennsylvania	6	16	27	441	465	242	257	364	8,255	7,460	6	4	11	166	151
E.N. Central	33	47	99	1,368	2,060	342	1,031	2,091	32,058	35,376	—	11	22	368	323
Illinois	—	9	31	232	481	7	269	369	7,671	9,695	—	3	10	111	111
Indiana	—	6	14	158	262	65	112	1,018	4,001	3,518	—	2	7	67	65
Michigan	4	10	25	281	426	169	235	490	7,596	8,819	—	1	4	41	24
Ohio	28	16	29	493	519	61	322	385	9,938	10,262	—	2	7	103	78
Wisconsin	1	8	35	204	372	40	95	127	2,852	3,082	—	1	5	46	45
W.N. Central	28	25	73	658	1,285	164	298	363	9,376	9,084	4	4	10	104	142
Iowa	7	5	12	164	187	4	38	57	1,175	1,082	—	0	0	—	1
Kansas	—	2	10	54	151	5	40	57	1,256	1,301	—	0	2	14	14
Minnesota	—	0	33	—	495	—	37	62	1,027	1,348	—	0	5	—	49
Missouri	12	8	26	253	238	141	145	181	4,756	4,258	2	1	5	56	57
Nebraska [§]	9	4	11	124	139	14	23	49	757	739	2	0	3	24	13
North Dakota	—	0	12	21	15	—	3	9	70	123	—	0	6	9	8
South Dakota	—	1	5	42	60	—	11	20	335	233	—	0	1	1	—
S. Atlantic	45	57	127	1,662	2,395	778	1,462	1,862	45,480	48,636	8	15	30	507	509
Delaware	—	1	5	18	22	10	17	48	522	626	—	0	2	3	5
District of Columbia	—	1	3	22	40	—	37	70	1,048	1,289	—	0	1	—	3
Florida	27	24	75	725	1,281	222	379	486	12,198	12,887	3	5	12	164	121
Georgia	10	14	51	498	476	163	315	874	9,947	9,621	—	3	7	99	117
Maryland [§]	5	4	10	149	182	—	118	246	3,186	4,376	4	1	4	56	42
North Carolina	N	0	0	N	N	168	266	468	9,507	9,564	1	2	8	53	87
South Carolina [§]	1	2	9	67	88	139	151	257	5,021	5,039	—	1	5	48	63
Virginia [§]	2	7	32	161	284	76	111	185	3,544	4,921	—	2	8	70	57
West Virginia	—	0	8	22	22	—	15	29	507	313	—	0	9	14	14
E.S. Central	—	4	11	105	115	315	495	1,007	16,055	15,872	—	3	11	130	121
Alabama [§]	—	4	11	105	115	99	161	410	5,416	4,839	—	1	4	40	21
Kentucky	N	0	0	N	N	110	69	712	2,685	2,598	—	0	4	18	24
Mississippi	N	0	0	N	N	—	118	197	3,431	3,913	—	0	3	12	9
Tennessee [§]	N	0	0	N	N	106	140	186	4,523	4,522	—	2	5	60	67
W.S. Central	3	5	17	138	244	678	906	1,319	28,298	30,859	3	2	26	89	94
Arkansas [§]	3	2	9	79	71	86	101	138	3,155	2,966	—	0	3	21	14
Louisiana	—	2	12	59	111	—	143	372	3,735	5,101	—	0	4	29	20
Oklahoma	—	0	0	—	62	189	61	254	1,978	2,666	3	1	19	38	53
Texas [§]	N	0	0	N	N	403	593	867	19,430	20,126	—	0	4	1	7
Mountain	13	26	58	741	1,095	82	191	253	6,212	6,089	1	5	12	183	218
Arizona	1	3	8	78	96	60	68	98	2,350	2,063	—	2	6	73	79
Colorado	7	12	23	367	453	19	45	86	1,333	1,707	—	1	5	43	64
Idaho [§]	3	4	9	89	133	—	2	14	75	70	1	0	2	14	12
Montana [§]	2	2	4	41	72	1	1	5	45	75	—	0	1	2	2
Nevada [§]	—	1	11	31	48	—	33	103	1,247	1,185	—	0	2	12	5
New Mexico [§]	—	1	6	46	65	—	27	98	988	744	—	1	4	26	26
Utah	—	3	13	73	198	2	4	9	151	220	—	0	3	12	25
Wyoming [§]	—	0	5	16	30	—	0	3	23	25	—	0	1	1	5
Pacific	23	48	128	1,452	1,728	169	618	791	19,160	20,036	1	3	10	121	90
Alaska	—	2	7	55	63	—	20	34	604	843	—	0	2	16	16
California	15	32	67	993	1,056	118	504	695	15,780	16,391	—	0	6	24	15
Hawaii	—	1	4	23	38	—	13	26	389	453	—	0	3	17	15
Oregon	1	7	20	190	302	11	23	40	791	641	1	2	6	61	39
Washington	7	8	57	191	269	40	57	86	1,596	1,708	—	0	2	3	5
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	2	—	0	17	6	55	—	0	0	—	—
Puerto Rico	—	1	7	25	55	—	6	14	209	183	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	5	52	95	—	0	0	—	—

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† Data for H. influenzae (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	13	22	74	655	996	11	52	167	1,425	2,042	10	17	39	598	507
New England	—	1	6	30	75	—	1	8	44	39	—	1	4	40	36
Connecticut	—	0	4	5	17	—	0	4	9	13	—	1	3	25	22
Maine†	—	0	1	1	7	—	0	2	5	11	—	0	2	6	2
Massachusetts	—	0	2	16	42	—	0	6	29	8	—	0	2	5	12
New Hampshire	—	0	1	—	—	—	0	1	1	5	N	0	0	N	N
Rhode Island†	—	0	1	3	9	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	2	5	—	—	0	0	—	2	—	0	1	4	—
Mid. Atlantic	1	5	12	123	165	2	5	12	167	196	—	1	6	49	69
New Jersey	—	1	4	18	48	—	1	4	32	52	—	0	4	—	15
New York (Upstate)	—	1	4	28	35	1	1	9	29	34	—	0	4	28	33
New York City	—	1	6	40	48	—	1	5	49	59	—	0	1	—	2
Pennsylvania	1	1	3	37	34	1	2	4	57	51	—	0	2	21	19
E.N. Central	1	4	9	114	119	1	5	36	204	333	2	2	12	115	60
Illinois	—	1	3	23	32	—	2	6	46	86	—	0	1	3	—
Indiana	—	0	3	11	11	—	1	3	25	49	—	0	5	42	22
Michigan	—	1	6	49	43	1	1	6	54	87	2	1	7	65	26
Ohio	1	1	5	26	19	—	1	30	64	76	—	0	1	4	7
Wisconsin	—	0	2	5	14	—	0	3	15	35	—	0	1	1	5
W.N. Central	—	1	25	22	48	—	2	16	80	74	—	0	6	3	11
Iowa	—	0	3	3	6	—	0	1	7	11	—	0	0	—	—
Kansas	—	0	2	3	10	—	0	2	8	5	—	0	1	2	—
Minnesota	—	0	22	2	13	—	0	15	2	6	—	0	6	—	6
Missouri	—	0	1	9	14	—	2	5	51	42	—	0	1	—	3
Nebraska†	—	0	4	3	4	—	0	3	11	9	—	0	1	1	2
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	1	—	0	1	1	1	—	0	0	—	—
S. Atlantic	7	5	13	140	223	5	12	33	368	556	4	4	11	148	113
Delaware	—	0	1	2	6	—	0	1	—	19	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	1	2	6	42	85	2	4	11	126	185	2	1	5	33	32
Georgia	—	1	4	31	25	3	2	8	57	116	1	1	3	25	15
Maryland†	3	0	3	18	14	—	1	4	32	40	1	0	2	25	16
North Carolina	1	0	3	15	37	—	2	12	71	58	—	1	7	39	26
South Carolina†	2	0	2	9	21	—	1	4	22	39	—	0	1	1	—
Virginia†	—	1	4	16	32	—	1	7	41	60	—	0	2	9	8
West Virginia	—	0	5	7	2	—	0	18	19	36	—	0	6	16	14
E.S. Central	—	0	6	29	26	1	8	14	262	223	3	3	8	102	91
Alabama†	—	0	2	1	5	—	2	4	63	44	—	0	1	7	3
Kentucky	—	0	6	7	11	1	2	6	75	76	2	1	6	43	63
Mississippi	—	0	1	5	1	—	1	3	28	21	U	0	0	U	U
Tennessee†	—	0	5	16	9	—	3	7	96	82	1	1	5	52	25
W.S. Central	—	3	15	64	78	1	7	67	170	339	1	2	11	57	44
Arkansas†	—	0	1	—	—	—	1	4	25	40	—	0	0	—	1
Louisiana	—	0	1	2	5	—	1	4	22	40	—	0	2	5	1
Oklahoma	—	0	4	3	1	—	1	16	41	58	1	1	10	32	14
Texas†	—	2	11	59	72	1	4	45	82	201	—	0	3	20	28
Mountain	3	2	5	48	108	—	2	5	51	91	—	1	4	37	40
Arizona	1	0	2	13	47	—	0	3	12	16	U	0	0	U	U
Colorado	1	0	2	17	27	—	0	3	15	30	—	0	3	12	9
Idaho†	1	0	1	6	6	—	0	1	2	5	—	0	2	7	8
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	3	1
Nevada†	—	0	3	5	11	—	0	3	14	29	—	0	1	5	4
New Mexico†	—	0	1	3	3	—	0	2	5	3	—	0	1	7	10
Utah	—	0	2	—	7	—	0	1	3	7	—	0	2	1	8
Wyoming†	—	0	1	2	3	—	0	1	—	1	—	0	1	2	—
Pacific	1	3	15	85	154	1	3	25	79	191	—	1	12	47	43
Alaska	—	0	1	2	1	—	0	1	4	2	U	0	1	U	U
California	1	2	15	58	120	—	2	22	31	130	—	0	4	19	18
Hawaii	—	0	2	6	5	—	0	1	5	3	U	0	0	U	U
Oregon	—	0	2	5	14	1	0	4	24	29	—	0	3	12	10
Washington	—	0	4	14	14	—	1	4	15	27	—	0	5	16	15
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	4	—	0	8	28	56	—	0	8	10	44
Puerto Rico	—	0	2	4	11	—	0	3	6	15	N	0	0	N	N
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 August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	47	48	128	1,582	1,951	549	361	1,414	16,376	21,919	17	27	114	754	1,024
New England	—	4	16	99	148	12	75	302	2,354	6,579	—	1	20	45	73
Connecticut	—	1	6	17	23	—	28	123	763	2,287	—	0	20	1	2
Maine†	—	0	3	6	7	3	11	62	316	350	—	0	1	2	5
Massachusetts	—	2	9	58	81	—	18	82	494	2,633	—	1	5	33	56
New Hampshire	—	0	5	7	10	2	12	49	381	959	—	0	2	2	2
Rhode Island†	—	0	4	5	20	6	1	35	97	103	—	0	4	2	6
Vermont†	—	0	1	6	7	1	5	54	303	247	—	0	1	5	2
Mid. Atlantic	12	13	53	406	469	482	149	1,080	10,881	7,683	1	8	22	157	310
New Jersey	—	2	18	48	72	119	50	502	4,337	2,754	—	0	6	8	72
New York (Upstate)	5	5	19	144	146	215	35	214	2,076	1,645	—	1	6	25	45
New York City	—	2	17	66	83	—	2	26	32	495	—	3	13	89	154
Pennsylvania	7	5	19	148	168	148	61	426	4,436	2,789	1	1	4	35	39
E.N. Central	12	10	49	389	449	2	23	88	845	3,139	—	3	7	89	108
Illinois	—	1	6	40	113	—	1	18	79	114	—	1	6	34	41
Indiana	1	1	5	53	39	—	0	10	51	69	—	0	2	5	8
Michigan	2	2	13	86	113	2	1	8	49	77	—	0	4	15	20
Ohio	9	4	34	209	142	—	1	9	36	22	—	1	4	30	31
Wisconsin	—	0	5	1	42	—	19	70	630	2,857	—	0	2	5	8
W.N. Central	1	2	9	50	77	—	4	61	68	1,766	—	1	45	18	43
Iowa	—	0	2	6	11	—	0	9	54	71	—	0	3	12	8
Kansas	—	0	2	4	7	—	0	2	6	10	—	0	2	4	7
Minnesota	—	0	8	—	23	—	0	55	—	1,665	—	0	45	—	3
Missouri	1	1	5	35	23	—	0	1	—	3	—	0	3	—	11
Nebraska†	—	0	1	2	6	—	0	2	6	8	—	0	1	2	12
North Dakota	—	0	1	1	3	—	0	10	—	8	—	0	1	—	—
South Dakota	—	0	2	2	4	—	0	1	2	1	—	0	1	—	2
S. Atlantic	15	9	22	254	334	48	57	157	2,034	2,507	11	8	20	256	268
Delaware	—	0	1	5	11	3	10	43	549	491	—	0	1	3	2
District of Columbia	—	0	3	8	13	—	0	5	11	25	—	0	1	5	10
Florida	3	3	9	89	106	4	2	9	69	46	4	2	7	64	79
Georgia	2	1	4	22	39	2	0	2	13	9	2	1	7	54	44
Maryland†	2	1	6	40	74	14	18	103	663	1,099	4	1	8	56	55
North Carolina	7	1	6	43	36	—	0	7	34	56	—	0	6	25	31
South Carolina†	—	0	2	9	8	—	0	3	16	25	—	0	1	1	3
Virginia†	1	1	9	33	38	25	19	76	632	679	1	1	8	48	43
West Virginia	—	0	2	5	9	—	0	14	47	77	—	0	1	—	1
E.S. Central	2	2	10	90	93	2	0	3	25	35	1	0	2	18	22
Alabama†	—	0	2	10	11	—	0	2	7	1	—	0	1	3	5
Kentucky	—	0	4	21	19	—	0	1	—	4	—	0	1	6	5
Mississippi	—	0	3	10	10	—	0	0	—	—	—	0	1	1	2
Tennessee†	2	1	8	49	53	2	0	3	18	30	1	0	2	8	10
W.S. Central	4	3	13	72	95	—	1	29	24	68	1	1	18	23	61
Arkansas†	—	0	2	5	14	—	0	0	—	—	1	0	1	3	4
Louisiana	—	0	3	13	5	—	0	0	—	3	—	0	1	—	2
Oklahoma	—	0	3	7	9	—	0	0	—	—	—	0	1	3	3
Texas†	4	2	11	47	67	—	1	29	24	65	—	1	17	17	52
Mountain	—	2	6	58	119	1	0	3	17	19	1	1	4	43	42
Arizona	—	1	3	20	40	—	0	1	5	2	—	0	4	16	19
Colorado	—	0	2	4	23	—	0	1	1	1	1	0	3	16	13
Idaho†	—	0	1	4	3	—	0	2	2	8	—	0	1	2	1
Montana†	—	0	1	—	4	1	0	1	3	1	—	0	1	—	2
Nevada†	—	0	2	11	17	—	0	1	3	—	—	0	2	6	3
New Mexico†	—	0	1	5	6	—	0	1	1	4	—	0	1	2	1
Utah	—	0	2	12	19	—	0	1	1	3	—	0	1	1	3
Wyoming†	—	0	2	2	7	—	0	1	1	—	—	0	0	—	—
Pacific	1	5	21	164	167	2	4	11	128	123	2	4	10	105	97
Alaska	—	0	0	—	2	—	0	1	4	5	—	0	2	4	3
California	—	4	15	146	141	2	3	9	99	74	1	2	10	74	63
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	4	2
Oregon	1	0	2	6	9	—	0	3	19	38	1	0	4	11	8
Washington	—	0	6	11	14	—	0	4	6	6	—	0	5	12	21
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	1	1	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	1	—	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	—	14	53	469	536	2	8	47	176	2,328	115	315	2,925	8,231	12,311
New England	—	0	3	23	14	—	0	1	4	23	1	9	24	263	296
Connecticut	—	0	1	3	2	—	0	0	—	11	—	1	8	22	61
Maine [§]	—	0	1	3	3	—	0	1	—	1	—	2	8	81	31
Massachusetts	—	0	2	11	4	—	0	1	3	8	—	4	13	99	169
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	7	40	8
Rhode Island [§]	—	0	1	—	—	—	0	1	1	—	1	0	4	12	23
Vermont [§]	—	0	3	5	5	—	0	0	—	—	—	0	4	9	4
Mid. Atlantic	—	1	6	53	53	—	1	23	23	2,029	42	35	125	910	760
New Jersey	—	0	1	3	16	—	0	2	8	331	—	3	10	75	100
New York (Upstate)	—	0	4	18	9	—	0	3	5	650	26	12	81	364	280
New York City	—	0	3	19	13	—	0	22	9	1,029	—	0	19	38	43
Pennsylvania	—	0	2	13	15	—	0	16	1	19	16	15	70	433	337
E.N. Central	—	2	7	59	89	—	1	7	45	42	18	76	198	1,699	2,829
Illinois	—	0	3	17	18	—	1	3	28	13	—	16	50	417	498
Indiana	—	0	2	8	21	—	0	1	—	3	—	6	26	119	414
Michigan	—	0	4	5	14	—	0	1	6	16	2	23	57	445	787
Ohio	—	1	2	20	21	—	0	5	9	9	16	19	80	503	905
Wisconsin	—	0	2	9	15	—	0	1	2	1	—	10	26	215	225
W.N. Central	—	1	4	32	37	1	0	4	25	78	11	27	501	746	1,113
Iowa	—	0	1	7	8	—	0	1	4	37	—	6	36	124	330
Kansas	—	0	1	2	5	—	0	1	4	4	—	2	10	65	112
Minnesota	—	0	2	—	3	—	0	4	1	4	7	0	469	292	251
Missouri	—	0	2	12	15	1	0	3	8	8	4	6	43	190	260
Nebraska [§]	—	0	2	8	5	—	0	1	4	23	—	2	13	38	103
North Dakota	—	0	1	1	1	—	0	3	4	—	—	0	30	30	30
South Dakota	—	0	1	2	—	—	0	0	—	2	—	0	3	7	27
S. Atlantic	—	2	8	94	97	1	0	4	16	41	13	32	106	857	1,046
Delaware	—	0	1	1	—	—	0	0	—	—	—	0	5	21	8
District of Columbia	—	0	1	1	—	—	0	0	—	3	—	0	2	3	4
Florida	—	1	5	36	44	1	0	2	5	8	6	6	17	205	193
Georgia	—	0	1	11	8	—	0	2	4	2	—	3	13	109	158
Maryland [§]	—	0	1	9	5	—	0	1	1	8	1	2	6	47	79
North Carolina	—	0	3	13	12	—	0	2	4	5	—	3	35	114	212
South Carolina [§]	—	0	1	8	9	—	0	1	—	3	2	4	25	92	240
Virginia [§]	—	0	2	10	17	—	0	2	2	10	4	7	41	214	126
West Virginia	—	0	3	5	2	—	0	0	—	2	—	0	41	52	26
E.S. Central	—	1	3	20	27	—	0	1	3	9	1	9	35	223	503
Alabama [§]	—	0	2	9	5	—	0	1	1	6	—	3	11	89	145
Kentucky	—	0	2	2	11	—	0	0	—	1	—	2	16	48	164
Mississippi	—	0	1	2	3	—	0	1	2	—	—	1	10	15	51
Tennessee [§]	—	0	2	7	8	—	0	1	—	2	1	3	11	71	143
W.S. Central	—	1	12	38	58	—	1	15	45	58	18	24	297	586	1,882
Arkansas [§]	—	0	1	8	5	—	0	1	1	5	—	2	16	36	148
Louisiana	—	0	2	7	12	—	0	2	—	5	1	0	3	14	25
Oklahoma	—	0	2	7	14	—	0	1	1	—	—	0	92	23	26
Texas [§]	—	0	10	16	27	—	1	14	43	48	17	20	187	513	1,683
Mountain	—	1	4	34	43	—	0	4	5	14	6	44	100	1,174	847
Arizona	—	0	1	10	11	—	0	1	—	5	1	14	29	484	261
Colorado	—	0	1	8	15	—	0	1	3	7	2	9	63	274	125
Idaho [§]	—	0	1	4	5	—	0	1	—	—	3	2	15	88	112
Montana [§]	—	0	2	3	1	—	0	0	—	—	—	2	16	67	33
Nevada [§]	—	0	1	1	7	—	0	1	—	—	—	0	5	16	19
New Mexico [§]	—	0	1	1	3	—	0	2	2	—	—	3	11	76	71
Utah	—	0	2	7	1	—	0	1	—	2	—	6	16	164	219
Wyoming [§]	—	0	1	—	—	—	0	1	—	—	—	0	2	5	7
Pacific	—	3	26	116	118	—	0	3	10	34	5	76	1,710	1,773	3,035
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	6	18	25
California	—	2	17	82	75	—	0	3	3	22	1	57	1,569	1,280	2,567
Hawaii	—	0	1	4	1	—	0	1	2	3	—	1	9	60	54
Oregon	—	0	3	16	24	—	0	1	4	2	1	5	11	170	201
Washington	—	0	8	12	17	—	0	1	—	6	3	11	131	245	188
Territories	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
American Samoa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	3	9	12	422	—	0	14	31	2
Puerto Rico	—	0	1	—	1	—	0	1	1	1	—	0	1	2	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	30	51	172	1,452	2,905	773	909	1,812	24,993	30,053	74	98	264	2,713	3,136
New England	4	3	12	86	201	3	29	322	1,191	1,729	1	2	33	126	155
Connecticut	—	0	8	—	93	—	0	301	301	491	—	0	33	33	60
Maine [§]	1	1	3	40	41	2	2	8	84	75	1	0	3	20	11
Massachusetts	—	0	0	—	—	—	18	51	554	858	—	1	10	44	57
New Hampshire	3	0	2	15	13	—	3	8	104	128	—	0	3	17	17
Rhode Island [§]	—	0	4	15	20	—	1	62	111	132	—	0	2	4	2
Vermont [§]	—	1	3	16	34	1	1	5	37	45	—	0	3	8	8
Mid. Atlantic	11	13	31	396	736	93	89	207	2,813	3,650	15	9	21	320	346
New Jersey	—	0	0	—	—	—	13	43	321	767	—	1	6	36	78
New York (Upstate)	11	7	20	220	351	66	25	65	811	845	12	4	12	125	114
New York City	—	0	4	7	133	—	20	53	625	821	—	1	6	51	44
Pennsylvania	—	7	17	169	252	27	32	73	1,056	1,217	3	3	13	108	110
E.N. Central	5	2	27	89	177	34	88	184	2,564	3,880	13	12	36	389	550
Illinois	1	1	11	26	89	—	28	57	855	1,327	—	2	7	62	110
Indiana	—	0	3	6	—	—	9	23	252	510	—	2	7	57	92
Michigan	2	1	5	31	52	3	13	49	445	596	3	2	8	90	103
Ohio	2	0	12	26	36	31	21	48	743	872	10	2	10	106	96
Wisconsin	N	0	0	N	N	—	10	50	269	575	—	2	13	74	149
W.N. Central	—	2	40	49	183	45	47	121	1,355	1,858	7	13	36	428	591
Iowa	—	0	3	—	19	4	9	22	278	345	—	2	11	112	121
Kansas	—	1	4	21	44	8	7	19	231	272	—	1	8	59	47
Minnesota	—	0	34	—	19	—	0	30	—	496	—	0	11	—	192
Missouri	—	0	4	—	54	20	16	42	568	476	6	4	14	153	161
Nebraska [§]	—	0	3	20	37	13	4	10	150	150	1	2	7	71	47
North Dakota	—	0	6	8	10	—	0	15	22	24	—	0	10	6	4
South Dakota	—	0	0	—	—	—	3	17	106	95	—	1	4	27	19
S. Atlantic	10	18	73	677	758	332	276	689	7,488	7,687	18	14	29	395	414
Delaware	—	0	0	—	—	3	3	11	96	95	1	0	2	10	4
District of Columbia	—	0	0	—	—	1	1	7	36	72	—	0	1	3	8
Florida	—	0	64	64	121	148	107	226	2,984	3,189	9	3	15	86	125
Georgia	—	0	0	—	—	42	41	142	1,295	1,494	—	2	7	70	64
Maryland [§]	—	6	14	163	239	32	18	51	534	646	1	1	8	27	57
North Carolina	—	0	0	—	—	42	31	250	1,094	740	3	2	11	73	37
South Carolina [§]	N	0	0	N	N	37	30	99	781	737	1	0	4	12	16
Virginia [§]	10	11	27	395	348	27	21	68	632	594	3	3	9	111	89
West Virginia	—	0	30	55	50	—	0	14	36	120	—	0	4	3	14
E.S. Central	—	2	7	75	130	43	60	175	1,952	2,015	6	5	22	183	163
Alabama [§]	—	1	7	51	55	—	17	57	555	530	—	1	15	65	35
Kentucky	—	0	2	10	14	2	8	32	216	321	—	1	5	28	37
Mississippi	—	0	1	1	—	9	21	65	659	607	1	0	12	17	11
Tennessee [§]	—	0	4	13	61	32	16	53	522	557	5	1	11	73	80
W.S. Central	—	4	54	53	557	140	133	515	3,210	3,559	6	7	151	206	175
Arkansas [§]	—	0	10	41	22	25	14	43	420	362	2	1	3	27	37
Louisiana	—	0	0	—	—	2	15	52	427	778	—	0	2	6	12
Oklahoma	—	0	30	12	38	32	11	95	350	327	2	1	55	34	14
Texas [§]	—	0	30	—	497	81	87	381	2,013	2,092	2	6	95	139	112
Mountain	—	0	5	14	41	29	47	95	1,440	1,788	4	11	33	325	386
Arizona	N	0	0	N	N	1	14	40	425	574	—	2	14	55	39
Colorado	—	0	0	—	—	23	10	17	350	379	4	3	14	80	144
Idaho [§]	—	0	2	1	5	1	3	8	99	100	—	3	7	61	43
Montana [§]	N	0	0	N	N	3	2	10	89	67	—	1	5	25	28
Nevada [§]	—	0	2	1	3	—	3	21	86	198	—	0	7	25	22
New Mexico [§]	—	0	1	6	9	1	6	19	164	197	—	1	6	25	31
Utah	—	0	3	6	7	—	6	15	188	232	—	1	6	43	63
Wyoming [§]	—	0	4	—	17	—	1	8	39	41	—	0	3	11	16
Pacific	—	1	15	13	122	54	104	288	2,980	3,887	4	13	46	341	356
Alaska	—	0	2	9	11	—	1	6	37	56	—	0	1	1	1
California	—	0	10	—	99	44	75	232	2,277	2,807	1	8	36	223	149
Hawaii	—	0	0	—	—	—	6	14	201	215	—	0	2	5	24
Oregon	—	0	2	4	12	1	6	20	148	373	—	2	11	42	60
Washington	—	0	14	—	—	9	13	42	317	436	3	2	16	70	122
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	8	—	0	0	—	—
Puerto Rico	—	0	6	23	31	—	6	25	106	360	—	0	0	—	—
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 August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Spotted Fever Rickettsiosis (including RMSF) [†]														
	Shigellosis				Confirmed						Probable				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	148	232	742	6,432	8,754	4	2	13	104	96	22	24	245	938	992
New England	—	3	27	128	251	—	0	0	—	—	—	0	1	3	2
Connecticut	—	0	26	26	69	—	0	0	—	—	—	0	0	—	—
Maine [§]	—	0	4	18	4	—	0	0	—	—	—	0	1	—	1
Massachusetts	—	2	13	76	159	—	0	0	—	—	—	0	1	1	—
New Hampshire	—	0	2	1	7	—	0	0	—	—	—	0	1	1	1
Rhode Island [§]	—	0	4	4	11	—	0	0	—	—	—	0	1	1	—
Vermont [§]	—	0	1	3	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	9	14	74	396	1,170	—	0	2	10	2	—	1	5	21	70
New Jersey	—	3	10	51	275	—	0	0	—	1	—	0	3	—	42
New York (Upstate)	9	3	18	142	126	—	0	1	2	1	—	0	3	5	9
New York City	—	4	14	137	205	—	0	0	—	—	—	0	2	7	9
Pennsylvania	—	3	56	66	564	—	0	2	8	—	—	0	3	9	10
E.N. Central	7	16	37	458	1,175	—	0	2	4	2	—	1	5	47	60
Illinois	—	5	18	107	690	—	0	1	—	1	—	0	2	19	27
Indiana [§]	—	1	4	33	42	—	0	0	—	1	—	0	4	20	17
Michigan	—	3	9	105	170	—	0	1	1	—	—	0	1	—	1
Ohio	7	5	27	213	218	—	0	2	3	—	—	0	2	8	10
Wisconsin	—	0	4	—	55	—	0	0	—	—	—	0	1	—	5
W.N. Central	4	10	38	210	1,658	—	0	6	18	9	1	4	29	222	189
Iowa	—	0	4	11	36	—	0	0	—	—	—	0	2	3	5
Kansas [§]	1	2	12	37	185	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	4	—	34	—	0	0	—	—	—	0	2	—	—
Missouri	3	6	18	151	1,372	—	0	3	13	7	1	4	29	217	181
Nebraska [§]	—	0	10	7	25	—	0	3	4	2	—	0	1	2	2
North Dakota	—	0	0	—	—	—	0	1	1	—	—	0	0	—	1
South Dakota	—	0	2	4	6	—	0	0	—	—	—	0	0	—	—
S. Atlantic	57	68	133	2,341	1,435	4	1	6	58	61	10	6	50	254	298
Delaware [§]	—	0	1	2	35	—	0	1	1	1	1	0	4	15	15
District of Columbia	—	0	2	10	23	—	0	1	1	—	—	0	0	—	—
Florida [§]	48	38	98	1,691	610	—	0	1	3	2	1	0	2	6	7
Georgia	2	12	26	339	459	4	0	5	36	45	—	0	0	—	—
Maryland [§]	4	2	6	55	85	—	0	1	2	—	—	0	3	16	33
North Carolina	1	4	36	145	101	—	0	4	8	10	—	1	41	123	145
South Carolina [§]	—	1	4	34	43	—	0	1	4	—	—	0	2	11	9
Virginia [§]	2	2	8	61	78	—	0	1	3	3	8	2	7	80	89
West Virginia	—	0	66	4	1	—	0	0	—	—	—	0	1	3	—
E.S. Central	5	13	29	357	472	—	0	3	4	15	4	5	26	193	289
Alabama [§]	—	4	15	116	103	—	0	1	—	4	—	1	6	28	57
Kentucky	—	1	6	34	178	—	0	0	—	6	—	0	0	—	—
Mississippi	2	2	9	95	31	—	0	0	—	1	—	0	4	9	16
Tennessee [§]	3	4	14	112	160	—	0	2	4	4	4	4	19	156	216
W.S. Central	52	61	503	1,540	1,529	—	0	8	1	1	7	2	235	168	75
Arkansas [§]	2	2	7	46	33	—	0	2	1	—	4	0	39	154	44
Louisiana	—	5	14	133	167	—	0	0	—	—	—	0	1	2	2
Oklahoma	2	2	161	61	177	—	0	5	—	—	3	0	202	9	15
Texas [§]	48	50	338	1,300	1,152	—	0	1	—	1	—	0	5	3	14
Mountain	3	16	32	425	451	—	0	5	9	2	—	0	6	30	8
Arizona	1	6	19	138	245	—	0	4	9	—	—	0	6	19	—
Colorado [§]	1	2	7	54	55	—	0	1	—	—	—	0	1	2	—
Idaho [§]	—	0	3	13	17	—	0	0	—	—	—	0	1	1	3
Montana [§]	1	1	15	112	6	—	0	0	—	2	—	0	1	1	1
Nevada [§]	—	0	6	13	22	—	0	0	—	—	—	0	0	—	—
New Mexico [§]	—	3	9	67	78	—	0	0	—	—	—	0	1	1	1
Utah	—	1	4	26	28	—	0	0	—	—	—	0	1	1	3
Wyoming [§]	—	0	1	2	—	—	0	0	—	—	—	0	1	5	—
Pacific	11	21	63	577	613	—	0	2	—	4	—	0	0	—	1
Alaska	—	0	2	3	—	N	0	0	N	N	N	0	0	N	N
California	10	17	59	460	476	—	0	2	—	4	—	0	0	—	—
Hawaii	—	1	3	36	34	N	0	0	N	N	N	0	0	N	N
Oregon	1	1	4	30	39	—	0	0	—	—	—	0	0	—	1
Washington	—	1	8	48	64	—	0	1	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	1	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	5	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	4	N	0	0	N	N	N	0	0	N	N
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 August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	<i>Streptococcus pneumoniae</i> , [†] invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	55	298	937	9,290	10,368	6	23	101	686	1,274	76	256	363	7,572	8,533
New England	—	11	79	380	590	—	1	5	28	76	3	8	18	232	298
Connecticut	—	0	49	94	246	—	0	3	6	22	2	1	8	34	56
Maine [§]	—	2	13	91	83	—	0	1	3	6	—	0	3	10	15
Massachusetts	—	0	3	21	53	—	0	3	8	37	—	5	11	142	188
New Hampshire	—	2	8	70	76	—	0	1	5	4	—	0	3	13	13
Rhode Island [§]	—	2	8	53	73	—	0	1	1	4	1	0	7	28	24
Vermont [§]	—	1	6	51	59	—	0	2	5	3	—	0	2	5	2
Mid. Atlantic	2	33	81	949	1,069	1	3	27	83	163	12	30	46	895	1,088
New Jersey	—	13	35	452	479	—	1	4	28	40	—	5	12	132	150
New York (Upstate)	2	2	10	59	105	1	1	9	33	81	3	3	20	117	88
New York City	—	14	42	438	485	—	0	14	22	42	1	15	31	426	613
Pennsylvania	N	0	0	N	N	N	0	0	N	N	8	7	13	220	237
E.N. Central	4	66	113	2,063	2,110	—	4	10	115	190	3	31	53	923	1,241
Illinois	N	0	0	N	N	N	0	0	N	N	2	13	23	363	593
Indiana	—	15	32	452	473	—	0	4	20	38	1	3	8	105	119
Michigan	1	15	29	461	484	—	1	4	25	58	—	5	10	152	168
Ohio	3	26	45	849	823	—	2	7	58	67	—	9	21	271	329
Wisconsin	—	9	24	301	330	—	0	3	12	27	—	1	4	32	32
W.N. Central	1	4	35	96	544	1	0	5	7	74	1	7	18	190	196
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	2	12	15
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	14	11
Minnesota	—	0	24	—	410	—	0	5	—	60	—	3	10	80	72
Missouri	N	0	0	N	N	N	0	0	N	N	1	2	9	78	92
Nebraska [§]	1	2	9	78	91	1	0	2	7	12	—	0	2	5	5
North Dakota	—	0	18	18	43	—	0	1	—	2	—	0	1	1	—
South Dakota	N	0	0	N	N	N	0	0	N	N	—	0	1	—	1
S. Atlantic	21	72	170	2,613	2,809	2	7	22	195	353	28	63	178	1,971	1,954
Delaware	—	1	6	35	24	—	0	1	—	—	—	0	4	13	4
District of Columbia	—	1	3	28	53	—	0	1	4	7	—	3	8	106	94
Florida	13	23	68	948	1,047	1	3	13	87	142	7	23	37	712	710
Georgia	7	22	54	678	888	—	2	7	46	108	12	12	130	379	411
Maryland [§]	1	10	32	385	356	1	1	4	26	40	—	8	17	263	184
North Carolina	N	0	0	N	N	N	0	0	N	N	6	7	19	228	273
South Carolina [§]	—	8	25	314	354	—	1	3	19	40	3	3	10	134	90
Virginia [§]	N	0	0	N	N	N	0	0	N	N	—	4	16	134	184
West Virginia	—	0	48	225	87	—	0	6	13	16	—	0	2	2	4
E.S. Central	7	19	36	623	708	—	1	4	38	68	6	15	34	439	556
Alabama [§]	N	0	0	N	N	N	0	0	N	N	3	4	11	118	160
Kentucky	N	0	0	N	N	N	0	0	N	N	2	2	16	73	83
Mississippi	N	0	0	N	N	N	0	0	N	N	—	3	16	93	141
Tennessee [§]	7	19	36	623	708	—	1	4	38	68	1	5	11	155	172
W.S. Central	9	31	368	1,253	1,261	1	4	30	119	168	19	34	71	1,034	1,315
Arkansas [§]	1	3	26	156	120	—	0	3	12	12	4	3	10	124	151
Louisiana	—	3	11	109	69	—	0	2	9	17	—	6	36	190	307
Oklahoma	N	0	0	N	N	N	0	0	N	N	1	1	6	34	59
Texas [§]	8	26	333	988	1,072	1	3	27	98	139	14	23	33	686	798
Mountain	11	32	72	1,207	1,204	1	3	8	92	166	—	12	23	344	370
Arizona	4	12	45	576	587	1	1	5	43	77	—	4	8	141	144
Colorado	6	11	23	371	357	—	1	4	26	48	—	2	8	70	79
Idaho [§]	N	0	0	N	N	N	0	0	N	N	—	0	2	5	2
Montana [§]	N	0	0	N	N	N	0	0	N	N	—	0	1	4	3
Nevada [§]	N	0	0	N	N	N	0	0	N	N	—	3	9	82	65
New Mexico [§]	1	3	13	167	113	—	0	2	11	14	—	1	4	36	29
Utah	—	3	8	74	136	—	0	3	12	24	—	0	4	6	48
Wyoming [§]	—	0	15	19	11	—	0	1	—	3	—	0	0	—	—
Pacific	—	3	11	106	73	—	0	2	9	16	4	50	66	1,544	1,515
Alaska	—	2	11	105	73	—	0	2	9	16	—	0	1	1	3
California	N	0	0	N	N	N	0	0	N	N	2	41	57	1,290	1,287
Hawaii	—	0	3	1	—	—	0	0	—	—	—	0	5	8	27
Oregon	N	0	0	N	N	N	0	0	N	N	—	2	6	61	43
Washington	N	0	0	N	N	N	0	0	N	N	2	5	13	184	155
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	4	13	142	148
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 reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.[†] Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 20, 2011, and August 21, 2010 (33rd week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	58	273	367	7,746	10,076	—	1	71	47	245	—	0	53	30	216
New England	—	22	46	646	709	—	0	3	—	4	—	0	1	—	3
Connecticut	—	5	16	149	216	—	0	2	—	2	—	0	1	—	3
Maine¶	—	5	16	135	127	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	6	18	260	189	—	0	2	—	2	—	0	1	—	—
New Hampshire	—	0	9	9	86	—	0	1	—	—	—	0	0	—	—
Rhode Island¶	—	1	6	28	21	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	2	10	65	70	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	12	35	71	1,304	1,110	—	0	19	—	56	—	0	13	2	30
New Jersey	10	11	54	708	399	—	0	3	—	6	—	0	6	1	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	32	—	0	7	1	22
New York City	—	0	0	—	—	—	0	7	—	12	—	0	2	—	6
Pennsylvania	2	19	41	596	711	—	0	3	—	6	—	0	3	—	2
E.N. Central	21	68	118	1,805	3,296	—	0	15	2	12	—	0	7	1	9
Illinois	1	17	31	458	836	—	0	10	2	4	—	0	4	—	2
Indiana¶	6	4	18	146	246	—	0	2	—	—	—	0	2	—	4
Michigan	6	20	38	599	988	—	0	6	—	7	—	0	1	—	1
Ohio	8	20	58	601	876	—	0	1	—	1	—	0	1	1	1
Wisconsin	—	0	22	1	350	—	0	0	—	—	—	0	1	—	1
W.N. Central	1	11	42	229	544	—	0	7	1	17	—	0	11	4	45
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	1
Kansas¶	—	4	15	75	230	—	0	1	—	2	—	0	3	—	10
Minnesota	—	0	0	—	—	—	0	1	—	3	—	0	3	—	—
Missouri	—	5	24	104	257	—	0	1	—	2	—	0	1	1	—
Nebraska¶	—	0	5	3	7	—	0	3	—	6	—	0	7	1	14
North Dakota	—	0	10	25	29	—	0	2	—	2	—	0	2	2	7
South Dakota	1	1	7	22	21	—	0	2	1	2	—	0	2	—	13
S. Atlantic	9	36	64	1,176	1,465	—	0	6	10	14	—	0	4	2	9
Delaware¶	—	0	3	6	23	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	12	16	—	0	1	—	1	—	0	1	—	1
Florida¶	9	15	38	590	708	—	0	4	8	3	—	0	1	—	1
Georgia	N	0	0	N	N	—	0	1	—	3	—	0	3	1	5
Maryland¶	N	0	0	N	N	—	0	3	1	5	—	0	2	1	2
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina¶	—	0	9	12	75	—	0	1	—	—	—	0	0	—	—
Virginia¶	—	8	25	277	355	—	0	1	1	2	—	0	1	—	—
West Virginia	—	8	32	279	288	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	5	15	173	195	—	0	3	8	3	—	0	3	7	5
Alabama¶	—	5	14	163	188	—	0	0	—	1	—	0	0	—	2
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	3	10	7	—	0	3	8	2	—	0	2	7	3
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	13	43	258	1,548	1,952	—	0	16	4	37	—	0	3	4	12
Arkansas¶	—	3	17	131	141	—	0	2	—	3	—	0	1	—	—
Louisiana	—	2	6	51	50	—	0	3	—	8	—	0	1	2	5
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas¶	13	38	247	1,366	1,761	—	0	15	4	26	—	0	2	2	7
Mountain	2	19	65	789	727	—	0	18	13	69	—	0	15	7	75
Arizona	1	3	50	372	—	—	0	13	12	55	—	0	5	4	36
Colorado¶	—	5	31	155	265	—	0	5	—	10	—	0	11	2	32
Idaho¶	N	0	0	N	N	—	0	0	—	—	—	0	0	—	1
Montana¶	—	2	28	104	154	—	0	0	—	—	—	0	0	—	—
Nevada¶	N	0	0	N	N	—	0	1	1	—	—	0	0	—	2
New Mexico¶	1	1	8	25	74	—	0	6	—	3	—	0	2	—	1
Utah	—	4	26	125	221	—	0	1	—	—	—	0	1	—	—
Wyoming¶	—	0	3	8	13	—	0	1	—	1	—	0	1	1	3
Pacific	—	2	6	76	78	—	0	7	9	33	—	0	4	3	28
Alaska	—	1	4	36	30	—	0	0	—	—	—	0	0	—	—
California	—	0	3	7	25	—	0	7	9	33	—	0	4	3	28
Hawaii	—	1	4	33	23	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	19	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	5	21	102	415	—	0	0	—	—	—	0	0	—	—
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 reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

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

¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending August 20, 2011 (33rd week)

Reporting area	All causes, by age (years)						P&I†	Reporting area (Continued)	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1			All Ages	≥65	45–64	25–44	1–24	<1	
New England	493	328	102	40	13	10	35	S. Atlantic	1,098	701	281	68	22	25	73
Boston, MA	122	75	21	17	7	2	8	Atlanta, GA	154	94	41	12	4	3	8
Bridgeport, CT	30	21	9	—	—	—	1	Baltimore, MD	152	90	39	10	4	9	12
Cambridge, MA	15	11	4	—	—	—	1	Charlotte, NC	129	86	29	10	2	1	11
Fall River, MA	20	15	3	2	—	—	1	Jacksonville, FL	127	79	36	7	3	2	10
Hartford, CT	42	27	12	3	—	—	2	Miami, FL	72	53	12	5	2	—	9
Lowell, MA	17	11	4	2	—	—	2	Norfolk, VA	47	32	13	2	—	—	1
Lynn, MA	4	4	—	—	—	—	—	Richmond, VA	53	27	17	5	1	3	3
New Bedford, MA	21	18	2	1	—	—	2	Savannah, GA	45	27	13	4	1	—	1
New Haven, CT	28	10	9	4	2	3	—	St. Petersburg, FL	33	20	9	3	—	1	—
Providence, RI	72	48	19	5	—	—	5	Tampa, FL	173	120	43	6	4	—	7
Somerville, MA	4	2	2	—	—	—	—	Washington, D.C.	102	64	28	3	1	6	10
Springfield, MA	37	23	5	3	2	4	5	Wilmington, DE	11	9	1	1	—	—	1
Waterbury, CT	31	27	3	1	—	—	1	E.S. Central	890	579	218	52	20	21	57
Worcester, MA	50	36	9	2	2	1	7	Birmingham, AL	134	91	27	11	4	1	8
Mid. Atlantic	1,699	1,150	401	98	26	23	77	Chattanooga, TN	114	88	14	8	2	2	5
Albany, NY	52	37	11	3	1	—	4	Knoxville, TN	112	74	27	4	3	4	6
Allentown, PA	22	19	3	—	—	—	1	Lexington, KY	46	28	10	4	1	3	3
Buffalo, NY	79	42	30	3	1	3	4	Memphis, TN	190	116	53	9	8	4	18
Camden, NJ	17	10	3	2	1	1	1	Mobile, AL	99	62	28	5	2	2	8
Elizabeth, NJ	12	5	4	1	1	1	1	Montgomery, AL	32	22	10	—	—	—	4
Erie, PA	54	39	7	7	—	1	4	Nashville, TN	163	98	49	11	—	5	5
Jersey City, NJ	10	8	2	—	—	—	—	W.S. Central	1,258	781	304	92	40	40	44
New York City, NY	926	640	210	56	15	4	40	Austin, TX	84	48	25	5	3	3	2
Newark, NJ	25	13	10	2	—	—	—	Baton Rouge, LA	67	51	13	2	—	1	—
Paterson, NJ	19	10	3	5	—	1	—	Corpus Christi, TX	62	43	14	5	—	—	2
Philadelphia, PA	175	105	52	8	4	6	7	Dallas, TX	195	110	53	16	7	9	4
Pittsburgh, PA§	27	21	5	—	1	—	2	El Paso, TX	103	72	20	7	3	1	2
Reading, PA	34	23	9	1	—	1	1	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	69	40	21	5	1	2	—	Houston, TX	217	105	64	21	12	15	3
Schenectady, NY	24	22	1	1	—	—	2	Little Rock, AR	94	56	24	9	3	2	2
Scranton, PA	21	14	4	1	—	2	1	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	78	62	13	2	1	—	7	San Antonio, TX	226	147	47	20	6	5	17
Trenton, NJ	23	14	8	—	—	1	—	Shreveport, LA	62	43	10	4	2	3	3
Utica, NY	12	11	1	—	—	—	—	Tulsa, OK	148	106	34	3	4	1	9
Yonkers, NY	20	15	4	1	—	—	2	Mountain	1,068	689	256	74	30	19	52
E.N. Central	1,980	1,295	472	126	53	34	120	Albuquerque, NM	101	64	25	8	2	2	5
Akron, OH	45	26	13	2	4	—	7	Boise, ID	48	37	9	1	1	—	2
Canton, OH	36	25	10	1	—	—	1	Colorado Springs, CO	73	46	19	7	—	1	2
Chicago, IL	243	158	57	15	11	2	6	Denver, CO	80	57	15	5	2	1	8
Cincinnati, OH	79	48	20	6	2	3	6	Las Vegas, NV	248	162	66	16	4	—	16
Cleveland, OH	262	184	55	13	2	8	12	Ogden, UT	43	32	5	3	2	1	3
Columbus, OH	207	141	44	18	3	1	18	Phoenix, AZ	164	82	48	19	7	8	8
Dayton, OH	124	86	27	8	3	—	8	Pueblo, CO	36	28	7	1	—	—	1
Detroit, MI	138	74	39	14	8	3	8	Salt Lake City, UT	130	79	30	9	10	2	4
Evansville, IN	59	35	20	2	2	—	3	Tucson, AZ	145	102	32	5	2	4	3
Fort Wayne, IN	83	51	22	8	—	2	5	Pacific	1,600	1,055	397	85	38	25	127
Gary, IN	6	3	1	1	1	—	—	Berkeley, CA	9	9	—	—	—	—	—
Grand Rapids, MI	66	46	13	4	1	2	2	Fresno, CA	128	84	34	8	2	—	14
Indianapolis, IN	220	125	64	10	12	9	18	Glendale, CA	30	23	6	1	—	—	4
Lansing, MI	44	33	9	2	—	—	3	Honolulu, HI	71	49	13	6	1	2	11
Milwaukee, WI	75	54	12	6	3	—	6	Long Beach, CA	72	51	18	1	1	1	4
Peoria, IL	56	39	13	4	—	—	6	Los Angeles, CA	235	153	55	14	7	6	23
Rockford, IL	46	31	11	4	—	—	3	Pasadena, CA	23	16	6	—	1	—	2
South Bend, IN	50	39	9	1	—	1	1	Portland, OR	97	61	31	4	—	1	5
Toledo, OH	77	50	18	6	1	2	2	Sacramento, CA	194	129	45	10	7	3	16
Youngstown, OH	64	47	15	1	—	1	5	San Diego, CA	156	101	40	4	6	5	15
W.N. Central	596	384	126	28	17	18	31	San Francisco, CA	113	76	30	5	2	—	13
Des Moines, IA	74	46	19	2	3	4	2	San Jose, CA	173	115	42	11	3	2	10
Duluth, MN	24	17	5	1	1	—	1	Santa Cruz, CA	28	14	13	1	—	—	2
Kansas City, KS	23	12	10	1	—	—	1	Seattle, WA	103	61	27	10	1	4	3
Kansas City, MO	93	54	27	7	3	2	2	Spokane, WA	60	43	9	4	3	1	—
Lincoln, NE	37	32	4	1	—	—	2	Tacoma, WA	108	70	28	6	4	—	5
Minneapolis, MN	65	36	14	5	4	6	6	Total¶	10,682	6,962	2,557	663	259	215	616
Omaha, NE	96	67	2	—	2	2	6								
St. Louis, MO	49	24	15	4	3	3	3								
St. Paul, MN	69	49	17	2	1	—	5								
Wichita, KS	66	47	13	5	—	1	3								

U: Unavailable. —: No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of >100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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