



# MMWR<sup>TM</sup>

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### National, State, and Local Area Vaccination Coverage Among Children Aged 19–35 Months — United States, 2007

The National Immunization Survey (NIS) provides vaccination coverage estimates among children aged 19–35 months for each of the 50 states and selected urban areas.\* This report describes the results of the 2007 NIS, which provided coverage estimates among children born during January 2004–July 2006. *Healthy People 2010* established vaccination coverage targets of 90% for each of the vaccines included in the combined 4:3:1:3:3:1<sup>†</sup> vaccine series and a target of 80% for the combined series (1). Findings from the 2007 NIS indicated that  $\geq 90\%$  coverage was achieved for most of the routinely recommended vaccines (2). The majority of parents were vaccinating their children, with less than 1% of children receiving no vaccines by age 19–35 months. The coverage level for the 4:3:1:3:3:1 series remained steady at 77.4%, compared with 76.9% in 2006. Among states and local areas, substantial variability continued, with estimated vaccination coverage ranging from 63.1% to 91.3%. Coverage remained high across all racial/ethnic groups and was not significantly different among racial/ethnic groups after adjusting for poverty status. However, for some vaccines, coverage remained lower among children living below the poverty level compared with children living at or above the poverty level. Maintaining high

vaccination coverage and continued attention to reducing current poverty disparities is needed to limit the spread of preventable diseases and ensure that children are protected.

To collect vaccination information on age-eligible children (i.e., those aged 19–35 months), NIS uses a quarterly, random-digit-dialing sample of telephone numbers for each survey area. When respondents grant permission to contact providers, the telephone interview is followed by a mail survey of the children's vaccination providers to validate immunization information. NIS methodology, including how the responses are weighted to represent the population of children aged 19–35 months, has been described previously (3). During 2007, the household response rate (4) was 64.9%; a total of 17,017 children with provider-verified vaccination records were included in this report, representing 68.6% of all children with completed household interviews. Statistical analyses were conducted using t-tests. Differences were considered statistically significant at  $p < 0.05$ . A poverty status variable<sup>§</sup> was added to the logistic regression models to control for racial/ethnic differences among children living at or above the poverty level and children living below the poverty level. This report describes coverage levels for vaccines that have been included in the routine childhood vaccination schedule recommended by the Advisory Committee on Immunization Practices (ACIP) since 2000 or before (2).

\* Fourteen local areas were sampled separately for the 2007 NIS. These included six areas that receive federal immunization grant funds and are included in the NIS sample every year (District of Columbia; Chicago, Illinois; New York, New York; Philadelphia County, Pennsylvania; Bexar County, Texas; and Houston, Texas); seven previously sampled areas (Alameda County, California; Los Angeles County, California; San Bernardino County, California; Miami-Dade County, Florida; Marion County, Indiana; Dallas County, Texas; and El Paso County, Texas); and one area sampled for the first time (western Washington). Local areas sampled in the NIS might change yearly as state immunization programs target local assessments where they are most needed.

<sup>†</sup>  $\geq 4$  doses of diphtheria, tetanus toxoid, and any acellular pertussis vaccine, which can include diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine (DTaP);  $\geq 3$  doses of poliovirus vaccine;  $\geq 1$  dose of measles, mumps, and rubella vaccine;  $\geq 3$  doses of *Haemophilus influenzae* type b vaccine;  $\geq 3$  doses of hepatitis B vaccine; and  $\geq 1$  dose of varicella vaccine).

<sup>§</sup> Poverty status was based on 2006 U.S. Census poverty thresholds (available at <http://www.census.gov/hhes/www/poverty.html>).

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In 2007, national coverage with the 4:3:1:3:3:1 series was 77.4%; this coverage has been stable since 2004. Coverage with the combined 4:3:1:3:3:1:4 vaccine series (i.e., the 4:3:1:3:3:1 series plus  $\geq 4$  doses of 7-valent pneumococcal conjugate vaccine [PCV7]) is being reported for the first time and was 66.5%. National coverage was  $\geq 90\%$  for each of the vaccines included in the 4:3:1:3:3:1 series except for  $\geq 4$  doses of DTaP (84.5%); coverage with  $\geq 3$  doses of DTaP was 95.5% (Table 1). Coverage with  $\geq 1$  dose of varicella vaccine (VAR) reached 90% for the first time. VAR coverage among American Indian/Alaska Native (AI/AN)<sup>§</sup> children increased significantly, from 85.4% in 2006 to 94.9% in 2007. National vaccination coverage estimates for PCV7 continued to increase, from 86.9% in 2006 to 90.0% in 2007 for  $\geq 3$  doses and from 68.4% to 75.3% for  $\geq 4$  doses. Among AI/AN children, coverage with the fourth dose of PCV7 increased significantly, from 62.7% to 80.4%.

Substantial differences were observed in vaccination coverage among states and local areas (Table 2). Estimated coverage for the 4:3:1:3:3:1 series ranged from 91.3% in Maryland to 63.1% in Nevada. Among the 14 local areas included in the 2007 NIS, coverage with the 4:3:1:3:3:1 series ranged from 82.2% in Philadelphia, Pennsylvania, to 69.6% in San Bernardino, California.

Vaccination coverage levels were higher among AI/ANs compared with whites for measles, mumps, and rubella (MMR) vaccine, hepatitis B (HepB) vaccine, and VAR (Table 3). Coverage with the fourth dose of DTaP and the fourth dose of PCV7 among black children was not significantly lower than white children after controlling for poverty status. Vaccination coverage with the fourth dose of DTaP and the fourth dose of PCV7 was lower among children living below the poverty level compared with children living at or above the poverty level, but this difference declined from 6.1% in 2006 to 4.8% in 2007 for  $\geq 4$  doses of DTaP and from 9.4% in 2006 to 3.5% in 2007 for  $\geq 4$  doses of PCV7. Vaccination coverage levels were similar across all racial/ethnic groups for the 4:3:1:3:3:1 series. Coverage differed for this series among children living at or above the poverty level compared with children living below the poverty level, but this difference declined from 4.9% in 2006 to 3.2% in 2007. Coverage between white and black children with the 4:3:1:3:3:1:4 series was not significantly different after controlling for poverty status.

<sup>§</sup> For this report, persons identified as white, black, Asian, or American Indian/Alaska Native are all non-Hispanic. Persons identified as Hispanic might be of any race.

**TABLE 1. Estimated vaccination coverage among children aged 19–35 months, by selected vaccines and dosages — National Immunization Survey, United States, 2003–2007**

Vaccine	2003*		2004†		2005§		2006¶		2007**	
	%	(95% CI)††	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
DTP/DT/DTaP§§										
≥3 doses	96.0	(±0.5)	95.9	(±0.5)	96.1	(±0.5)	95.8	(±0.5)	95.5	(±0.5)
≥4 doses	84.8	(±0.8)	85.5	(±0.8)	85.7	(±0.9)	85.2	(±0.9)	84.5	(±0.9)
Poliovirus	91.6	(±0.7)	91.6	(±0.7)	91.7	(±0.7)	92.8	(±0.6)	92.6	(±0.7)
MMR¶¶ ≥1 dose	93.0	(±0.6)	93.0	(±0.6)	91.5	(±0.7)	92.3	(±0.6)	92.3	(±0.7)
Hib*** ≥3 doses	93.9	(±0.6)	93.5	(±0.6)	93.9	(±0.6)	93.4	(±0.6)	92.6	(±0.7)
Hepatitis B ≥3 doses	92.4	(±0.6)	92.4	(±0.6)	92.9	(±0.6)	93.3	(±0.6)	92.7	(±0.7)
Varicella ≥1 dose	84.8	(±0.8)	87.5	(±0.7)	87.9	(±0.8)	89.2	(±0.7)	90.0	(±0.7)
PCV7†††										
≥3 doses	68.1	(±1.0)	73.2	(±1.0)	82.8	(±1.0)	86.9	(±0.8)	90.0	(±0.8)
≥4 doses	35.8	(±1.0)	43.4	(±1.1)	53.7	(±1.3)	68.4	(±1.1)	75.3	(±1.2)
Combined series										
4:3:1§§§	82.2	(±0.9)	83.5	(±0.9)	83.1	(±1.0)	83.1	(±0.9)	82.8	(±1.0)
4:3:1:3¶¶¶	81.3	(±0.9)	82.5	(±0.9)	82.4	(±1.0)	82.1	(±1.0)	81.8	(±1.0)
4:3:1:3:3****	79.4	(±0.9)	80.9	(±0.9)	80.8	(±1.0)	80.5	(±1.0)	80.1	(±1.0)
4:3:1:3:3:1††††	72.5	(±1.0)	76.0	(±1.0)	76.1	(±1.1)	76.9	(±1.0)	77.4	(±1.1)
4:3:1:3:3:1:4§§§§	30.8	(±1.0)	38.4	(±1.1)	47.2	(±1.3)	60.1	(±1.2)	66.5	(±1.3)
Children who received no vaccinations	0.4	(±0.1)	0.4	(±0.2)	0.4	(±0.1)	0.4	(±0.1)	0.6	(±0.2)

\* Born during January 2000–July 2002.

† Born during January 2001–July 2003.

§ Born during February 2002–July 2004.

¶ Born during January 2003–June 2005 (2006 estimates based on National Immunization Survey dataset, which was rereleased on February 25, 2008, after correcting for Hispanic overcount in nine states).

\*\* Born during January 2004–July 2006.

†† Confidence interval.

§§ Diphtheria, tetanus toxoids and pertussis vaccines, diphtheria and tetanus toxoids, and diphtheria, tetanus toxoids, and any acellular pertussis vaccine.

¶¶ Measles, mumps, and rubella vaccine.

\*\*\* *Haemophilus influenzae* type b (Hib) vaccine.

††† 7-valent pneumococcal conjugate vaccine (PCV7).

§§§ ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, and ≥1 dose of any measles-containing vaccine.

¶¶¶ 4:3:1 plus ≥3 doses of Hib vaccine.

\*\*\*\* 4:3:1:3 plus ≥3 doses of hepatitis B vaccine.

†††† 4:3:1:3:3 plus ≥1 dose of varicella vaccine.

§§§§ 4:3:1:3:3:1 plus ≥4 doses of PCV7.

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**Editorial Note:** NIS is the only population-based, provider-verified survey to provide national, state, and local area estimates of vaccination coverage among children aged 19–35 months. The results of the 2007 survey indicate that vaccination coverage for vaccines recommended routinely by ACIP since 2000 and before (2) reached record high levels. Improvements in vaccination coverage for VAR meant that national coverage estimates for all individual vaccines in the 4:3:1:3:3:1 series were ≥90%, except coverage with ≥4 doses of DTaP. Coverage with ≥4 doses of PCV7 also was <90%. However, 3-dose coverage for both DTaP and PCV7 remained high. Coverage with ≥4 doses of PCV7 increased significantly to 75.3% in 2007, a substantial increase since PCV7 was first recommended in 2000 (5). However, coverage with ≥4 doses of DTaP has not changed during the past 5 years. Increasing coverage for the fourth dose of DTaP and the fourth dose of PCV7 would improve national coverage for the 4:3:1:3:3:1 series and the 4:3:1:3:3:1:4 series, which will be used to monitor the *Healthy People 2010* immunization objectives begin-

ning with 2009 NIS data. The vaccine shortage that ended in September 2004 (6) might have reduced coverage with the fourth dose of PCV7 among children in the 2007 NIS cohort (i.e., those born during January 2004–July 2006). Use of effective interventions, such as parent and provider reminder/recall, reducing out-of-pocket costs, increasing access to vaccination, and multicomponent interventions that include education might further improve overall coverage in areas where coverage is low (7). In addition, closing the coverage gap between areas with the highest and lowest coverage remains a priority. To achieve this, further collaborative efforts among CDC, state immunization coordinators, immunization programs, and other entities are essential.

Vaccination coverage among AI/AN children for VAR, MMR vaccine, and the fourth dose of PCV7 increased significantly in 2007 compared with 2006; in 2007, coverage levels among AI/AN children were higher for two of these vaccines (VAR and MMR vaccine) compared with white children. Improved exchange of data between the Indian Health Service information system and state immunization information systems and implementation of evidence-based strategies such as reminder/recall at Indian Health Service and tribal

**TABLE 2. Estimated vaccination coverage for the 4:3:1:3:3:1\* and 4:3:1:3:3:1:4† vaccination series and selected individual vaccines among children aged 19–35 months, by state and selected local areas — National Immunization Survey, United States, 2007§**

State/Area	≥4 DTaP¶		≥1 MMR**		≥1 VAR††		≥4 PCV7§§		4:3:1:3:3:1		4:3:1:3:3:1:4	
	%	(95% CI¶¶)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
<b>United States</b>	<b>84.5</b>	<b>(±0.9)</b>	<b>92.3</b>	<b>(±0.7)</b>	<b>90.0</b>	<b>(±0.7)</b>	<b>75.3</b>	<b>(±1.2)</b>	<b>77.4</b>	<b>(±1.1)</b>	<b>66.5</b>	<b>(±1.3)</b>
Alabama	85.4	(±5.2)	95.0	(±2.8)	92.0	(±4.5)	79.6	(±5.7)	78.2	(±6.3)	67.3	(±7.0)
Alaska	81.7	(±5.6)	89.7	(±4.1)	80.5	(±6.0)	80.9	(±6.0)	70.1	(±6.8)	64.4	(±7.3)
Arizona	85.4	(±5.7)	89.0	(±4.8)	86.0	(±5.4)	76.8	(±6.6)	75.2	(±6.7)	66.1	(±7.3)
Arkansas	78.8	(±5.8)	92.5	(±3.1)	89.2	(±4.2)	65.4	(±6.4)	72.3	(±6.2)	57.4	(±6.5)
California	84.9	(±4.0)	94.6	(±2.4)	93.2	(±2.6)	78.8	(±4.8)	77.1	(±4.7)	67.7	(±5.4)
Alameda County	83.1	(±5.4)	91.6	(±4.4)	89.6	(±4.5)	80.7	(±5.7)	76.3	(±5.8)	69.4	(±6.2)
Los Angeles County	84.0	(±5.3)	95.8	(±2.8)	93.9	(±3.3)	74.8	(±6.2)	78.0	(±5.9)	65.0	(±6.7)
San Bernardino County	74.8	(±6.2)	90.3	(±4.3)	89.8	(±4.4)	68.6	(±6.4)	69.6	(±6.5)	57.5	(±6.8)
Rest of state	86.4	(±5.8)	94.7	(±3.5)	93.5	(±3.8)	81.3	(±7.1)	77.4	(±7.0)	69.7	(±8.1)
Colorado	82.1	(±7.0)	91.2	(±4.5)	88.9	(±5.9)	70.7	(±8.7)	78.0	(±7.8)	64.3	(±9.1)
Connecticut	91.1	(±4.4)	95.3	(±2.8)	94.2	(±3.3)	88.8	(±4.9)	86.8	(±5.0)	81.2	(±5.9)
Delaware	86.9	(±4.5)	94.8	(±3.3)	92.1	(±3.8)	77.3	(±6.2)	80.3	(±5.7)	68.6	(±6.7)
District of Columbia	85.1	(±5.6)	95.2	(±3.3)	94.0	(±3.5)	77.5	(±6.2)	81.6	(±5.9)	71.0	(±6.7)
Florida	85.0	(±5.2)	92.3	(±4.1)	90.2	(±4.4)	66.1	(±6.7)	80.3	(±5.5)	61.8	(±6.8)
Miami-Dade County	86.0	(±5.0)	95.4	(±3.0)	90.8	(±4.5)	61.2	(±7.3)	76.1	(±6.3)	53.8	(±7.4)
Rest of state	84.9	(±6.0)	91.8	(±4.8)	90.1	(±5.1)	67.0	(±7.8)	81.0	(±6.4)	63.2	(±7.9)
Georgia	85.5	(±5.2)	91.4	(±4.2)	91.6	(±4.1)	75.5	(±6.7)	79.6	(±6.0)	65.9	(±7.2)
Hawaii	90.6	(±3.8)	93.8	(±3.7)	95.5	(±2.6)	80.7	(±5.8)	87.5	(±4.5)	77.4	(±6.1)
Idaho	77.2	(±6.3)	86.1	(±5.2)	75.5	(±6.4)	66.6	(±7.2)	65.6	(±7.2)	52.9	(±7.6)
Illinois	81.6	(±4.2)	93.1	(±2.7)	88.7	(±3.4)	76.0	(±4.5)	73.5	(±4.8)	65.8	(±5.0)
City of Chicago	78.2	(±6.4)	89.5	(±4.7)	88.8	(±4.2)	69.0	(±6.7)	71.0	(±6.7)	60.6	(±6.8)
Rest of state	82.7	(±5.2)	94.4	(±3.2)	88.7	(±4.4)	78.5	(±5.6)	74.4	(±6.0)	67.6	(±6.3)
Indiana	80.3	(±4.4)	90.4	(±3.3)	88.3	(±3.5)	70.4	(±5.2)	74.0	(±4.6)	61.8	(±5.3)
Marion County	80.8	(±5.2)	87.5	(±4.6)	86.0	(±4.6)	75.0	(±5.7)	71.4	(±5.9)	63.2	(±6.3)
Rest of state	80.2	(±5.2)	91.0	(±3.9)	88.8	(±4.2)	69.4	(±6.1)	74.5	(±5.4)	61.5	(±6.3)
Iowa	83.0	(±5.9)	93.0	(±3.8)	88.2	(±4.6)	72.3	(±6.6)	75.9	(±6.3)	64.2	(±6.9)
Kansas	87.0	(±4.9)	93.1	(±3.5)	88.7	(±4.1)	75.0	(±6.2)	76.0	(±6.0)	64.8	(±6.8)
Kentucky	85.2	(±5.8)	90.8	(±4.6)	87.9	(±5.1)	69.7	(±6.5)	78.2	(±6.2)	63.3	(±6.7)
Louisiana	80.1	(±5.9)	92.9	(±3.4)	91.5	(±3.7)	76.0	(±6.0)	77.0	(±6.1)	66.9	(±6.9)
Maine	86.7	(±5.4)	90.2	(±4.8)	85.5	(±5.3)	82.5	(±5.6)	72.9	(±6.9)	67.0	(±7.2)
Maryland	94.8	(±2.4)	97.1	(±2.0)	96.8	(±1.9)	84.4	(±5.9)	91.3	(±3.1)	79.9	(±6.2)
Massachusetts	90.0	(±5.0)	93.3	(±4.6)	87.4	(±5.6)	85.1	(±6.3)	77.9	(±7.3)	76.0	(±7.4)
Michigan	84.3	(±6.1)	89.5	(±5.3)	89.5	(±5.3)	71.1	(±7.4)	78.8	(±6.7)	66.9	(±7.5)
Minnesota	88.9	(±4.7)	94.9	(±2.8)	89.1	(±4.7)	82.1	(±6.2)	80.5	(±6.1)	72.8	(±6.9)
Mississippi	81.0	(±6.8)	87.2	(±5.8)	88.4	(±5.6)	65.8	(±7.8)	77.1	(±7.0)	61.2	(±7.9)
Missouri	80.6	(±6.5)	89.0	(±5.2)	89.4	(±5.0)	73.7	(±7.0)	76.1	(±6.9)	64.7	(±7.5)
Montana	79.1	(±5.8)	89.6	(±4.0)	78.5	(±5.8)	70.7	(±6.7)	65.3	(±6.9)	58.0	(±7.0)
Nebraska	87.8	(±5.3)	94.0	(±3.7)	93.8	(±3.8)	80.5	(±6.5)	82.9	(±6.0)	74.4	(±7.1)
Nevada	71.4	(±7.3)	86.3	(±4.9)	83.3	(±5.5)	61.7	(±7.5)	63.1	(±7.6)	50.7	(±7.5)
New Hampshire	94.4	(±3.5)	96.6	(±2.6)	95.2	(±3.1)	87.3	(±5.3)	90.6	(±4.3)	80.5	(±6.2)
New Jersey	85.3	(±5.9)	91.2	(±5.5)	92.5	(±4.8)	69.3	(±7.8)	80.5	(±6.4)	62.3	(±7.9)
New Mexico	81.6	(±7.0)	90.6	(±3.6)	88.8	(±3.9)	72.0	(±7.6)	76.0	(±7.2)	65.4	(±7.7)
New York	88.9	(±2.9)	93.6	(±2.1)	88.4	(±3.2)	75.1	(±4.5)	77.8	(±4.1)	65.2	(±4.9)
City of New York	84.7	(±4.5)	91.9	(±3.2)	89.0	(±3.9)	73.4	(±5.4)	76.3	(±5.3)	64.4	(±6.0)
Rest of state	92.8	(±3.8)	95.2	(±2.6)	87.8	(±5.1)	76.7	(±7.2)	79.1	(±6.3)	65.9	(±7.6)
North Carolina	85.8	(±5.0)	96.9	(±2.0)	93.3	(±4.1)	81.7	(±5.6)	77.3	(±6.5)	70.1	(±7.0)
North Dakota	85.5	(±4.9)	95.2	(±2.9)	91.5	(±3.8)	81.4	(±5.5)	77.2	(±5.7)	68.9	(±6.3)
Ohio	86.6	(±4.9)	90.7	(±3.7)	89.1	(±4.1)	74.7	(±6.0)	77.7	(±5.8)	64.5	(±6.5)
Oklahoma	82.7	(±6.0)	89.9	(±5.0)	89.7	(±5.0)	58.3	(±7.8)	78.5	(±6.3)	53.3	(±7.7)
Oregon	77.8	(±7.3)	88.9	(±5.3)	84.2	(±6.3)	70.1	(±7.5)	70.5	(±7.6)	62.7	(±7.8)
Pennsylvania	86.4	(±3.6)	93.8	(±2.5)	91.9	(±2.8)	79.1	(±4.4)	78.8	(±4.3)	68.3	(±4.9)
Philadelphia County	88.3	(±5.4)	92.2	(±4.5)	91.8	(±4.4)	81.2	(±6.5)	82.2	(±6.2)	73.0	(±7.3)
Rest of state	86.0	(±4.2)	94.1	(±2.8)	92.0	(±3.2)	78.8	(±5.1)	78.2	(±4.9)	67.5	(±5.7)
Rhode Island	84.9	(±6.1)	94.7	(±3.9)	92.1	(±4.1)	90.7	(±4.4)	75.0	(±7.0)	69.2	(±7.4)
South Carolina	84.2	(±4.5)	92.5	(±3.2)	91.5	(±3.3)	80.8	(±4.8)	79.5	(±5.0)	74.9	(±5.3)
South Dakota	88.7	(±4.5)	95.0	(±2.4)	85.3	(±5.2)	54.3	(±7.4)	76.9	(±6.1)	45.8	(±7.4)

\* Includes ≥4 doses of diphtheria, tetanus toxoid, and any acellular pertussis vaccine (DTaP) (also can include diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine); ≥3 doses of poliovirus vaccine; ≥1 dose of any measles-containing vaccine; ≥3 doses of *Haemophilus influenzae* type b vaccine; ≥3 doses of hepatitis B vaccine; and ≥1 dose of varicella vaccine.

† 4:3:1:3:3:1 plus ≥4 doses of 7-valent pneumococcal conjugate vaccine (PCV7).

§ Children in the 2007 National Immunization Survey were born during January 2004–July 2006.

¶ ≥4 doses of DTaP.

\*\* ≥1 dose of measles, mumps, and rubella vaccine.

†† ≥1 dose of varicella vaccine at or after child's first birthday.

§§ ≥3 doses of PCV7.

¶¶ Confidence interval.

**TABLE 2. (Continued) Estimated vaccination coverage for the 4:3:1:3:3:1\* and 4:3:1:3:3:1:4† vaccination series and selected individual vaccines among children aged 19–35 months, by state and selected local areas — National Immunization Survey, United States, 2007§**

State/Area	≥4 DTaP¶		≥1 MMR**		≥1 VAR††		≥4 PCV7§§		4:3:1:3:3:1		4:3:1:3:3:1:4	
	%	(95% CI¶¶)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Tennessee	84.8	(±6.0)	94.5	(±4.3)	92.3	(±4.7)	72.6	(±7.5)	78.7	(±6.7)	64.3	(±7.7)
Texas	82.1	(±3.5)	90.4	(±2.6)	90.0	(±2.6)	75.7	(±4.0)	77.3	(±3.8)	68.5	(±4.4)
Bexar County	85.5	(±4.8)	90.9	(±3.9)	88.8	(±4.3)	79.1	(±5.5)	80.1	(±5.3)	74.0	(±5.8)
City of Houston	77.9	(±5.6)	89.4	(±3.8)	89.6	(±3.8)	71.6	(±5.9)	73.0	(±5.7)	64.1	(±6.2)
Dallas County	77.0	(±6.0)	89.9	(±4.1)	90.0	(±4.1)	70.8	(±6.3)	71.9	(±6.2)	61.0	(±6.8)
El Paso County	81.8	(±5.7)	90.3	(±4.8)	91.1	(±4.7)	69.3	(±6.9)	77.4	(±6.2)	63.1	(±7.1)
Rest of state	83.4	(±5.1)	90.6	(±3.8)	90.2	(±3.8)	77.4	(±5.8)	78.7	(±5.6)	70.4	(±6.4)
Utah	82.2	(±5.3)	90.9	(±4.0)	86.6	(±4.8)	70.7	(±6.4)	73.6	(±6.1)	61.4	(±6.8)
Vermont	81.9	(±7.5)	93.6	(±5.2)	77.6	(±7.8)	84.2	(±7.0)	67.3	(±8.3)	62.7	(±8.5)
Virginia	84.1	(±4.8)	90.9	(±3.8)	87.8	(±4.5)	79.1	(±5.1)	75.5	(±5.7)	67.9	(±6.1)
Washington	80.9	(±5.4)	90.5	(±3.9)	84.0	(±4.9)	73.8	(±6.0)	69.0	(±6.1)	64.6	(±6.2)
Western Washington	88.1	(±4.8)	91.9	(±3.9)	80.8	(±5.9)	82.3	(±5.8)	71.3	(±6.7)	66.8	(±7.0)
Rest of state	79.3	(±6.4)	90.2	(±4.6)	84.8	(±5.8)	71.9	(±7.2)	68.4	(±7.3)	64.1	(±7.4)
West Virginia	84.5	(±4.9)	96.2	(±2.1)	89.2	(±3.8)	75.8	(±5.7)	75.5	(±5.6)	64.9	(±6.2)
Wisconsin	82.0	(±6.1)	91.4	(±4.6)	86.7	(±5.4)	78.7	(±6.5)	77.1	(±6.6)	69.6	(±7.2)
Wyoming	78.7	(±6.1)	87.5	(±5.2)	78.5	(±6.3)	68.0	(±6.7)	70.2	(±6.8)	58.7	(±7.1)

**TABLE 3. Estimated vaccination coverage among children aged 19–35 months, by selected vaccines and dosages, race/ethnicity,\* and poverty level† — National Immunization Survey, United States, 2007§**

Vaccine	White		Black		Hispanic		American Indian/ Alaska Native		Asian		Below poverty level		At or above poverty level	
	%	(95% CI¶)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
DTaP**														
≥3 doses	95.5	(±0.7)	93.9	(±1.8)	96.1	(±1.1)	97.3	(±2.9)	96.4	(±2.4)	94.1	(±1.2)	96.0	(±0.6)
≥4 doses	85.3	(±1.2)	82.3	(±2.7)	83.8	(±2.2)	86.4	(±7.1)	87.5	(±4.0)	81.1	(±2.1)	85.9	(±1.1)
Poliovirus	92.6	(±0.9)	91.1	(±2.1)	93.0	(±1.6)	94.8	(±5.5)	95.0	(±2.6)	91.9	(±1.3)	92.8	(±0.9)
MMR†† ≥1 dose	92.1	(±0.8)	91.5	(±2.0)	92.6	(±1.6)	96.2	(±3.2)	93.9	(±3.5)	91.3	(±1.4)	92.6	(±0.8)
Hib§§ ≥3 doses	92.9	(±0.9)	90.8	(±2.2)	93.5	(±1.4)	95.0	(±4.1)	91.0	(±3.4)	91.0	(±1.5)	93.1	(±0.8)
Hepatitis B ≥3 doses	92.5	(±0.9)	91.2	(±2.1)	93.6	(±1.6)	96.7	(±3.0)	93.8	(±2.9)	92.1	(±1.4)	92.9	(±0.9)
Varicella ≥1 dose	89.2	(±1.0)	89.8	(±2.2)	90.6	(±1.7)	94.9	(±3.5)	93.7	(±2.9)	89.2	(±1.6)	90.1	(±0.9)
PCV7¶¶														
≥3 doses	89.8	(±0.9)	89.5	(±2.2)	91.0	(±1.7)	94.0	(±4.3)	86.8	(±4.7)	89.0	(±1.6)	90.3	(±0.9)
≥4 doses	76.6	(±1.4)	70.3	(±3.4)	75.4	(±2.6)	80.4	(±7.1)	75.0	(±5.9)	72.8	(±2.4)	76.3	(±1.4)
Combined series														
4:3:1:3***	82.6	(±1.2)	79.5	(±2.9)	81.5	(±2.3)	85.3	(±7.2)	81.9	(±5.1)	78.8	(±2.2)	82.9	(±1.2)
4:3:1:3:3†††	81.0	(±1.3)	77.5	(±3.1)	79.8	(±2.4)	85.1	(±7.3)	80.7	(±5.2)	76.9	(±2.3)	81.4	(±1.2)
4:3:1:3:3:1§§§	77.5	(±1.3)	75.3	(±3.2)	78.0	(±2.5)	82.7	(±7.5)	79.4	(±5.3)	75.0	(±2.3)	78.2	(±1.3)
4:3:1:3:3:1:4¶¶¶	67.0	(±1.6)	62.0	(±3.6)	67.0	(±2.8)	74.6	(±8.4)	68.6	(±6.5)	64.7	(±2.7)	66.9	(±1.5)

\* Persons identified as white, black, Asian, or American Indian/Alaska Native are all non-Hispanic. Persons identified as Hispanic might be of any race. Native Hawaiian or other Pacific Islanders and multiple races were not included because of small sample sizes.

† Poverty status was based on 2006 U.S. Census poverty thresholds (available at <http://www.census.gov/hhes/www/poverty.html>).

§ Children in the 2007 National Immunization Survey were born during January 2004–July 2006.

¶ Confidence interval.

\*\* Diphtheria, tetanus toxoid, and any acellular pertussis vaccine, which can include diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine.

†† Measles, mumps, and rubella vaccine.

§§ *Haemophilus influenzae* type b (Hib) vaccine.

¶¶ 7-valent pneumococcal conjugate vaccine (PCV7).

\*\*\* ≥4 doses of DTP/DT/DTaP; ≥3 doses of poliovirus vaccine, and ≥1 dose of any measles-containing vaccine, and ≥3 doses of Hib vaccine.

††† 4:3:1:3 plus ≥3 doses of hepatitis B vaccine.

§§§ 4:3:1:3:3 plus ≥1 dose of varicella vaccine.

¶¶¶ 4:3:1:3:3:1 plus ≥4 doses of PCV7.

facilities, might have contributed to these increases in vaccination coverage (A. Groom, CDC, personal communication, August 2008). However, further monitoring is needed to determine whether these levels will be sustained.

As in 2006, the results of the 2007 NIS indicate that differences in poverty status accounted for the observed differences in coverage between white and black children for the fourth dose of DTaP and fourth dose of PCV7. In 2007, these differences in coverage between children living at or above the poverty level compared with children living below the poverty level were reduced by one percentage point for DTaP and by nearly six percentage points for PCV7. Continued efforts are needed to improve vaccination coverage among children of all racial and ethnic groups living below the poverty level.

The 2007 NIS results confirm that the majority of parents are vaccinating their children, with less than 1% of children receiving no vaccines by age 19–35 months. Although vaccination coverage in this age group remains high, recent outbreaks of measles have occurred in certain communities (8). Several factors might explain this apparent paradox. Despite record high coverage with MMR vaccine, nearly 8% of children aged 19–35 months surveyed for the 2007 NIS remained unvaccinated. Measles is highly contagious, and clustering of unimmunized children within geographic areas can increase risk for measles and other vaccine-preventable disease transmission. Clusters of unimmunized children might not be detected by NIS methods and might not be visible in national and state rates. Furthermore, any changes in vaccination behaviors among parents of children born after July 2006 would not have been detected by the 2007 survey. Increased attention to parental concerns about vaccine safety has become apparent in recent years (9). The 2008 NIS is collecting information on parental concerns about vaccine safety to better assess parental attitudes and beliefs about vaccines. In addition, CDC and its partners are developing new educational materials that can assist parents in making fully informed decisions about immunizing their children.\*\*

The findings in this report are subject to at least three limitations. First, NIS is a telephone survey, and statistical adjustments might not compensate fully for nonresponse and households without landline telephones. Second, underestimates of vaccination coverage might have resulted from the exclusive use of provider-verified vaccination histories because completeness of these records is unknown. Finally, although national

coverage estimates are precise, annual estimates and trends for state and local areas should be interpreted with caution because of smaller sample sizes and wider confidence intervals.

Achieving and maintaining high vaccination coverage levels is important to further reduce the burden of vaccine-preventable diseases and prevent a resurgence of measles and other diseases that have been eliminated in the United States (10). Although vaccination coverage estimates were at record highs and above the *Healthy People 2010* target for most of the routinely recommended vaccines in 2007, ongoing efforts through partnerships among national, state, local, private, and public entities are needed to sustain these levels and ensure that vaccination programs in the United States remain strong.

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### References

1. US Department of Health and Human Services. *Healthy people 2010* (conference ed, in 2 vols). Washington, DC: US Department of Health and Human Services; 2000. Available at <http://www.healthypeople.gov/document/html/objectives/14-24.htm>.
2. CDC. Recommendations and guidelines: 2008 child & adolescent immunization schedules for persons aged 0–6 years, 7–18 years, and catch-up schedule. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at <http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm>.
3. CDC. Statistical methodology of the National Immunization Survey, 1994–2002. *Vital Health Stat* 2005;2(138). Available at [http://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_138.pdf](http://www.cdc.gov/nchs/data/series/sr_02/sr02_138.pdf).
4. Ezzati-Rice TM, Frankel MR, Hoaglin DC, Loft JD, Coronado VG, Wright RA. An alternative measure of response rate in random-digit-dialing surveys that screen for eligible subpopulations. *J Econ Soc Meas* 2000;26:99–109.
5. CDC. Preventing pneumococcal disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2000;49(No. RR-9).
6. CDC. Pneumococcal conjugate vaccine shortage resolved. *MMWR* 2004;53:851–2.
7. Briss PA, Rodewald LE, Hinman AR, et al. Reviews of evidence regarding interventions to improve vaccination coverage in children, adolescents, and adults. The Task Force on Community Preventive Services. *Am J Prev Med* 2000;18:97–140.
8. CDC. Update: measles—United States, January–July 2008. *MMWR* 2008;57:893–6.
9. Cooper LZ, Larsen HJ, Katz SL. Protecting public trust in immunization. *Pediatrics* 2008;122:149–53.
10. CDC. Measles—United States, January 1–April 25, 2008. *MMWR* 2008;57:494–8.

\*\* Additional information available at <http://www.cdc.gov/vaccines>.

## Laboratory Surveillance for Wild and Vaccine-Derived Polioviruses — Worldwide, January 2007–June 2008

The Global Polio Laboratory Network (GPLN), comprising 145 facilities in 100 countries and operating in all six World Health Organization (WHO) regions,\* was established in 1988 to support the Global Polio Eradication Initiative. GPLN isolates and characterizes polioviruses from stool specimens of patients with acute flaccid paralysis (AFP), from healthy contacts of AFP patients, and, in some laboratories, from sewage samples. Nucleotide sequences (viral capsid protein VP1 region; 900–906 nucleotides) are determined for wild poliovirus (WPV) isolates from each patient, contact, or sewage sample to target vaccination activities based on the patterns of virus transmission. This report updates previous reports (1,2) describing GPLN activities and vaccine-derived poliovirus (VDPV) surveillance during January 2007–June 2008. GPLN routinely screens for and characterizes VDPVs, which have caused polio outbreaks in areas with low oral poliovirus vaccine (OPV) coverage and caused prolonged infections in persons with primary immunodeficiencies (3). Data from GPLN guide the global initiative to eliminate polio. GPLN data are used to confirm polio cases, identify reservoirs of endemicity, determine serotype distributions of circulating polioviruses, detect importations, identify VDPVs, and ultimately document the absence of WPV and VDPVs for certification of polio eradication.

\*The six WHO regions are Africa, Americas, Eastern Mediterranean, Europe, South-East Asia, and Western Pacific.

## Laboratory Network Performance

WHO monitors GPLN performance through an annual laboratory accreditation program that uses proficiency testing, confirmatory testing by reference laboratories, and other measures to evaluate laboratory performance and the timeliness and accuracy of results. Of the 145 network laboratories, 143 were fully accredited in 2007, one was provisionally accredited, and one was not evaluated. Performance reviews are under way for 2008.

GPLN tested 234,521 stool specimens from AFP cases during January 2007–June 2008 (Table 1), a 12% increase in workload compared with the previous 18-month period. Most (90%) AFP specimens were from the polio-endemic WHO regions of Africa, the Eastern Mediterranean, and South-East Asia, where workloads increased by 7.5%, 3.2%, and 23.8%, respectively.

During mid-2006, GPLN began implementing measures to accelerate poliovirus confirmation in the 44 laboratories in polio-endemic regions. By June 2008, all 44 laboratories had adopted a new algorithm for virus isolation that shortened isolation reporting times from 28 days to 14 days. A new algorithm using polymerase chain reaction (PCR) and enzyme-linked immunosorbent assay procedures for intratypic differentiation (ITD) between wild and vaccine-like polioviruses was introduced in 12 laboratories in mid-2006 and in an additional 10 laboratories by June 2008, and shortened ITD reporting times from 14 days to 7 days. During 2007–2008, the percentage of virus isolation results reported within 14 days of specimen receipt remained unchanged in the Africa region (83%), but increased from 36% to 95% in the Eastern Mediterranean region and from 36% to 84% in the South-East Asia region.

**TABLE 1. Number of specimens and poliovirus isolates, percentage of specimens with nonpolio enterovirus (NPEV) isolates, and timing of results, by World Health Organization (WHO) region and year — January 2007–June 2008**

WHO region	January–December 2007						January–June 2008					
	No. of specimens	No. of poliovirus isolates		% specimens with NPEV isolated	% results on time*	% ITD† results within 60 days of paralysis onset	No. of specimens	No. of poliovirus isolates		% specimens with NPEV isolated	% results on time*	% ITD† results within 60 days of paralysis onset
		Wild	Sabin-like					Wild	Sabin-like			
Africa	24,484	661	1,137	18.0	83.0	82.0	14,443	1,023	526	13.9	83.0	87.0
Americas	1,880	0	54	9.0	90.3	100.0	691	0	18	7.0	84.0	100.0
Eastern Mediterranean	22,522	94	914	18.3	80.6	76.5	12,887	52	593	15.3	95.0	75.2
Europe	2,247	0	42	7.2	98.0	86.0	513	0	3	2.6	100.0	100.0
South-East Asia	93,412	1,565	3,163	19.0	36.0	91.0	44,221	590	1,623	22.0	84.0	97.0
Western Pacific	12,250	0	321	9.0	96.0	52.0	4,971	0	70	8.0	96.0	59.0
<b>Worldwide</b>	<b>156,795</b>	<b>2,320</b>	<b>5,631</b>	<b>17.0</b>	<b>55.9</b>	<b>84.5</b>	<b>77,726</b>	<b>1,665</b>	<b>2,833</b>	<b>18.2</b>	<b>86.5</b>	<b>89.1</b>

\* Reported within 14 days for laboratories in the regions of Africa, Americas, and Eastern Mediterranean, and within 28 days for the regions of Europe and Western Pacific. In South-East Asia, the test algorithm changed in mid-2007; 99% of specimens were reported within 28 days during the first 6 months of 2007, and 41% were reported within 14 days during the last 6 months.

† Intratypic differentiation.

## Detection and Characterization of WPV Isolates and Transmission Links

WPV isolates were detected in stool specimens from AFP patients in 16 countries (4) during January 2007–June 2008 (Table 2). During this period, 1,257 (86%) of 1,470 WPV1 isolates and 2,444 (97%) of 2,518 WPV3 isolates were found in the four polio-endemic countries of Afghanistan, India, Nigeria, and Pakistan. In India, the ratio of WPV1 to WPV3 isolates reversed, from approximately 24:1 (July 2005–December 2006) to approximately 1:13 (January 2007–June 2008), reflecting a WPV3 outbreak, primarily in the states of Bihar and Uttar Pradesh, and also the effectiveness of program activities that prioritized the use of monovalent type 1 oral polio vaccine (mOPV1) in supplementary vaccination campaigns to interrupt WPV1 transmission. WPV1 endemicity is sustained in India by approximately six lineages, but the WPV3 outbreak has expanded the number of WPV3 lineages in India from approximately 10 to 40 (5). Sequence data reveal frequent cross-border transmission of WPV1 and WPV3 between southern Afghanistan and southern Pakistan, continued WPV1 endemicity in Sindh province in Pakistan,

and persistent WPV1 and WPV3 circulation in and around Pakistan's Northwest Frontier Province, even as genetic diversity of WPV1 and WPV3 remains low (6). Although the number of cases in Nigeria were reduced by 50% during January 2007–June 2008 compared with July 2005–December 2006, multiple genetic lineages of WPV1 and WPV3 continue to circulate in the country (7).

The 12 countries where polio is not endemic (Angola, Australia, Benin, Central African Republic, Chad, Democratic Republic of the Congo, Ethiopia, Myanmar, Nepal, Niger, Somalia, and Sudan) accounted for 212 (14%) of WPV1 isolates detected during January 2007–June 2008; all of these viruses were genetically linked to those found in India or Nigeria (Table 2). Sequence data showed that a WPV1 isolate of Indian origin detected in Angola in 2007 represented a continuation of an outbreak that began in 2005. WPV1 from the Angola outbreak spread to the Democratic Republic of Congo in 2007 and subsequently to the Central African Republic in 2008. A second WPV1 importation from India was detected in Angola in 2008. The WPV1 from Myanmar was imported from India via Bangladesh during 2006–2007, and the WPV1

**TABLE 2. Number of wild poliovirus (WPV) isolates detected from persons with acute flaccid paralysis (AFP), by World Health Organization (WHO) region and country — January 2007–June 2008**

WHO region and country	January–December 2007			January–June 2008		
	No. of WPV isolates	Serotype*		No. of WPV isolates	Serotype*	
1		3	1		3	
<b>Africa</b>	<b>661</b>	<b>354</b>	<b>307</b>	<b>1,023</b>	<b>851</b>	<b>172</b>
Angola†	14	14	0	39	4	35
Benin§	0	0	0	1	1	0
Central African Republic†	0	0	0	2	2	0
Chad§	47	40	7	15	0	15
Democratic Republic of the Congo†	75	75	0	4	4	0
Ethiopia§	0	0	0	4	4	0
Nigeria	504	206	298	937	815	122
Niger§	21	19	2	21	21	0
<b>Americas</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Eastern Mediterranean</b>	<b>94</b>	<b>49</b>	<b>45</b>	<b>53</b>	<b>42</b>	<b>11</b>
Afghanistan	30	9	21	23	15	8
Pakistan	59	35	24	29	26	3
Somalia§	5	5	0	0	0	0
Sudan§	0	0	0	1	1	0
<b>Europe</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>South-East Asia</b>	<b>1,565</b>	<b>159</b>	<b>1,406</b>	<b>590</b>	<b>13</b>	<b>577</b>
India	1,537	138	1,399	582	13	569
Myanmar†	21	21	0	0	0	0
Nepal†	7	0	7	8	0	8
<b>Western Pacific</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Australia¶	1	1	0	0	0	0
<b>Worldwide</b>	<b>2,322</b>	<b>564</b>	<b>1,758</b>	<b>1,666</b>	<b>906</b>	<b>760</b>

\* No serotype 2 isolates detected.

† Linked to WPV type 1 (WPV1) and/or WPV type 3 (WPV3) that originated in northern India.

§ Linked to WPV1 and/or WPV3 that originated in northern Nigeria.

¶ WPV1 from adult patient of Pakistani origin, with paralysis onset in Pakistan before entering Australia.



from Somalia was imported from Ethiopia (with Nigeria as the ultimate source) during 2006–2007. Two genetic lineages of WPV1 circulated in Chad in 2007; one lineage signaled a new importation from Nigeria, with local spread, and the other signaled continued circulation of virus imported from Nigeria that had caused an outbreak in Chad more than 3 years earlier. WPV1 isolates detected in Ethiopia and Sudan in 2008 were of a different lineage than those detected in Chad, but were linked to each other and to outbreak viruses originating in Nigeria that were found at least 3 years earlier in these countries. WPV1 was isolated in Australia in 2007 from a Pakistani adult who had paralysis onset in Pakistan before traveling to Australia. The 12 countries where polio is not endemic also accounted for 74 (3%) of WPV3 isolates detected during January 2007–June 2008. WPV3 isolates in Angola and Nepal originated in India, and WPV3 isolates in Chad and Niger originated in Nigeria. In Nepal, seven importations of WPV3 were detected within 18 months, but no evidence of secondary spread was detected. However, local spread was detected from the WPV3 importations in Angola, Chad, and Niger.

WPV1 and WPV3 also were detected by GPLN from non-AFP sources. WPV1 was isolated from a healthy contact of an AFP patient in Sudan in 2007. WPV1 and WPV3 found in sewage in Mumbai, India, in 2007 and 2008 were closely related to viruses circulating in the northeastern state of Bihar. WPV1 isolated from sewage in Switzerland in 2007 was closely related to WPV1 imported into Chad from Nigeria in previous years. No poliomyelitis cases were identified in Switzerland.

## Detection of VDPVs

GPLN screens for VDPVs among vaccine-related isolates. Isolates are sequenced if results from ITD tests based on genetic and antigenic properties are discordant. A combination of sequence results, clinical status, and epidemiologic investigations are used to categorize Sabin-related isolates as 1) circulating VDPVs (cVDPVs), if obtained from two or more AFP cases in the same area; 2) immunodeficiency-associated VDPVs (iVDPVs), if isolated from persons with primary immunodeficiencies; or 3) ambiguous VDPVs (aVDPVs), if results provide no evidence of community circulation or immunodeficiency (3). During January 2007–June 2008, GPLN screened 8,478 Sabin-related isolates from AFP cases (Table 3). cVDPVs were found in Myanmar (eight type 1 from four cases) and Nigeria (207 type 2 from 101 cases).<sup>†</sup> iVDPVs were found in the Russian Federation (one type 1),

**TABLE 3. Number of Sabin vaccine virus isolates from persons with acute flaccid paralysis, by World Health Organization (WHO) region — January 2007–June 2008**

WHO region	Vaccine-derived poliovirus*				Total <sup>††</sup>
	Sabin-like <sup>†</sup>	cVDPV <sup>§</sup> isolates	iVDPV <sup>¶</sup> isolates	aVDPV <sup>**</sup> isolates	
Africa	1,468	207	0	2	1,667
Americas	72	0	0	0	72
Eastern Mediterranean	1,504	0	3	0	1,507
Europe	42		1	2	45
South-East Asia	4,778	8	0	0	4,786
Western Pacific	387	0	0	4	391
<b>Worldwide</b>	<b>8,251</b>	<b>215</b>	<b>4</b>	<b>8</b>	<b>8,478</b>

\* A poliovirus with  $\geq 1\%$  sequence difference compared with Sabin vaccine virus.

<sup>†</sup> Either concordant Sabin-like results in tests of intratypic differentiation or  $< 1\%$  sequence difference compared with Sabin vaccine virus.

<sup>§</sup> Circulating vaccine-derived poliovirus.

<sup>¶</sup> Vaccine-derived poliovirus isolated from a person with primary immunodeficiency.

\*\* Ambiguous vaccine-derived poliovirus that cannot be categorized as iVDPV or cVDPV.

<sup>††</sup> In the majority of cases, an isolate was obtained from both stool specimens collected from patients.

Belarus (one type 2), and Iran (one coinfection with types 1 and 2, and one type 2). aVDPVs isolated in China in three areas (Guangxi Zhuang Autonomous Region [one type 1], Shandong Province [two type 1], and Shanxi Province [one type 1]) signaled independent events with no evidence of circulation. A type 2 VDPV isolated from a single AFP case in the Russian Federation in 2008 is under clinical investigation. A type 2 aVDPV was found in the Democratic Republic of Congo in 2007, and a type 3 aVDPV was detected in a child in Malawi in 2008. GPLN and collaborating laboratories also found type 1 aVDPVs in a sewage sample collected in Zurich, Switzerland in 2008, and type 2 aVDPVs in sewage samples collected in Egypt in 2007, in Israel in 2007 and 2008, and in Geneva, Switzerland, in 2008. No paralyzed persons have been determined to be associated with aVDPV detection in sewage.

**Reported by:** Polio Eradication Dept, World Health Organization, Geneva, Switzerland. Div of Viral Diseases and Global Immunization Div, National Center for Immunization and Respiratory Diseases, CDC.

**Editorial Note:** Results from GPLN regularly are used to target polio vaccination activities to interrupt poliovirus transmission. Data from GPLN also are evaluated to determine progress toward polio eradication, as indicated by reductions in geographic spread and reductions in genetic diversity among virus isolates. Based on these criteria, India made substantial progress in reducing WPV1 transmission during January 2007–June 2008. In contrast, WPV3 transmission was widespread in the Indian states of Bihar and Uttar Pradesh during most of this period, with genetic diversity increasing. Limited

<sup>†</sup> The 207 cVDPV isolates were from 105 polio patients, four of whom had mixed WPV and cVDPV infections, and the paralytic disease was attributed to the WPV infections.

evidence of program progress was detected in Afghanistan, Pakistan, and Nigeria, the other three WPV-endemic countries (6,7).

WPV importations continue because of failure to interrupt transmission in WPV-endemic countries, particularly Nigeria and India. A single infected traveler, such as the WPV1-infected person from Pakistan who went to Australia, is a source of virus who potentially can spread the virus within another country. This underscores the importance of maintaining laboratory and surveillance capacity in polio-free regions. Countries neighboring WPV-endemic countries (e.g., Chad, Niger, and Nepal) are at particular risk for repeated WPV importations, although long-range importations also occur, as was observed in the importation of WPV1 and WPV3 into Angola. The apparent lack of imported virus spread in Nepal demonstrates that high polio vaccination coverage can mitigate the potential consequences of importation. WHO estimated routine coverage with 3 doses of OPV by age 12 months in 2007 was 91% for Nepal, 36% for Chad, and 79% for Niger.<sup>§</sup> Gaps in genetic information linking WPV isolates to their most closely related ancestor are interpreted as weaknesses in AFP surveillance. Substantial sequence gaps existed for viruses detected in Chad in 2007 and southern Sudan and Ethiopia in 2008. Such laboratory data are used to identify and address reasons for suboptimal surveillance performance.

In Nigeria and Myanmar, locations overlapped where WPV and cVDPVs were found. In Nigeria, type 2 VDPVs cocirculated with WPV1 and WPV3, indicating serious problems with vaccination coverage. In Myanmar, local gaps in OPV coverage in 2007 allowed imported WPV1 to spread and type 1 cVDPV to emerge before both outbreaks were controlled.

GPLN has reduced laboratory reporting time in polio-endemic regions by approximately 50% by implementing new test algorithms and increasing ITD testing capacity. The latter strategy required investments in staff training and equipment that will be offset by reductions in costly intercountry shipments of specimens. In some facilities, equipment provided for ITD testing also can be used for laboratory diagnosis of other vaccine-preventable diseases.

<sup>§</sup> Available at <http://www.who.int/vaccines/globalsummary/immunization/countryprofileselect.cfm>.

#### References

1. CDC. Laboratory surveillance for wild and vaccine-derived polioviruses—worldwide, January 2006–June 2007. *MMWR* 2007;56:965–9.
2. CDC. Update on vaccine-derived polioviruses—worldwide, January 2006–August 2007. *MMWR* 2007;56:996–1001.
3. Kew OM, Sutter RW, de Gourville EM, Dowdle WR, Pallansch MA. Vaccine-derived polioviruses and the endgame strategy for global polio eradication. *Annu Rev Microbiol* 2005;59:587–635.

4. CDC. Progress toward interruption of wild poliovirus transmission—worldwide, January 2007–April 2008. *MMWR* 2008;57:489–94.
5. CDC. Progress toward poliomyelitis eradication—India, January 2006–September 2007. *MMWR* 2007;45:1187–91.
6. CDC. Progress toward poliomyelitis eradication—Pakistan and Afghanistan, 2007. *MMWR* 2008;57:315–9.
7. CDC. Progress toward poliomyelitis eradication—Nigeria, January 2007–August 12, 2008. *MMWR* 2008;57:942–6.

#### Notice to Readers

### **National Gynecologic Cancer Awareness Month — September 2008**

September is National Gynecologic Cancer Awareness Month. This observance is intended to increase awareness of gynecologic cancers, thus enabling early detection, appropriate treatment, and a greater chance for recovery. In 2004 (the most recent year for which data are available), approximately 73,000 women in the United States were diagnosed with a cancer affecting the reproductive organs, and approximately 27,000 women died from some form of gynecologic cancer (1).

To raise awareness about the five major gynecologic cancers (cervical, ovarian, uterine, vaginal, and vulvar), CDC, in collaboration with the U.S. Department of Health and Human Services' Office on Women's Health, established the Inside Knowledge: Get the Facts about Gynecologic Cancer campaign. This campaign aims to communicate 1) the importance of finding gynecologic cancers early, when treatment is most effective, and 2) the need for women to pay attention to their bodies and know what is normal for them, so that they can recognize the warning signs of gynecologic cancers. This campaign also supports the Gynecologic Education and Awareness Act of 2005, or Johanna's Law. Additional information about the Inside Knowledge campaign is available at <http://www.cdc.gov/cancer/knowledge>.

#### **Reference**

1. US Cancer Statistics Working Group. United States cancer statistics: 2004 incidence and mortality. Atlanta, GA: Department of Health and Human Services, CDC, National Cancer Institute; 2007. Available at [http://www.cdc.gov/cancer/npcr/npcrpdfs/us\\_cancer\\_statistics\\_2004\\_incidence\\_and\\_mortality.pdf](http://www.cdc.gov/cancer/npcr/npcrpdfs/us_cancer_statistics_2004_incidence_and_mortality.pdf).

#### Notice to Readers

### **Public Health Informatics Fellowship Application Deadline — November 14, 2008**

CDC offers a 2-year postgraduate fellowship in public health informatics, the systematic application of information technology to public health practice, research, and learning. Fellows receive training in both informatics and public

health, are assigned to teams involved in research and development of CDC information systems, and are given the opportunity to lead one or more major projects during their fellowships.

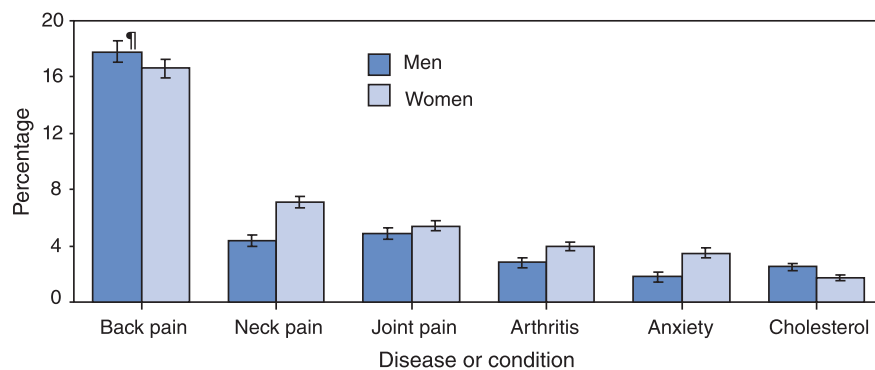
The deadline to apply for the fellowship period beginning July 2009 is November 14, 2008. All supporting documents must be received by the Public Health Informatics Fellowship office by November 21, 2008.

Additional information regarding the application process is available at <http://www.cdc.gov/epo/phifp/appinfo.htm>. Additional information regarding the program is available at <http://www.cdc.gov/epo/phifp>, by telephone, 404-498-6219, or by e-mail, [phifp@cdc.gov](mailto:phifp@cdc.gov) (subject line: request info).

## QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Percentage of Adults Aged $\geq 18$ Years Who Used Complementary and Alternative Medicine (CAM),\* by Selected Diseases and Conditions<sup>†</sup> and Sex — National Health Interview Survey, United States, 2007<sup>§</sup>



\* A group of diverse health-care systems, practices, and products not presently considered to be part of conventional medicine. CAM includes acupuncture; ayurveda; homeopathic treatment; naturopathy; traditional healers; chelation therapy; nonvitamin, nonmineral, natural products; diet-based therapies; chiropractic or osteopathic manipulation; massage; movement therapies; biofeedback; meditation; guided imagery; progressive relaxation; deep-breathing exercises; hypnosis; yoga; tai chi; qi gong; and energy healing therapy. Respondents might have reported using more than one type of CAM.

<sup>†</sup> Respondents were asked: "Did you use (specific CAM therapy) for a specific health problem or condition?" and "For what health problems or conditions did you use (specific CAM therapy)?"

<sup>§</sup> Estimates were age adjusted using the projected 2000 U.S. population as the standard population and four age groups: 18–24 years, 25–44 years, 45–64 years, and  $\geq 65$  years. Estimates were based on household interviews of a sample of the civilian, noninstitutionalized U.S. population. Persons with unknown CAM information were excluded from the denominators.

<sup>†</sup> 95% confidence interval.

In 2007, approximately 38% of adults aged  $\geq 18$  years reported using CAM during the preceding 12 months. Women (43%) were more likely than men (34%) to use CAM, and men and women differed in their use of CAM for certain conditions. Women were more likely than men to use CAM for neck pain, arthritis, and anxiety; men were more likely than women to use CAM to reduce cholesterol.

**SOURCE:** National Health Interview Survey, 2007. Available at <http://www.cdc.gov/nchs/nhis.htm>.

**TABLE 1. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 30, 2008 (35th week)\***

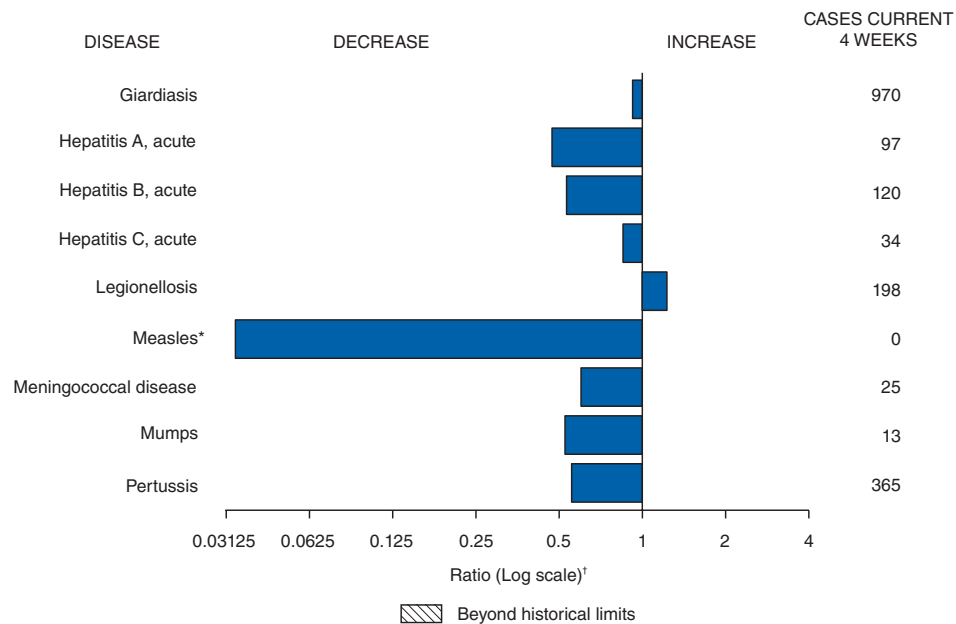
Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2007	2006	2005	2004	2003	
Anthrax	—	—	0	1	1	—	—	—	
Botulism:									
foodborne	—	6	1	32	20	19	16	20	
infant	—	57	2	85	97	85	87	76	
other (wound & unspecified)	—	11	1	27	48	31	30	33	
Brucellosis	1	50	2	131	121	120	114	104	NC (1)
Chancroid	—	24	0	23	33	17	30	54	
Cholera	—	—	0	7	9	8	6	2	
Cyclosporiasis§	3	101	2	93	137	543	160	75	MI (1), FL (1), TN (1)
Diphtheria	—	—	—	—	—	—	—	1	
Domestic arboviral diseases§,¶:									
California serogroup	—	18	6	55	67	80	112	108	
eastern equine	—	1	1	4	8	21	6	14	
Powassan	—	—	0	7	1	1	1	—	
St. Louis	—	5	2	9	10	13	12	41	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
<i>Ehrlichia chaffeensis</i>	8	453	14	828	578	506	338	321	MD (1), VA (1), GA (1), TN (5)
<i>Ehrlichia ewingii</i>	—	5	—	—	—	—	—	—	
<i>Anaplasma phagocytophilum</i>	—	174	15	834	646	786	537	362	
undetermined	1	47	4	337	231	112	59	44	TN (1)
<i>Haemophilus influenzae</i> ,††									
invasive disease (age <5 yrs):									
serotype b	—	17	0	22	29	9	19	32	
nonserotype b	3	110	3	199	175	135	135	117	CT (1), MD (1), GA (1)
unknown serotype	—	139	3	180	179	217	177	227	
Hansen disease§	—	43	1	101	66	87	105	95	
Hantavirus pulmonary syndrome§	—	9	0	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	—	105	8	292	288	221	200	178	
Hepatitis C viral, acute	4	539	15	849	766	652	720	1,102	NY (1), MI (2), GA (1)
HIV infection, pediatric (age <13 years)§§	—	—	3	—	—	380	436	504	
Influenza-associated pediatric mortality§,¶¶	—	88	0	77	43	45	—	N	
Listeriosis	3	377	22	808	884	896	753	696	NY (1), FL (2)
Measles***	—	126	1	43	55	66	37	56	
Meningococcal disease, invasive†††:									
A, C, Y, & W-135	2	198	4	325	318	297	—	—	TX (2)
serogroup B	2	114	2	167	193	156	—	—	NY (1), IN (1)
other serogroup	—	24	0	35	32	27	—	—	
unknown serogroup	2	437	9	550	651	765	—	—	PA (2)
Mumps	4	276	12	800	6,584	314	258	231	NY (3), AK (1)
Novel influenza A virus infections	—	—	0	1	N	N	N	N	
Plague	—	1	0	7	17	8	3	1	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Polio virus infection, nonparalytic§	—	—	—	—	N	N	N	N	
Psittacosis§	—	7	0	12	21	16	12	12	
Qfever§,§§§ total:	—	73	3	171	169	136	70	71	
acute	—	67	—	—	—	—	—	—	
chronic	—	6	—	—	—	—	—	—	
Rabies, human	—	—	0	1	3	2	7	2	
Rubella¶¶¶	—	10	0	12	11	11	10	7	
Rubella, congenital syndrome	—	—	—	—	1	1	—	1	
SARS-CoV§,****	—	—	—	—	—	—	—	8	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	100	1	132	125	129	132	161	
Syphilis, congenital (age <1 yr)	—	129	7	430	349	329	353	413	
Tetanus	—	7	1	28	41	27	34	20	
Toxic-shock syndrome (staphylococcal)§	1	44	2	92	101	90	95	133	MI (1)
Trichinellosis	—	5	0	5	15	16	5	6	
Tularemia	—	71	4	137	95	154	134	129	
Typhoid fever	9	245	11	434	353	324	322	356	PA (1), OH (1), MI (1), MD (1), FL (2), TX (2), WA (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> §	—	6	0	28	6	2	—	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> §	—	—	—	2	1	3	1	N	
Vibriosis (noncholera <i>Vibrio</i> species infections)§	10	228	9	447	N	N	N	N	FL (6), WA (4)
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

**TABLE 1. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 30, 2008 (35th week)\***

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.  
 \* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.  
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at <http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf>.  
 § Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.  
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.  
 \*\* The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).  
 †† Data for *H. influenzae* (all ages, all serotypes) are available in Table II.  
 §§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.  
 ¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Eighty-six cases occurring during the 2007–08 influenza season have been reported.  
 \*\*\* No measles cases were reported for the current week.  
 ††† Data for meningococcal disease (all serogroups) are available in Table II.  
 §§§ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.  
 ¶¶¶ No rubella cases were reported for the current week.  
 \*\*\*\* Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 30, 2008, with historical data**



\* No measles cases were reported for the current 4-week period yielding a ratio for week 35 of zero.  
 † Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

**Notifiable Disease Data Team and 122 Cities Mortality Data Team**  
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 Willie J. Anderson      Michael S. Wodajo  
 Lenee Blanton      Pearl C. Sharp

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 30, 2008, and September 1, 2007 (35th Week)\*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	7,373	21,005	28,892	693,166	731,530	—	126	341	4,249	5,105	162	103	983	3,443	5,348
<b>New England</b>	350	673	1,516	23,590	23,629	—	0	1	1	2	6	5	24	220	208
Connecticut	—	205	1,093	6,831	7,118	N	0	0	N	N	—	0	22	22	42
Maine§	—	49	73	1,591	1,709	N	0	0	N	N	1	1	5	25	33
Massachusetts	334	320	660	11,678	10,614	N	0	0	N	N	5	2	11	91	68
New Hampshire	6	38	73	1,308	1,391	—	0	1	1	2	—	1	4	39	36
Rhode Island§	—	55	98	1,755	2,116	—	0	0	—	—	—	0	3	5	6
Vermont§	10	17	44	427	681	N	0	0	N	N	—	1	4	38	23
<b>Mid. Atlantic</b>	2,658	2,795	5,039	98,192	94,679	—	0	0	—	—	24	13	108	440	845
New Jersey	224	406	521	12,646	14,459	N	0	0	N	N	—	0	6	10	39
New York (Upstate)	536	575	2,177	18,261	17,216	N	0	0	N	N	19	5	20	161	120
New York City	1,342	1,012	3,099	39,043	34,024	N	0	0	N	N	—	2	8	59	62
Pennsylvania	556	807	1,047	28,242	28,980	N	0	0	N	N	5	6	84	210	624
<b>E.N. Central</b>	1,234	3,554	4,466	114,549	119,614	—	1	3	34	24	65	23	134	908	974
Illinois	—	1,038	1,711	31,064	34,660	N	0	0	N	N	—	2	13	55	113
Indiana	294	379	656	13,506	14,085	N	0	0	N	N	9	3	41	125	50
Michigan	785	779	1,226	29,900	25,217	—	0	3	25	18	1	5	9	150	125
Ohio	155	881	1,530	28,870	32,494	—	0	1	9	6	55	6	60	332	237
Wisconsin	—	365	615	11,209	13,158	N	0	0	N	N	—	8	59	246	449
<b>W.N. Central</b>	545	1,233	1,700	42,251	42,111	—	0	77	1	6	17	18	111	542	816
Iowa	—	160	240	5,614	5,811	N	0	0	N	N	11	5	61	165	335
Kansas	237	164	529	6,212	5,389	N	0	0	N	N	3	1	15	48	62
Minnesota	—	255	373	7,960	9,009	—	0	77	—	—	—	5	34	119	109
Missouri	308	473	567	16,214	15,539	—	0	1	1	6	—	3	13	97	95
Nebraska§	—	94	253	3,292	3,524	N	0	0	N	N	3	2	24	72	79
North Dakota	—	34	65	1,128	1,124	N	0	0	N	N	—	0	51	3	13
South Dakota	—	54	81	1,831	1,715	N	0	0	N	N	—	1	13	38	123
<b>S. Atlantic</b>	1,364	3,848	7,609	121,793	144,118	—	0	1	2	3	29	18	65	508	667
Delaware	60	66	150	2,484	2,353	—	0	1	1	—	—	0	4	9	12
District of Columbia	—	129	216	4,489	3,993	—	0	1	—	1	—	0	2	5	1
Florida	1,294	1,317	1,553	46,168	37,505	N	0	0	N	N	23	8	35	254	323
Georgia	3	482	1,338	9,133	28,750	N	0	0	N	N	2	4	14	128	148
Maryland§	—	458	667	14,597	14,397	—	0	1	1	2	2	0	4	11	21
North Carolina	—	163	4,783	5,901	19,457	N	0	0	N	N	—	0	18	16	55
South Carolina§	—	431	3,056	16,985	18,619	N	0	0	N	N	1	1	15	27	52
Virginia§	—	534	1,062	20,015	16,891	N	0	0	N	N	1	1	5	46	50
West Virginia	7	59	96	2,021	2,153	N	0	0	N	N	—	0	5	12	5
<b>E.S. Central</b>	559	1,555	2,394	53,915	55,537	—	0	0	—	—	2	4	64	95	277
Alabama	34	473	589	15,409	17,095	N	0	0	N	N	1	2	14	41	51
Kentucky	—	232	370	7,511	5,200	N	0	0	N	N	—	1	40	21	128
Mississippi	—	369	1,048	12,795	14,918	N	0	0	N	N	—	0	11	11	48
Tennessee§	525	522	788	18,200	18,324	N	0	0	N	N	1	1	18	22	50
<b>W.S. Central</b>	483	2,713	4,426	94,341	82,492	—	0	1	2	2	12	6	37	159	208
Arkansas§	324	266	455	9,631	6,212	N	0	0	N	N	—	1	8	30	23
Louisiana	—	382	729	12,605	13,470	—	0	1	2	2	—	1	5	25	42
Oklahoma	159	209	392	6,868	8,974	N	0	0	N	N	12	1	9	55	59
Texas§	—	1,867	3,923	65,237	53,836	N	0	0	N	N	—	2	28	49	84
<b>Mountain</b>	99	1,348	1,811	39,723	49,534	—	89	170	2,874	3,221	2	10	567	311	1,041
Arizona	—	473	650	14,678	16,696	—	86	168	2,808	3,122	—	1	9	56	30
Colorado	—	256	488	5,748	11,752	N	0	0	N	N	—	2	26	70	99
Idaho§	—	60	314	2,579	2,412	N	0	0	N	N	1	2	71	39	64
Montana§	—	53	363	1,947	1,819	N	0	0	N	N	1	1	7	35	44
Nevada§	—	182	416	5,925	6,471	—	1	7	41	42	—	0	6	9	10
New Mexico§	—	139	561	3,967	6,018	—	0	3	19	18	—	2	10	73	81
Utah	99	120	209	3,962	3,558	—	0	7	4	36	—	1	484	20	677
Wyoming§	—	25	58	917	808	—	0	1	2	3	—	0	4	9	36
<b>Pacific</b>	81	3,321	4,676	104,812	119,816	—	31	217	1,335	1,847	5	9	37	260	312
Alaska	81	93	129	3,078	3,308	N	0	0	N	N	—	0	1	3	3
California	—	2,821	4,115	92,606	93,389	—	31	217	1,335	1,847	—	5	19	152	170
Hawaii	—	108	151	3,470	3,818	N	0	0	N	N	—	0	1	1	5
Oregon§	—	175	402	5,545	6,523	N	0	0	N	N	—	1	11	42	85
Washington	—	0	498	113	12,778	N	0	0	N	N	5	2	16	62	49
American Samoa	—	0	22	73	73	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	9	26	103	568	—	0	0	—	—	—	0	0	—	—
Puerto Rico	116	122	612	4,910	5,151	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	20	42	678	123	—	0	0	—	—	—	0	0	—	—

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

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

\* Incidence data for reporting years 2007 and 2008 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 30, 2008, and September 1, 2007 (35th Week)\*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	170	301	1,158	10,120	11,072	2,037	6,035	8,913	194,667	235,755	25	48	173	1,756	1,711
<b>New England</b>	12	25	58	848	890	48	103	227	3,365	3,761	3	3	12	116	126
Connecticut	—	6	18	178	221	—	50	199	1,545	1,438	3	0	9	29	29
Maine§	9	3	9	107	115	—	2	6	60	91	—	0	3	9	8
Massachusetts	2	11	22	343	397	46	41	127	1,455	1,797	—	2	5	57	65
New Hampshire	—	2	4	72	19	1	2	6	71	106	—	0	1	8	15
Rhode Island§	—	1	15	57	32	—	6	13	212	284	—	0	1	5	7
Vermont§	1	3	9	91	106	1	1	5	22	45	—	0	3	8	2
<b>Mid. Atlantic</b>	47	56	131	1,810	1,919	599	624	1,028	22,041	24,436	8	10	31	355	331
New Jersey	—	6	15	132	258	70	105	170	3,399	4,047	—	1	7	53	51
New York (Upstate)	25	23	111	699	675	102	127	545	4,087	4,187	6	3	22	104	92
New York City	7	15	29	505	547	285	175	518	6,930	7,353	—	1	6	61	69
Pennsylvania	15	15	29	474	439	142	230	394	7,625	8,849	2	4	9	137	119
<b>E.N. Central</b>	24	48	100	1,604	1,815	422	1,284	1,626	40,257	48,686	4	8	28	265	267
Illinois	—	11	32	349	577	—	346	589	10,235	12,905	—	2	7	75	84
Indiana	N	0	0	N	N	115	152	296	5,454	5,968	3	1	20	56	43
Michigan	3	11	21	348	405	256	301	657	11,058	10,373	—	0	3	14	22
Ohio	21	16	36	553	510	51	319	685	10,446	14,920	1	2	6	99	77
Wisconsin	—	11	48	354	323	—	113	214	3,064	4,520	—	1	4	21	41
<b>W.N. Central</b>	8	29	621	1,144	763	156	327	435	10,860	13,393	2	3	24	131	96
Iowa	1	6	24	191	173	—	29	53	954	1,325	—	0	1	2	1
Kansas	3	3	11	93	96	69	41	130	1,519	1,569	—	0	4	14	10
Minnesota	—	0	575	343	6	—	59	92	1,841	2,304	—	0	21	35	35
Missouri	—	9	22	303	323	87	159	216	5,358	6,948	—	1	6	51	33
Nebraska§	4	4	10	135	90	—	26	47	915	999	2	0	3	21	14
North Dakota	—	0	36	14	11	—	2	7	66	72	—	0	2	8	3
South Dakota	—	1	9	65	64	—	5	15	207	176	—	0	0	—	—
<b>S. Atlantic</b>	30	55	102	1,582	1,891	443	1,286	3,072	41,511	54,894	6	11	29	412	430
Delaware	—	1	6	25	25	15	21	44	762	922	—	0	2	6	5
District of Columbia	—	1	5	34	45	—	48	104	1,662	1,604	—	0	1	7	3
Florida	16	23	47	775	811	420	470	549	15,612	15,458	2	3	10	131	115
Georgia	—	12	25	367	410	—	210	561	3,437	11,729	3	2	10	107	83
Maryland§	5	1	18	52	163	—	119	188	3,944	4,359	1	0	3	10	65
North Carolina	N	0	0	N	N	—	93	1,949	2,638	9,092	—	1	9	54	43
South Carolina§	1	3	7	75	68	—	182	833	6,214	7,046	—	1	7	38	37
Virginia§	8	8	39	226	349	—	154	486	6,756	4,042	—	1	6	43	61
West Virginia	—	0	8	28	20	8	15	34	486	642	—	0	3	16	18
<b>E.S. Central</b>	7	9	23	278	336	209	566	945	19,556	21,558	2	2	8	92	99
Alabama§	1	5	11	156	167	7	188	287	6,087	7,396	—	0	2	15	22
Kentucky	N	0	0	N	N	—	90	161	2,960	1,994	—	0	1	2	6
Mississippi	N	0	0	N	N	—	131	401	4,703	5,596	—	0	2	11	7
Tennessee§	6	4	16	122	169	202	166	295	5,806	6,572	2	2	6	64	64
<b>W.S. Central</b>	13	7	41	241	257	148	1,006	1,355	32,395	34,297	—	2	29	84	75
Arkansas§	5	3	11	89	91	107	86	167	3,144	2,804	—	0	3	7	8
Louisiana	—	2	7	72	83	—	178	297	5,548	7,808	—	0	2	7	4
Oklahoma	8	3	35	80	83	41	83	134	2,651	3,437	—	1	21	64	56
Texas§	N	0	0	N	N	—	642	1,102	21,052	20,248	—	0	3	6	7
<b>Mountain</b>	9	30	68	864	1,034	6	224	335	6,756	9,283	—	5	14	214	184
Arizona	—	3	11	80	123	—	74	115	2,116	3,454	—	2	11	94	70
Colorado	—	11	26	329	328	—	56	86	1,853	2,293	—	1	4	40	45
Idaho§	7	3	19	122	110	—	4	18	112	173	—	0	4	12	4
Montana§	2	2	9	59	59	—	1	48	66	51	—	0	1	2	1
Nevada§	—	2	6	69	98	—	43	130	1,451	1,582	—	0	1	12	9
New Mexico§	—	2	5	52	81	—	24	104	725	1,137	—	0	4	24	29
Utah	—	5	32	139	207	6	12	36	356	542	—	0	6	28	22
Wyoming§	—	0	3	14	28	—	2	9	77	51	—	0	1	2	4
<b>Pacific</b>	20	55	185	1,749	2,167	6	588	809	17,926	25,447	—	2	7	87	103
Alaska	3	2	5	58	46	6	11	24	342	367	—	0	4	13	8
California	—	35	91	1,148	1,485	—	532	683	16,492	21,336	—	0	3	20	39
Hawaii	—	1	5	22	58	—	12	22	383	440	—	0	2	14	8
Oregon§	—	9	19	279	284	—	23	63	692	768	—	1	4	37	46
Washington	17	9	87	242	294	—	0	97	17	2,536	—	0	3	3	2
American Samoa	—	0	0	—	—	—	0	1	3	3	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	2	—	1	12	45	91	—	0	1	—	—
Puerto Rico	—	2	31	60	229	4	5	24	196	228	—	0	0	—	2
U.S. Virgin Islands	—	0	0	—	—	—	4	12	128	31	N	0	0	N	N

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

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

\* Incidence data for reporting years 2007 and 2008 are provisional.

† 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 30, 2008, and September 1, 2007 (35th Week)\***

Reporting area	Hepatitis (viral, acute), by type†										Legionellosis				
	A					B									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	21	51	171	1,659	1,924	31	71	259	2,216	2,864	41	54	125	1,660	1,567
<b>New England</b>	1	2	7	79	84	1	1	7	42	81	3	3	11	81	97
Connecticut	—	0	3	18	10	—	0	7	15	27	3	0	5	26	25
Maine§	1	0	1	5	2	1	0	2	10	5	—	0	2	5	3
Massachusetts	—	1	5	38	46	—	0	3	9	33	—	0	3	13	28
New Hampshire	—	0	2	6	10	—	0	1	4	4	—	0	3	16	4
Rhode Island§	—	0	2	10	9	—	0	2	3	11	—	0	5	16	30
Vermont§	—	0	1	2	7	—	0	1	1	1	—	0	1	5	7
<b>Mid. Atlantic</b>	4	6	16	187	308	3	10	18	302	362	21	15	50	538	490
New Jersey	—	1	6	38	89	—	3	7	95	104	—	1	13	43	72
New York (Upstate)	2	1	6	41	49	2	2	7	46	54	12	4	19	182	118
New York City	—	2	7	64	107	—	2	6	57	80	—	2	10	52	109
Pennsylvania	2	1	6	44	63	1	3	7	104	124	9	6	31	261	191
<b>E.N. Central</b>	1	6	16	209	232	3	7	18	236	309	10	12	36	389	359
Illinois	—	2	10	64	88	—	1	6	53	97	—	1	16	23	84
Indiana	—	0	4	13	12	—	0	8	23	29	—	1	7	34	33
Michigan	—	2	7	82	59	1	2	5	78	78	—	3	16	107	100
Ohio	1	1	4	29	48	2	2	7	76	88	10	5	18	196	123
Wisconsin	—	0	3	21	25	—	0	1	6	17	—	1	7	29	19
<b>W.N. Central</b>	—	5	29	199	122	—	2	9	64	83	—	2	8	71	71
Iowa	—	1	7	89	35	—	0	2	9	17	—	0	2	8	9
Kansas	—	0	3	10	5	—	0	2	5	7	—	0	1	1	7
Minnesota	—	0	23	26	49	—	0	5	5	14	—	0	4	9	15
Missouri	—	0	3	33	17	—	1	4	39	30	—	1	5	36	30
Nebraska§	—	1	5	39	11	—	0	1	5	10	—	0	4	16	7
North Dakota	—	0	2	—	—	—	0	1	1	—	—	0	2	—	—
South Dakota	—	0	1	2	5	—	0	1	—	5	—	0	1	1	3
<b>S. Atlantic</b>	10	7	15	230	328	9	15	60	519	691	3	8	28	249	258
Delaware	—	0	1	6	4	—	0	3	7	14	—	0	2	7	7
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	1	9	9
Florida	8	3	8	102	97	6	6	12	218	231	2	3	10	96	95
Georgia	—	1	4	29	52	1	3	8	86	104	1	0	3	17	25
Maryland§	—	0	3	9	55	—	0	6	11	78	—	1	10	54	46
North Carolina	1	0	9	47	37	—	0	17	52	89	—	0	7	14	31
South Carolina§	—	0	2	7	14	—	1	6	41	44	—	0	2	8	11
Virginia§	1	1	5	27	64	2	2	16	73	98	—	1	6	33	29
West Virginia	—	0	2	3	5	—	0	30	31	33	—	0	3	11	5
<b>E.S. Central</b>	3	1	9	55	74	1	7	13	226	250	2	2	10	83	66
Alabama§	—	0	4	8	15	—	2	5	61	88	—	0	2	11	7
Kentucky	1	0	3	20	15	—	2	5	62	48	—	1	4	40	34
Mississippi	—	0	2	4	7	1	0	3	25	24	—	0	1	1	—
Tennessee§	2	1	6	23	37	—	2	8	78	90	2	1	5	31	25
<b>W.S. Central</b>	1	5	55	166	151	11	15	131	454	595	1	1	23	49	80
Arkansas§	—	0	1	5	9	—	1	4	30	56	—	0	2	9	6
Louisiana	—	0	2	9	24	—	1	4	52	71	—	0	1	6	4
Oklahoma	—	0	7	7	3	5	3	37	75	32	—	0	3	3	4
Texas§	1	5	53	145	115	6	9	107	297	436	1	1	18	31	66
<b>Mountain</b>	1	4	9	144	167	1	3	11	129	149	—	2	5	49	68
Arizona	—	2	8	75	114	—	1	4	39	66	—	0	5	14	21
Colorado	—	0	3	27	20	—	0	3	20	22	—	0	2	3	17
Idaho§	1	0	3	17	3	1	0	2	6	9	—	0	1	3	4
Montana§	—	0	1	—	8	—	0	1	—	—	—	0	1	3	3
Nevada§	—	0	2	5	9	—	1	3	30	33	—	0	2	8	6
New Mexico§	—	0	3	15	6	—	0	2	8	10	—	0	1	4	8
Utah	—	0	2	2	5	—	0	5	23	5	—	0	3	14	6
Wyoming§	—	0	1	3	2	—	0	1	3	4	—	0	0	—	3
<b>Pacific</b>	—	11	51	390	458	2	9	30	244	344	1	4	18	151	78
Alaska	—	0	1	2	3	1	0	2	9	4	—	0	1	1	—
California	—	9	42	320	397	—	6	19	166	254	—	3	14	119	59
Hawaii	—	0	1	7	5	—	0	2	4	10	—	0	1	4	1
Oregon§	—	1	3	23	20	—	1	3	30	41	—	0	2	11	6
Washington	—	1	7	38	33	1	1	9	35	35	1	0	3	16	12
American Samoa	—	0	0	—	—	—	0	0	—	14	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	2	—	0	0	—	—
Puerto Rico	—	0	4	13	52	—	1	5	26	52	—	0	1	1	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.  
 U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.  
 \* Incidence data for reporting years 2007 and 2008 are provisional.  
 † Data for acute hepatitis C, viral 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 30, 2008, and September 1, 2007 (35th Week)\*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	87	145	849	4,923	6,584	52	84	166	2,711	4,194	44	29	195	1,286	1,385
<b>New England</b>	—	19	49	490	1,012	9	7	20	238	382	—	0	1	2	7
Connecticut	—	0	4	—	62	5	3	17	130	164	—	0	0	—	—
Maine†	—	1	5	21	54	1	1	5	33	57	N	0	0	N	N
Massachusetts	—	16	33	420	807	N	0	0	N	N	—	0	1	1	7
New Hampshire	—	0	4	22	54	3	1	3	28	37	—	0	1	1	—
Rhode Island†	—	0	25	19	8	N	0	0	N	N	—	0	0	—	—
Vermont†	—	0	6	8	27	—	2	6	47	124	—	0	0	—	—
<b>Mid. Atlantic</b>	27	20	43	583	856	20	19	32	705	701	—	1	5	46	59
New Jersey	—	0	9	4	151	—	0	0	—	—	—	0	2	2	22
New York (Upstate)	17	6	24	270	413	20	9	20	344	357	—	0	3	15	6
New York City	—	2	7	45	88	—	0	2	11	32	—	0	2	14	21
Pennsylvania	10	9	23	264	204	—	9	23	350	312	—	0	2	15	10
<b>E.N. Central</b>	14	19	190	842	1,160	11	5	33	165	294	2	1	8	71	42
Illinois	—	3	9	107	123	4	1	18	73	86	—	1	7	47	27
Indiana	4	0	12	35	47	—	0	1	4	9	1	0	1	5	5
Michigan	2	4	16	137	205	4	1	25	52	147	—	0	1	3	3
Ohio	8	6	176	514	511	3	1	5	36	52	1	0	4	16	6
Wisconsin	—	2	9	49	274	N	0	0	N	N	—	0	0	—	1
<b>W.N. Central</b>	2	12	142	420	456	1	4	12	107	201	—	4	31	285	278
Iowa	—	1	5	35	119	1	0	3	15	23	—	0	2	3	13
Kansas	—	1	5	31	79	—	0	7	—	91	—	0	2	—	11
Minnesota	—	1	131	144	104	—	0	7	35	20	—	0	4	—	1
Missouri	—	3	18	141	60	—	0	8	33	33	—	3	31	265	238
Nebraska†	2	1	12	59	33	—	0	0	—	—	—	0	4	14	11
North Dakota	—	0	5	1	7	—	0	8	17	18	—	0	0	—	—
South Dakota	—	0	2	9	54	—	0	2	7	16	—	0	1	3	4
<b>S. Atlantic</b>	27	13	50	488	656	8	35	94	1,176	1,536	41	9	109	454	626
Delaware	—	0	2	7	9	—	0	0	—	—	—	0	3	21	12
District of Columbia	—	0	1	3	8	—	0	0	—	—	—	0	2	7	2
Florida	20	3	17	174	164	—	0	77	90	128	1	0	4	13	8
Georgia	—	1	4	39	29	—	7	16	228	197	3	0	8	40	53
Maryland†	5	1	6	29	82	—	0	17	52	293	2	1	6	30	40
North Carolina	—	0	38	79	213	6	9	16	325	338	34	0	96	223	390
South Carolina†	—	2	22	72	56	—	0	0	—	46	1	0	4	22	45
Virginia†	2	2	8	81	83	—	12	27	416	488	—	1	12	95	74
West Virginia	—	0	12	4	12	2	1	11	65	46	—	0	3	3	2
<b>E.S. Central</b>	2	6	23	187	338	3	2	7	82	115	1	4	21	188	207
Alabama†	—	1	6	27	63	—	0	0	—	—	—	1	8	47	66
Kentucky	1	1	8	53	19	3	0	4	32	15	—	0	1	1	5
Mississippi	—	2	14	63	191	—	0	1	2	1	—	0	3	4	12
Tennessee†	1	1	4	44	65	—	1	6	48	99	1	2	17	136	124
<b>W.S. Central</b>	1	19	198	716	752	—	3	40	75	735	—	2	153	215	135
Arkansas†	1	1	11	47	141	—	1	6	43	24	—	0	14	44	59
Louisiana	—	0	4	32	16	—	0	2	—	4	—	0	1	3	4
Oklahoma	—	0	26	30	4	—	0	32	31	45	—	0	132	142	45
Texas†	—	17	179	607	591	—	0	34	1	662	—	1	8	26	27
<b>Mountain</b>	4	18	37	544	765	—	1	7	45	61	—	0	3	21	28
Arizona	—	3	10	130	168	N	0	0	N	N	—	0	2	8	6
Colorado	—	4	13	102	211	—	0	0	—	—	—	0	2	1	1
Idaho†	—	0	4	20	36	—	0	2	—	6	—	0	1	1	4
Montana†	4	1	11	71	35	—	0	2	7	14	—	0	1	3	1
Nevada†	—	0	7	22	33	—	0	2	3	9	—	0	1	1	—
New Mexico†	—	1	5	29	57	—	0	3	21	8	—	0	1	2	4
Utah	—	6	27	161	206	—	0	2	3	10	—	0	0	—	—
Wyoming†	—	0	2	9	19	—	0	4	11	14	—	0	2	5	12
<b>Pacific</b>	10	21	303	653	589	—	3	12	118	169	—	0	1	4	3
Alaska	2	1	29	101	40	—	0	4	12	37	N	0	0	N	N
California	—	8	129	233	319	—	3	12	100	125	—	0	1	1	1
Hawaii	—	0	2	6	17	—	0	0	—	—	N	0	0	N	N
Oregon†	—	3	14	110	70	—	0	1	6	7	—	0	1	3	2
Washington	8	5	169	203	143	—	0	0	—	—	N	0	0	N	N
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	—	1	5	43	37	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

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

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

\* Incidence data for reporting years 2007 and 2008 are provisional.

† 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 30, 2008, and September 1, 2007 (35th Week)\*

Reporting area	Streptococcal diseases, invasive, group A					Streptococcal pneumoniae, invasive disease, nondrug resistant†				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max		
<b>United States</b>	39	93	259	3,833	3,936	6	37	166	1,087	1,191
<b>New England</b>	2	6	31	285	301	—	1	14	50	94
Connecticut	2	0	26	86	90	—	0	11	—	12
Maine§	—	0	3	20	21	—	0	1	1	1
Massachusetts	—	3	8	138	150	—	1	5	39	63
New Hampshire	—	0	2	18	23	—	0	1	7	8
Rhode Island§	—	0	8	12	2	—	0	1	2	8
Vermont§	—	0	2	11	15	—	0	1	1	2
<b>Mid. Atlantic</b>	9	18	43	795	744	—	4	19	137	212
New Jersey	—	3	11	130	136	—	1	6	28	43
New York (Upstate)	6	6	17	264	228	—	2	14	68	75
New York City	—	3	10	138	182	—	1	12	41	94
Pennsylvania	3	5	16	263	198	N	0	0	N	N
<b>E.N. Central</b>	5	19	63	831	779	1	6	23	227	212
Illinois	—	5	16	204	239	—	1	6	46	52
Indiana	1	2	11	105	90	—	0	14	27	13
Michigan	1	3	10	130	161	—	1	5	52	57
Ohio	3	5	14	215	185	1	1	5	40	44
Wisconsin	—	2	42	177	104	—	1	9	62	46
<b>W.N. Central</b>	—	4	39	292	258	—	2	16	89	60
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	6	39	27	—	0	3	14	—
Minnesota	—	0	35	130	124	—	0	13	34	35
Missouri	—	2	10	67	67	—	1	2	26	16
Nebraska§	—	0	3	30	20	—	0	3	6	8
North Dakota	—	0	5	10	13	—	0	2	4	1
South Dakota	—	0	2	16	7	—	0	1	5	—
<b>S. Atlantic</b>	7	19	34	672	932	2	6	13	163	207
Delaware	—	0	2	6	8	—	0	0	—	—
District of Columbia	—	0	4	20	16	—	0	1	1	2
Florida	3	6	11	190	219	1	1	4	44	42
Georgia	1	4	14	161	182	—	1	5	47	48
Maryland§	1	0	6	17	160	1	0	4	5	48
North Carolina	—	2	10	104	128	N	0	0	N	N
South Carolina§	2	1	5	48	82	—	1	4	36	28
Virginia§	—	3	12	103	117	—	0	6	25	32
West Virginia	—	0	3	23	20	—	0	1	5	7
<b>E.S. Central</b>	2	4	9	128	163	1	2	11	67	67
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	1	1	3	29	32	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	3	16	5
Tennessee§	1	3	7	99	131	1	2	9	51	62
<b>W.S. Central</b>	13	8	85	337	236	2	5	66	174	164
Arkansas§	—	0	2	4	17	—	0	2	4	9
Louisiana	—	0	2	11	14	—	0	2	6	29
Oklahoma	3	2	19	84	54	—	1	7	49	35
Texas§	10	6	65	238	151	2	3	58	115	91
<b>Mountain</b>	—	10	22	389	424	—	5	12	168	162
Arizona	—	3	9	144	158	—	2	8	85	81
Colorado	—	2	8	108	108	—	1	4	46	31
Idaho§	—	0	2	11	12	—	0	1	3	2
Montana§	N	0	0	N	N	—	0	1	4	1
Nevada§	—	0	2	8	2	N	0	0	N	N
New Mexico§	—	2	7	72	72	—	0	3	14	27
Utah	—	1	5	40	67	—	0	3	15	20
Wyoming§	—	0	2	6	5	—	0	1	1	—
<b>Pacific</b>	1	3	10	104	99	—	0	2	12	13
Alaska	1	0	4	27	20	N	0	0	N	N
California	—	0	0	—	—	N	0	0	N	N
Hawaii	—	2	10	77	79	—	0	2	12	13
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	12	30	4	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	3	—	10	—	0	0	—	—
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N

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

\* Incidence data for reporting years 2007 and 2008 are provisional.

† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 30, 2008, and September 1, 2007 (35th Week)\*

Reporting area	<i>Streptococcus pneumoniae</i> , invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	23	58	307	2,024	2,117	3	9	43	291	349	75	232	351	7,549	7,214
<b>New England</b>	1	1	49	36	99	1	0	8	6	12	2	6	14	205	172
Connecticut	—	0	44	—	55	—	0	7	—	4	—	0	6	20	24
Maine§	1	0	2	15	10	1	0	1	2	1	—	0	2	8	5
Massachusetts	—	0	0	—	2	—	0	0	—	2	2	4	11	150	98
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	2	11	21
Rhode Island§	—	0	3	9	18	—	0	1	2	3	—	0	5	13	22
Vermont§	—	0	2	12	14	—	0	1	2	2	—	0	5	3	2
<b>Mid. Atlantic</b>	3	3	13	183	123	—	0	2	17	22	26	32	49	1,137	1,055
New Jersey	—	0	0	—	—	—	0	0	—	—	2	4	10	143	138
New York (Upstate)	1	1	6	49	43	—	0	2	6	8	1	3	13	94	97
New York City	—	0	5	54	—	—	0	0	—	—	23	17	37	722	642
Pennsylvania	2	2	9	80	80	—	0	2	11	14	—	5	12	178	178
<b>E.N. Central</b>	5	14	64	538	547	1	2	14	76	81	6	18	32	627	587
Illinois	—	2	17	71	118	—	0	6	14	27	—	6	19	174	310
Indiana	1	3	39	160	117	—	0	11	18	17	1	2	9	93	34
Michigan	—	0	3	13	2	—	0	1	2	1	—	2	17	135	72
Ohio	4	8	17	294	310	1	1	4	42	36	5	5	13	192	127
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	4	33	44
<b>W.N. Central</b>	—	4	115	125	144	—	0	9	8	27	5	8	15	254	234
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	12	12
Kansas	—	1	5	57	69	—	0	1	3	6	1	0	5	23	14
Minnesota	—	0	114	—	18	—	0	9	—	17	—	1	5	60	47
Missouri	—	1	8	65	44	—	0	1	2	—	4	5	10	151	151
Nebraska§	—	0	0	—	2	—	0	0	—	—	—	0	2	8	4
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	3	11	—	0	1	3	4	—	0	1	—	6
<b>S. Atlantic</b>	14	22	53	855	930	1	4	10	134	165	21	49	215	1,604	1,597
Delaware	—	0	1	3	8	—	0	0	—	2	—	0	4	10	8
District of Columbia	—	0	3	13	13	—	0	0	—	1	—	2	11	73	123
Florida	12	13	30	506	517	1	2	6	91	88	20	20	34	631	522
Georgia	2	8	22	261	336	—	1	5	37	66	—	10	175	285	291
Maryland§	—	0	0	—	1	—	0	0	—	—	—	6	14	212	210
North Carolina	N	0	0	N	N	N	0	0	N	N	1	5	18	170	228
South Carolina§	—	0	0	—	—	—	0	0	—	—	—	1	5	56	65
Virginia§	N	0	0	N	N	N	0	0	N	N	—	5	17	166	144
West Virginia	—	1	9	72	55	—	0	2	6	8	—	0	1	1	6
<b>E.S. Central</b>	—	6	15	201	167	—	1	4	33	23	15	20	31	713	577
Alabama§	N	0	0	N	N	N	0	0	N	N	4	8	16	292	250
Kentucky	—	1	6	56	19	—	0	2	9	2	—	1	7	56	38
Mississippi	—	0	5	1	36	—	0	0	—	—	—	3	15	100	77
Tennessee§	—	4	13	144	112	—	0	3	24	21	11	8	14	265	212
<b>W.S. Central</b>	—	2	7	60	62	—	0	2	12	7	—	41	61	1,368	1,178
Arkansas§	—	0	2	12	3	—	0	1	3	2	—	2	19	108	75
Louisiana	—	1	7	48	59	—	0	2	9	5	—	11	22	301	312
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	5	51	44
Texas§	—	0	0	—	—	—	0	0	—	—	—	26	48	908	747
<b>Mountain</b>	—	1	7	25	42	—	0	2	4	9	—	10	29	299	312
Arizona	—	0	0	—	—	—	0	0	—	—	—	5	21	145	162
Colorado	—	0	0	—	—	—	0	0	—	—	—	2	7	73	33
Idaho§	N	0	0	N	N	N	0	0	N	N	—	0	1	2	1
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	3	—	1
Nevada§	N	0	0	N	N	N	0	0	N	N	—	2	6	54	71
New Mexico§	—	0	1	1	—	—	0	0	—	—	—	1	3	23	30
Utah	—	1	7	22	28	—	0	2	4	8	—	0	2	—	11
Wyoming§	—	0	1	2	14	—	0	1	—	1	—	0	1	2	3
<b>Pacific</b>	—	0	1	1	3	—	0	1	1	3	—	41	70	1,342	1,502
Alaska	N	0	0	N	N	N	0	0	N	N	—	0	1	1	6
California	N	0	0	N	N	N	0	0	N	N	—	38	59	1,193	1,382
Hawaii	—	0	1	1	3	—	0	1	1	3	—	0	2	11	5
Oregon§	N	0	0	N	N	N	0	0	N	N	—	0	2	9	12
Washington	N	0	0	N	N	N	0	0	N	N	—	3	15	128	97
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	4
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	3	2	10	102	103
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).

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