

CHAPTER 23

Immunization and Infectious Diseases (IID)

Lead Agency

Centers for Disease Control and Prevention

Contents

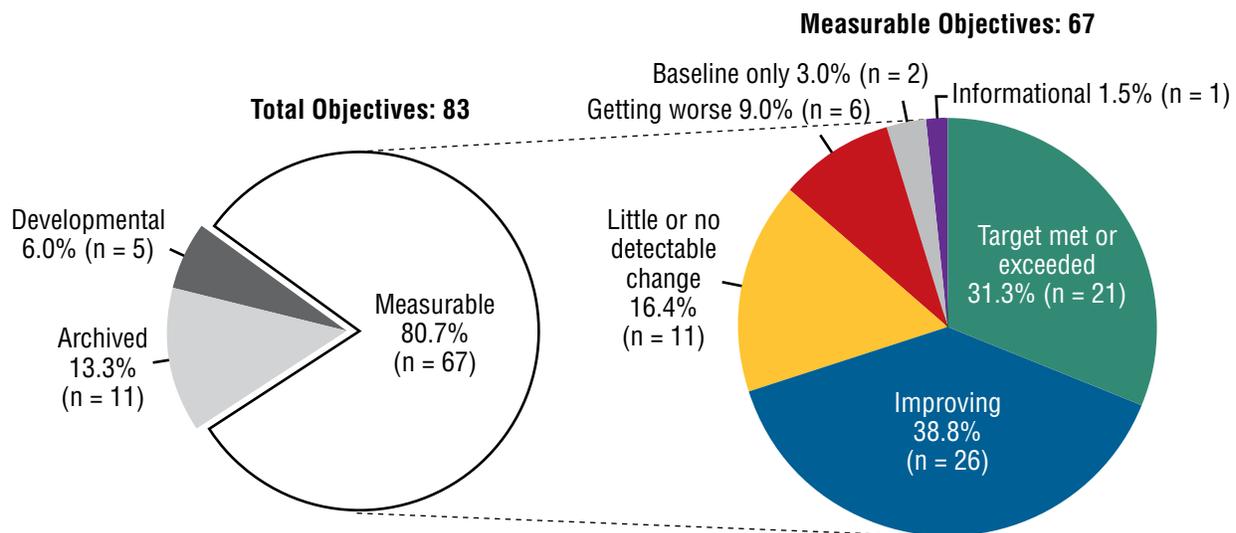
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Goal: Increase immunization rates and reduce preventable infectious diseases.

This chapter includes objectives that monitor vaccine-preventable diseases, vaccination coverage, immunization information systems, viral hepatitis, and tuberculosis (TB). The **Reader's Guide** provides a step-by-step explanation of the content of this chapter, including criteria for highlighting objectives in the Selected Findings.¹

Status of Objectives

Figure 23-1. Midcourse Status of the Immunization and Infectious Diseases Objectives



Of the 83 objectives in the Immunization and Infectious Diseases Topic Area, 11 were archived,² 5 were developmental,³ and 67 objectives were measurable⁴ (Figure 23-1, Table 23-1). The midcourse status of the measurable objectives (Table 23-2) was as follows:

- 21 objectives had met or exceeded their 2020 targets,⁵
 - 26 objectives were improving,⁶
 - 11 objectives had demonstrated little or no detectable change,⁷
 - 6 objectives were getting worse,⁸
 - 2 objectives had baseline data only,⁹ and
 - 1 objective was informational.¹⁰
- Between 2008 and 2013, cases of *Haemophilus influenzae* type B (Hib) in children under age 5 years (IID-1.2) declined from 0.30 to 0.08 per 100,000 population, exceeding the 2020 target (Table 23-2).
 - » In 2013, the disparity by sex in the rate of Hib in children under age 5 years (IID-1.2) was not tested for statistical significance (Table 23-3).
 - From 2007 to 2013, new cases of hepatitis B (HepB) among persons aged 2-18 years (IID-1.3) decreased from 0.1 to 0.0 per 100,000 population, meeting the 2020 target (Table 23-2).
 - Between 2008 and 2014, the number of U.S.-acquired cases of measles (IID-1.4) increased from 115 to 604, moving away from the baseline and 2020 target (Table 23-2).
 - » Two states reported more than 30 cases of U.S.-acquired measles (IID-1.4) in 2014. Twenty-six states and the District of Columbia reported no U.S.-acquired measles cases (Map 23-1).¹¹
 - Between 2008 and 2014, the number of U.S.-acquired cases of mumps (IID-1.5) increased from 421 to 1,183,

Selected Findings

Incidence of Vaccine-preventable Diseases

- The number of U.S.-acquired cases of congenital rubella syndrome in children under age 1 year (IID-1.1) was zero in 2008 and 2014, meeting the 2020 target (Table 23-2).

moving away from the baseline and 2020 target (Table 23-2).

- The number of **pertussis cases in children under age 1 year** (IID-1.6) increased from 2,777 in 2004–2008 to 3,869 in 2009–2013, moving away from the baseline and 2020 target (Table 23-2).
- The number of **pertussis cases in adolescents aged 11–18 years** (IID-1.7) increased from 3,995 in 2000–2004 to 6,701 in 2009–2013, moving away from the baseline and 2020 target (Table 23-2).
- The number of **U.S.-acquired cases of acute paralytic poliomyelitis** (IID-1.8) was zero in 2008 and 2014, meeting the 2020 target (Table 23-2).
- The number of **U.S.-acquired cases of rubella** (IID-1.9) dropped from 10 in 2008 to 4 in 2014, exceeding the 2020 target (Table 23-2).
- The number of **cases of varicella (chicken pox) in children and adolescents aged 17 and under** (IID-1.10) decreased from 586,000 in 2008 to 145,000 in 2013, moving toward the 2020 target (Table 23-2).
- The rate of **early onset group B streptococcal disease in newborns aged 0–6 days** (IID-2) declined from 0.30 per 1,000 live births in 2008 to 0.25 in 2013, meeting the 2020 target (Table 23-2).
 - » The disparity by race in the rate of early onset group B streptococcal disease in newborns aged 0–6 days (IID-2) in 2013 was not tested for statistical significance (Table 23-3).
- From 2004–2008 to 2009–2013, the number of **cases of meningococcal disease** (IID-3) dropped from 1,215 to 748, exceeding the 2020 target (Table 23-2).

Invasive Pneumococcal Infection

- From 2008 to 2013, **new invasive pneumococcal infections in children under age 5 years** (IID-4.1) declined from 21.1 to 9.6 per 100,000 population, exceeding the 2020 target (Table 23-2).
 - » The disparities by sex and race in the incidence rate of invasive pneumococcal infections in children under age 5 years (IID-4.1) in 2013 were not tested for statistical significance (Table 23-3).
- **New invasive pneumococcal infections in adults aged 65 and over** (IID-4.2) declined from 40.7 to 30.5 per 100,000 population from 2008 to 2013, exceeding the 2020 target (Table 23-2).
 - » The disparities by sex and race in the incidence rate of invasive pneumococcal infections in adults aged 65 and over (IID-4.2) in 2013 were not tested for statistical significance (Table 23-3).

- From 2008 to 2013, **invasive antibiotic-resistant pneumococcal infections in children under age 5 years** (IID-4.3) declined from 8.3 to 3.7 per 100,000 population, exceeding the 2020 target (Table 23-2).
 - » The disparities by sex and race in the rate of invasive antibiotic-resistant pneumococcal infections in children under age 5 years (IID-4.3) in 2013 were not tested for statistical significance (Table 23-3).
- From 2008 to 2013, **invasive antibiotic-resistant pneumococcal infections in adults aged 65 and over** (IID-4.4) declined from 12.2 to 10.2 per 100,000 population, moving toward the 2020 target (Table 23-2).
 - » The disparities by sex and race in the rate of invasive antibiotic-resistant pneumococcal infections in adults aged 65 and over (IID-4.4) in 2013 were not tested for statistical significance (Table 23-3).

Inappropriate Use of Antibiotics

- The proportion of **outpatient visits for ear infections in children under age 5 years at which antibiotics were prescribed** (IID-5) demonstrated little or no detectable change from 2006–2007 (77.8%) to 2008–2009 (81.5%) (Table 23-2).
 - » In 2008–2009, the disparities by sex and race and ethnicity in the proportion of outpatient visits for ear infections in children under age 5 years at which antibiotics were prescribed (IID-5) were not statistically significant (Table 23-3).
- The proportion of **outpatient visits at which antibiotics were prescribed for the common cold** (IID-6) demonstrated little or no detectable change from 2006–2007 (28.6%) to 2008–2009 (28.5%) (Table 23-2).
 - » In 2008–2009, the disparities by sex and race and ethnicity in the proportion of outpatient visits at which antibiotics were prescribed for the common cold (IID-6) were not statistically significant (Table 23-3).

Vaccination Coverage in Children Aged 19–35 Months

- Between 2012 and 2014, the percentage of **children aged 19–35 months who received 4 or more doses of diphtheria, tetanus, and pertussis (DTaP) vaccine** (IID-7.1) increased from 82.5% to 84.2%, moving toward the 2020 target (Table 23-2).

- » In 2014, there were statistically significant disparities by sex, mother’s education, and family income in the percentage of children aged 19–35 months who received 4 or more doses of DTaP vaccine (IID-7.1, Table 23–3). The disparities by race and ethnicity and geographic location were not statistically significant.
- The percentage of **children aged 19–35 months who received 3 or 4 doses of Hib vaccine** (IID-7.2) demonstrated little or no detectable change between 2012 (80.9%) and 2014 (82.0%) (Table 23–2).
 - » In 2014, there were statistically significant disparities by mother’s education and family income in the percentage of children aged 19–35 months who received 3 or 4 doses of Hib vaccine (IID-7.2, Table 23–3). The disparities by sex, race and ethnicity, and geographic location were not statistically significant.
- The percentage of **children aged 19–35 months who received 3 or more doses of HepB vaccine** (IID-7.3) increased from 89.7% in 2012 to 91.6% in 2014, exceeding the 2020 target (Table 23–2).
 - » In 2014, the disparities by sex, race and ethnicity, mother’s education, family income, and geographic location in the percentage of children aged 19–35 months who received 3 or more doses of HepB vaccine (IID-7.3) were not statistically significant (Table 23–3).
- The percentage of **children aged 19–35 months who received 1 or more doses of measles-mumps-rubella (MMR) vaccine** (IID-7.4) continued to exceed the 2020 target (90.8% in 2012 and 91.5% in 2014) (Table 23–2).
 - » In 2014, 40 states and the District of Columbia had met or exceeded the national target of 90.0% of children aged 19–35 months having received 1 or more doses of MMR vaccine (IID-7.4, Map 23–2).
 - » In 2014, there were statistically significant disparities by mother’s education and family income in the percentage of children aged 19–35 months who received 1 or more doses of MMR vaccine (IID-7.4, Table 23–3). The disparities by sex, race and ethnicity, and geographic location were not statistically significant.
- The percentage of **children aged 19–35 months who received 3 or more doses of polio vaccine** (IID-7.5) continued to exceed the 2020 target between 2012 (92.8%) and 2014 (93.3%) (Table 23–2).
 - » In 2014, there was a statistically significant disparity by mother’s education in the percentage of children aged 19–35 months who received 3 or more doses of polio vaccine (IID-7.5, Table 23–3). The disparities by sex, race and ethnicity, family income, and geographic location were not statistically significant.
- The percentage of **children aged 19–35 months who received 1 or more doses of varicella vaccine** (IID-7.6) continued to exceed the 2020 target (90.2% in 2012 and 91.0% in 2014) (Table 23–2).
 - » In 2014, there was a statistically significant disparity by mother’s education in the percentage of children aged 19–35 months who received 1 or more doses of varicella vaccine (IID-7.6, Table 23–3). The disparities by sex, race and ethnicity, family income, and geographic location were not statistically significant.
- The percentage of **children aged 19–35 months who received 4 or more doses of pneumococcal conjugate vaccine (PCV)** (IID-7.7) demonstrated little or no detectable change between 2012 (81.9%) and 2014 (82.9%) (Table 23–2).
 - » In 2014, Maine, Nebraska, and New Hampshire had achieved the national target of 90.0% of children aged 19–35 months having received 4 or more doses of PCV (IID-7.7, Map 23–3).
 - » In 2014, there were statistically significant disparities by race and ethnicity, mother’s education, and family income in the percentage of children aged 19–35 months who received 4 or more doses of PCV (IID-7.7, Table 23–3). Disparities by sex and geographic location were not statistically significant.
- Between 2012 and 2014, the percentage of **children aged 19–35 months who received 2 or more doses of hepatitis A (HepA) vaccine** (IID-7.8) increased from 53.0% to 57.5%, moving toward the 2020 target (Table 23–2).
 - » In 2014, there were statistically significant disparities by race and ethnicity, family income, and geographic location in the percentage of children aged 19–35 months who received 2 or more doses of HepA vaccine (IID-7.8, Table 23–3). The disparities by sex and mother’s education were not statistically significant.
- The percentage of **children who received a birth dose of HepB vaccine within 3 days of birth** (IID-7.9) increased from 70.6% in 2010–2012 (for children born in 2009) to 73.2% in 2012–2014 (for children born in 2011), moving toward the 2020 target (Table 23–2).

- » In 2012–2014, there were statistically significant disparities by mother’s education and geographic location in the percentage of children (born in 2011) who received a birth dose of HepB vaccine within 3 days of birth (IID-7.9, Table 23–3). The disparities by sex, race and ethnicity, and family income were not statistically significant.
- Between 2012 and 2014, the percentage of **children aged 19–35 months who received 2 or more doses of rotavirus vaccine** (IID-7.10) increased from 68.6% to 71.7%, moving toward the 2020 target (Table 23–2).
 - » In 2014, there were statistically significant disparities by mother’s education, family income, and geographic location in the percentage of children aged 19–35 months who received 2 or more doses of rotavirus vaccine (IID-7.10, Table 23–3). The disparities by sex and race and ethnicity were not statistically significant.
- Between 2012 and 2014, the percentage of **children aged 19–35 months who received the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella, and PCV** (IID-8) increased from 68.4% to 71.6%, moving toward the 2020 target (Table 23–2).
 - » In 2014, there were statistically significant disparities by sex, mother’s education, and family income in the percentage of children aged 19–35 months who received the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella, and PCV (IID-8, Table 23–3). The disparities by race and ethnicity and geographic location were not statistically significant.
- There was no change in the percentage of **children aged 19–35 months who received no doses of the recommended vaccines** (IID-9) from 2012 to 2014 (0.8%) (Table 23–2). This objective was informational only and no 2020 target was set.
 - » In 2014, there was a statistically significant disparity by geographic location in the percentage of children aged 19–35 months who received no doses of the recommended vaccines (IID-9, Table 23–3). The disparities by sex, mother’s education, and family income were not statistically significant.

Vaccination Coverage in Kindergarten Children

- From 2009–2010 to 2013–2014, three of the five objectives monitoring vaccination coverage in kindergarten children continued to meet or exceed their 2020 targets: the percentage who received **4**

or more doses of DTaP vaccine (IID-10.1: 97.2% and 95.0%); the percentage who received **3 or more doses of polio vaccine** (IID-10.3: 96.2% and 95.1%); and the percentage who received **3 or more doses of HepB vaccine** (IID-10.4: 97.0% and 95.8%) (Table 23–2).

- The percentage of **children in kindergarten who received 2 or more doses of varicella vaccine** (IID-10.5) increased from 91.3% to 93.3% from 2009–2010 to 2013–2014, moving toward the 2020 target (Table 23–2).

Vaccination Coverage in Adolescents Aged 13–15

- The percentage of **adolescents aged 13–15 who had received 1 or more doses of tetanus, diphtheria, pertussis (Tdap) booster vaccine** (IID-11.1) continued to exceed the 2020 target (85.3% in 2012 and 88.3% in 2014) (Table 23–2).
 - » In 2014, there were statistically significant disparities by mother’s education and family income in the percentage of adolescents aged 13–15 who had received 1 or more doses of Tdap booster vaccine (IID-11.1, Table 23–3). The disparities by sex, race and ethnicity, and geographic location were not statistically significant.
- Between 2012 and 2014, the percentage of **adolescents aged 13–15 who had received 2 or more doses of varicella vaccine** (IID-11.2) increased from 76.8% to 82.1%, moving toward the 2020 target (Table 23–2).
 - » In 2014, there was a statistically significant disparity by sex in the percentage of adolescents aged 13–15 who had received 2 or more doses of varicella vaccine (IID-11.2, Table 23–3). The disparities by race and ethnicity, mother’s education, family income, and geographic location were not statistically significant.
- Between 2012 and 2014, the percentage of **adolescents aged 13–15 who had received 1 or more doses of meningococcal vaccine** (IID-11.3) increased from 73.8% to 79.4%, moving toward the 2020 target (Table 23–2).
 - » In 2014, there were statistically significant disparities by family income and geographic location in the percentage of adolescents aged 13–15 who had received 1 or more doses of meningococcal vaccine (IID-11.3, Table 23–3). The disparities by sex, race and ethnicity, and mother’s education were not statistically significant.

- The percentage of **female adolescents aged 13–15 who had received 3 or more doses of human papillomavirus (HPV) vaccine** (IID-11.4) increased from 28.1% in 2012 to 34.4% in 2014, moving toward the 2020 target (Table 23–2).
 - » In 2014, variation by state was observed in the percentage of female adolescents aged 13–15 who had received 3 or more doses of HPV vaccine (IID-11.4), and no state had achieved the national target of 80.0% (Map 23–4).
 - » In 2014, there were statistically significant disparities by mother’s education and family income in the percentage of female adolescents aged 13–15 who had received 3 or more doses of HPV vaccine (IID-11.4, Table 23–3). The disparities by race and ethnicity and geographic location were not statistically significant.
- The percentage of **male adolescents aged 13–15 who had received 3 or more doses of HPV vaccine** (IID-11.5) increased from 6.9% in 2012 to 20.6% in 2014, moving toward the 2020 target (Table 23–2).
 - » In 2014, variation by state was observed in the percentage of male adolescents aged 13–15 who had received 3 or more doses of HPV vaccine (IID-11.5), with no state achieving the national target of 80.0% (Map 23–5).
 - » In 2014, there were statistically significant disparities by mother’s education and family income in the percentage of male adolescents aged 13–15 who had received 3 or more doses of HPV vaccine (IID-11.5, Table 23–3). The disparities by race and ethnicity and geographic location were not statistically significant.
- From 2010–2011 to 2012–2013, the percentage of **adults aged 18 and over who were vaccinated against seasonal influenza** (IID-12.12) increased from 38.1% to 42.6%, moving toward the 2020 target (Table 23–2).
 - » In 2012–2013, there were statistically significant disparities by sex, race and ethnicity, education, and family income in the percentage of adults aged 18 and over who were vaccinated against seasonal influenza (IID-12.12, Table 23–3).
- From 2010–2011 to 2012–2013, the percentage of **health care personnel aged 18 and over who were vaccinated against seasonal influenza** (IID-12.13) increased from 55.8% to 66.9%, moving toward the 2020 target (Table 23–2).
 - » In 2012–2013, there were statistically significant disparities by race and ethnicity, education, and family income in the percentage of health care personnel aged 18 and over who were vaccinated against seasonal influenza (IID-12.13, Table 23–3). The disparity by sex was not statistically significant.

Vaccine Coverage in Adults

Seasonal Influenza Vaccine Coverage

- From 2010–2011 to 2012–2013, the percentage of **children aged 6 months through 17 years who were vaccinated against seasonal influenza** (IID-12.11) increased from 46.9% to 50.5%, moving toward the 2020 target (Table 23–2).
 - » In 2012–2013, there was a statistically significant disparity by family income in the percentage of children aged 6 months through 17 years who were vaccinated against seasonal influenza (IID-12.11, Table 23–3). The disparities by sex and race and ethnicity were not statistically significant.
- There was little or no detectable change in the percentage of **noninstitutionalized adults aged 65 and over who were vaccinated against pneumococcal disease** (IID-13.1) between 2008 (60.0%) and 2013 (59.7%) (Table 23–2).
 - » In 2013, there were statistically significant disparities by sex, race and ethnicity, education, and family income in the percentage of noninstitutionalized adults aged 65 and over who were vaccinated against pneumococcal disease (IID-13.1, Table 23–3).
- The percentage of **noninstitutionalized high-risk adults aged 18–64 who were vaccinated against pneumococcal disease** (IID-13.2) increased from 16.6% in 2008 to 21.0% in 2013, moving toward the 2020 target (Table 23–2).
 - » In 2013, there was a statistically significant disparity by sex in the percentage of noninstitutionalized high-risk adults aged 18–64 who were vaccinated against pneumococcal disease (IID-13.2, Table 23–3). The disparities by race and ethnicity, education, and family income were not statistically significant.
- The percentage of **adults aged 18 and over residing in long-term care and nursing home facilities who were vaccinated against pneumococcal disease** (IID-13.3) increased from 67.4% in 2006 to 79.3% in 2013, moving toward the 2020 target (Table 23–2).

- » The disparities by sex and race and ethnicity in the percentage of adults aged 18 and over residing in long-term care and nursing home facilities who were vaccinated against pneumococcal disease (IID-13.3) in 2013 were not tested for statistical significance (Table 23-3).
- The percentage of **adults aged 60 and over who were vaccinated against zoster (shingles)** (IID-14) increased from 6.7% in 2008 to 24.2% in 2013, moving toward the 2020 target (Table 23-2).
 - » In 2013, there were statistically significant disparities by sex, race and ethnicity, education, and family income in the percentage of adults aged 60 and over who were vaccinated against zoster (shingles) (IID-14, Table 23-3).
- There was little or no detectable change in the percentage of **health care personnel who were vaccinated against hepatitis B** (IID-15.3) between 2008 (64.3%) and 2013 (61.8%) (Table 23-2).
 - » In 2013, there were statistically significant disparities by sex, education, and family income in the percentage of health care personnel who were vaccinated against hepatitis B (IID-15.3, Table 23-3). The disparity by race and ethnicity was not statistically significant.

Immunization Information Systems

- The percentage of **children under age 6 years whose immunization records were included in a population-based immunization information system** (IID-18) increased from 75.0% in 2008 to 89.7% in 2013, moving toward the 2020 target (Table 23-2).
- The number of **states, the District of Columbia, and other reporting areas¹² with 80% of adolescents aged 11-18 who had 2 or more age-appropriate immunizations recorded in an immunization information system** (IID-20) increased from 11 in 2012 to 15 in 2013, moving toward the 2020 target (Table 23-2).
- The number of **states using electronic rabies animal surveillance data to inform public health prevention programs** (IID-21) increased from 8 in 2010 to 14 in 2014, moving toward the 2020 target (Table 23-2).
- The number of **public health laboratories that monitored influenza virus resistance to antiviral agents** (IID-22) increased from 3 in 2009 to 21 in 2015, moving toward the 2020 target (Table 23-2).

Viral Hepatitis Surveillance

- Between 2007 and 2013, **new cases of hepatitis A** (IID-23) decreased from 1.0 to 0.6 per 100,000 population, moving toward the 2020 target (Table 23-2).
 - » The disparities by sex and race and ethnicity in incidence rates of hepatitis A (IID-23) in 2013 were not tested for statistical significance (Table 23-3).
- Between 2007 and 2013, **new hepatitis B infections in adults aged 19 and over** (IID-25.1) decreased from 2.0 to 1.3 per 100,000 population, exceeding the 2020 target (Table 23-2).
 - » The disparities by sex and race and ethnicity in incidence rates of HepB infections in adults aged 19 and over (IID-25.1) in 2013 were not tested for statistical significance (Table 23-3).
- Between 2007 and 2013, the number of **new hepatitis B infections in injection drug users** (IID-25.2) increased from 285 to 329, moving away from the baseline and 2020 target (Table 23-2).
- Between 2007 and 2013, the number of **new hepatitis B infections in men who have sex with men** (IID-25.3) decreased from 62 to 45, meeting the 2020 target (Table 23-2).
- Between 2007 and 2013, **new hepatitis C cases** (IID-26) increased from 0.28 to 0.73 per 100,000 population, moving away from the baseline and 2020 target (Table 23-2).
 - » The disparities by sex and race and ethnicity in incidence rates of hepatitis C cases (IID-26) in 2013 were not tested for statistical significance (Table 23-3).
- The proportion of **persons with hepatitis C who were aware of their infection** (IID-27) increased from 53.0% in 2003-2008 to 54.0% in 2013-2014, moving toward the 2020 target (Table 23-2).

Tuberculosis Incidence, Testing, and Treatment

- Between 2005 and 2013, **new cases of tuberculosis** (IID-29) decreased from 4.8 to 3.0 per 100,000 population, moving toward the 2020 target (Table 23-2).
 - » In 2013, the incidence rate of TB varied by state (IID-29). Idaho, Montana, Vermont, West Virginia, Wisconsin, and Wyoming had achieved the national 2020 target (Map 23-6).

- » The disparities by sex and race and ethnicity in incidence rates of tuberculosis (IID-29) in 2013 were not tested for statistical significance (Table 23–3).
- The proportion of **tuberculosis patients who completed curative therapy within 12 months** (IID-30) increased from 81.9% in 2005 to 84.4% in 2011, moving toward the 2020 target (Table 23–2).
 - » The disparities by sex and race and ethnicity in the proportion of tuberculosis patients who completed curative therapy within 12 months (IID-30) in 2011 were not tested for statistical significance (Table 23–3).
- The proportion of **tuberculosis patients aged 25–44 who were tested for HIV** (IID-33) increased from 73.3% in 2008 to 94.0% in 2013, exceeding the 2020 target (Table 23–2).
 - » The disparities by sex and race and ethnicity in the proportion of tuberculosis patients aged 25–44 tested for HIV (IID-33) in 2013 were not evaluated for statistical significance (Table 23–3).
- Annual School Assessment Reports: <https://www.healthypeople.gov/2020/data-source/annual-school-assessment-reports>
- Aggregate Reports for Tuberculosis Program Evaluation: http://www.cdc.gov/tb/publications/pdf/arpes_manualsm1.pdf
- Bridged-race Population Estimates: <https://www.healthypeople.gov/2020/data-source/bridged-race-population-estimates>
- Immunization Information Systems Annual Report: <http://www.cdc.gov/vaccines/programs/iis/index.html>
- Minimum Data Set: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/Minimum-Data-Set-3-0-Public-Reports/index.html>
- National Ambulatory Medical Care Survey: <http://www.cdc.gov/nchs/ahcd.htm>
- National Health and Nutrition Examination Survey: <http://www.cdc.gov/nchs/nhanes.htm>
- National Health Interview Survey: <http://www.cdc.gov/nchs/nhis.htm>
- National Hospital Ambulatory Medical Care Survey: <http://www.cdc.gov/nchs/ahcd.htm>
- National Immunization Surveys: <http://www.cdc.gov/nchs/nis.htm>
- National Immunization Survey—Teens: <http://www.cdc.gov/vaccines/imz-managers/coverage/nis/teen/index.html> or <http://www.cdc.gov/vaccines/who/teens/index.html>
- National Notifiable Diseases Surveillance System: <http://www.cdc.gov/nndss/>
- National TB Surveillance System: <https://www.healthypeople.gov/2020/data-source/national-tb-surveillance-system>
- National Vital Statistics System—Nativity: <http://www.cdc.gov/nchs/births.htm>
- Perinatal Hepatitis B Prevention Program: <https://www.healthypeople.gov/2020/data-source/perinatal-hepatitis-b-prevention-program>
- Program Annual Progress Assessments: <https://www.healthypeople.gov/2020/data-source/program-annual-progress-assessments>
- Rabies Surveillance Network: <https://www.healthypeople.gov/2020/data-source/rabies-surveillance-network>

More Information

Readers interested in more detailed information about the objectives in this topic area are invited to visit the [HealthyPeople.gov](http://www.healthypeople.gov) website, where extensive substantive and technical information is available:

- For the background and importance of the topic area, see: <http://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases>
- For data details for each objective, including definitions, numerators, denominators, calculations, and data limitations, see: <https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives>
Select an objective, then click on the “Data Details” icon.
- For objective data by population group (e.g., sex, race and ethnicity, or family income), including rates, percentages, or counts for multiple years, see: <https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives>
Select an objective, then click on the “Data2020” icon.

Data for the measurable objectives in this chapter were from the following data sources:

- Active Bacterial Core Surveillance System: <http://www.cdc.gov/abcs/index.html>

- State Public Health Laboratories Performing Antiviral Resistance Testing: <https://www.healthypeople.gov/2020/data-source/state-public-health-laboratories-performing-antiviral-resistance-testing>

Unit of Measurement

The unit of measurement of several objectives is the “number.” This includes selected objectives that track the incidence of vaccine preventable diseases (e.g., IID-1.4, U.S.-acquired cases of measles). Even though data by population groups are available for these objectives, they were not included in the Midcourse Health Disparities Table because a disparity in the number of cases could be a function of only the population size of the groups, rather than the measure. For example, in 2014, four U.S.-acquired cases of measles were reported among the American Indian or Alaska Native population, whereas 484 cases were reported among the white population; this was likely due to the difference in the size of these populations, rather than a disparity in the rate of incidence of measles in those populations.

HPV Vaccine

In 2014, Healthy People 2020 added the proportion of male adolescents receiving three or more doses of HPV vaccine (IID-11.5) in addition to the separate objective tracking HPV vaccine coverage among female adolescents (IID-11.4). This was due to the October 2011 recommendation from the Advisory Committee on Immunization Practices for HPV vaccination among adolescent males and the difference in male and female HPV vaccine coverage rates.¹³ The year 2012 serves as the baseline year for both objectives.

Footnotes

¹The **Technical Notes** provide more information on Healthy People 2020 statistical methods and issues.

²**Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

³**Developmental** objectives did not have a national baseline value.

⁴**Measurable** objectives had a national baseline value.

⁵**Target met or exceeded**—One of the following, as specified in the Midcourse Progress Table:

- » At baseline the target was not met or exceeded and the midcourse value was equal to or exceeded the target. (The percentage of targeted change achieved was equal to or greater than 100%.)
- » The baseline and midcourse values were equal to or exceeded the target. (The percentage of targeted change achieved was not assessed.)

⁶**Improving**—One of the following, as specified in the Midcourse Progress Table:

- » Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was statistically significant.
- » Movement was toward the target, standard errors were not available, and the objective had achieved 10% or more of the targeted change.

⁷**Little or no detectable change**—One of the following, as specified in the Midcourse Progress Table:

- » Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was not statistically significant.
- » Movement was toward the target, standard errors were not available, and the objective had achieved less than 10% of the targeted change.
- » Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was not statistically significant.
- » Movement was away from the baseline and target, standard errors were not available, and the objective had moved less than 10% relative to the baseline.
- » There was no change between the baseline and the midcourse data point.

⁸**Getting worse**—One of the following, as specified in the Midcourse Progress Table:

- » Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was statistically significant.
- » Movement was away from the baseline and target, standard errors were not available, and the objective had moved 10% or more relative to the baseline.

⁹**Baseline only**—The objective only had one data point, so progress toward target attainment could not be assessed.

¹⁰**Informational**—A target was not set for this objective, so progress toward target attainment could not be assessed.

¹¹The state data shown in Map 23–1 are for the number of U.S.-acquired measles cases. The national target does not apply to individual states because it is a cumulative count of all state cases.

¹²Other reporting areas are defined as the following five cities: Houston, San Antonio, Chicago, Philadelphia, and New York City. These five cities operate separately from their state programs. Data from these cities are not included in the state data.

¹³The Human Papillomavirus Vaccination: Recommendations of the Advisory Committee on Immunization Practices (ACIP) is available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6305a1.htm>

Suggested Citation

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Table 23–1. Immunization and Infectious Diseases Objectives

LEGEND



Data for this objective are available in this chapter's Midcourse Progress Table.



Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.



A state or county level map for this objective is available at the end of the chapter.

Not Applicable

Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-1.1	Maintain elimination of cases of vaccine-preventable congenital rubella syndrome (CRS) among children under 1 year of age (U.S.-acquired cases)	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-1.2	Reduce serotype b cases of <i>Haemophilus influenzae</i> (Hib) invasive disease among children under age 5 years	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Population Estimates, Census	
IID-1.3	Reduce new hepatitis B cases among persons aged 2 to 18 years	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census	
IID-1.4	Reduce measles cases (U.S.-acquired cases)	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-1.5	Reduce cases of mumps (U.S.-acquired cases)	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-1.6	Reduce cases of pertussis among children under 1 year of age	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-1.7	Reduce cases of pertussis among adolescents aged 11 to 18 years	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-1.8	Maintain elimination of acute paralytic poliomyelitis (U.S.-acquired cases)	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-1.9	Maintain elimination of rubella (U.S.-acquired cases)	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-1.10	Reduce cases of varicella (chicken pox) among persons aged 17 years of age or under	National Health Interview Survey (NHIS), CDC/NCHS	
IID-2	Reduce early onset group B streptococcal disease	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; National Vital Statistics System–Nativity (NVSS–N), CDC/NCHS	
IID-3	Reduce meningococcal disease	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	

Table 23–1. Immunization and Infectious Diseases Objectives—Continued

LEGEND

	Data for this objective are available in this chapter's Midcourse Progress Table.		Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.		A state or county level map for this objective is available at the end of the chapter.
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Not Applicable

Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-4.1	Reduce new invasive pneumococcal infections among children under age 5 years	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census	 
IID-4.2	Reduce new invasive pneumococcal infections among adults aged 65 years and older	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census	 
IID-4.3	Reduce invasive antibiotic-resistant pneumococcal infections among children under age 5 years	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census	 
IID-4.4	Reduce invasive antibiotic-resistant pneumococcal infections among adults aged 65 years and older	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census	 
IID-5	Reduce outpatient visits for ear infections where antibiotics were prescribed to young children	National Ambulatory Medical Care Survey (NAMCS), CDC/NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC/NCHS	 
IID-6	Reduce outpatient visits where antibiotics were prescribed for the sole diagnosis of the common cold	National Ambulatory Medical Care Survey (NAMCS), CDC/NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC/NCHS	 
IID-7.1	Maintain an effective vaccination coverage level of 4 doses of the diphtheria-tetanus-acellular pertussis (DTaP) vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-7.2	Achieve and maintain an effective vaccination coverage level of 3 or 4 doses of <i>Haemophilus influenzae</i> type b (Hib) vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-7.3	Maintain an effective vaccination coverage level of 3 doses of hepatitis B (HepB) vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-7.4	Maintain an effective coverage level of 1 dose of measles-mumps-rubella (MMR) vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	  

Table 23–1. Immunization and Infectious Diseases Objectives—Continued

LEGEND

	Data for this objective are available in this chapter's Midcourse Progress Table.		Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.		A state or county level map for this objective is available at the end of the chapter.
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Not Applicable

Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-7.5	Maintain an effective coverage level of 3 doses of polio vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-7.6	Maintain an effective coverage level of 1 dose of varicella vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-7.7	Achieve and maintain an effective coverage level of 4 doses of pneumococcal conjugate vaccine (PCV) among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	  
IID-7.8	Achieve and maintain an effective coverage level of 2 doses of hepatitis A vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-7.9	Achieve and maintain an effective coverage level of a birth dose of hepatitis B vaccine (0 to 3 days between birth date and date of vaccination, reported by annual birth cohort)	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-7.10	Achieve and maintain an effective coverage level of 2 or more or 3 or more doses of rotavirus vaccine among children by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-8	Increase the percentage of children aged 19 to 35 months who receive the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella, and pneumococcal conjugate vaccine (PCV)	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-9	Decrease the percentage of children in the United States who receive 0 doses of recommended vaccines by age 19 to 35 months	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	 
IID-10.1	Maintain the vaccination coverage level of 4 doses of diphtheria-tetanus-acellular pertussis (DTaP) vaccine for children in kindergarten	Annual School Assessment Reports, CDC/NCIRD	
IID-10.2	Maintain the vaccination coverage level of 2 doses of measles-mumps-rubella (MMR) vaccine for children in kindergarten	Annual School Assessment Reports, CDC/NCIRD	

Table 23–1. Immunization and Infectious Diseases Objectives—Continued

LEGEND

 Data for this objective are available in this chapter’s Midcourse Progress Table.  Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.  A state or county level map for this objective is available at the end of the chapter.

Not Applicable Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-10.3	Maintain the vaccination coverage level of 3 doses of polio vaccine for children in kindergarten	Annual School Assessment Reports, CDC/NCIRD	
IID-10.4	Maintain the vaccination coverage level of 3 doses of hepatitis B vaccine for children in kindergarten	Annual School Assessment Reports, CDC/NCIRD	
IID-10.5	Maintain the vaccination coverage level of 2 doses of varicella vaccine for children in kindergarten	Annual School Assessment Reports, CDC/NCIRD	
IID-11.1	Increase the vaccination coverage level of 1 dose of tetanus-diphtheria-acellular pertussis (Tdap) booster vaccine for adolescents by age 13 to 15 years	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS	 
IID-11.2	Increase the vaccination coverage level of 2 doses of varicella vaccine for adolescents by age 13 to 15 years (excluding children who have had varicella)	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS	 
IID-11.3	Increase the vaccination coverage level of 1 dose of meningococcal conjugate vaccine for adolescents by age 13 to 15 years	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS	 
IID-11.4	Increase the vaccination coverage level of 3 doses of human papillomavirus (HPV) vaccine for females by age 13 to 15 years	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS	  
IID-11.5	Increase the vaccination coverage level of 3 doses of human papillomavirus (HPV) vaccine for males by age 13 to 15 years	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS	  
IID-12.1	(Archived) Increase the percentage of children aged 6 to 23 months who are vaccinated annually against seasonal influenza (1 or 2 doses, depending on age-appropriateness and previous doses received)	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS	Not Applicable
IID-12.2	(Archived) Increase the percentage of children aged 2 to 4 years who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable

Table 23–1. Immunization and Infectious Diseases Objectives—Continued

LEGEND



Data for this objective are available in this chapter's Midcourse Progress Table.



Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.



A state or county level map for this objective is available at the end of the chapter.

Not Applicable

Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-12.3	(Archived) Increase the percentage of children aged 5 to 12 years who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable
IID-12.4	(Archived) Increase the percentage of children aged 13 to 17 years who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable
IID-12.5	(Archived) Increase the percentage of noninstitutionalized adults aged 18 to 64 years who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable
IID-12.6	(Archived) Increase the percentage of noninstitutionalized high-risk adults aged 18 to 64 years who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable
IID-12.7	(Archived) Increase the percentage of noninstitutionalized adults aged 65 years and older who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable
IID-12.8	(Archived) Increase the percentage of institutionalized adults aged 18 years and older in long-term or nursing homes who are vaccinated annually against seasonal influenza	Minimum Data Set (MDS), CMS	Not Applicable
IID-12.9	(Archived) Increase the percentage of health care personnel who are vaccinated annually against seasonal influenza	Minimum Data Set (MDS), CMS	Not Applicable
IID-12.10	(Archived) Increase the percentage of pregnant women who are vaccinated against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable
IID-12.11	Increase the percentage of children aged 6 months through 17 years who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	 
IID-12.12	Increase the percentage of adults aged 18 and older who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	 

Table 23–1. Immunization and Infectious Diseases Objectives—Continued

LEGEND

	Data for this objective are available in this chapter's Midcourse Progress Table.		Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.		A state or county level map for this objective is available at the end of the chapter.
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Not Applicable	Midcourse data availability is not applicable for developmental and archived objectives. Developmental objectives did not have a national baseline value. Archived objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.
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Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-12.13	Increase the percentage of health care personnel who are vaccinated annually against seasonal influenza	National Health Interview Survey (NHIS), CDC/NCHS	 
IID-12.14	(Developmental) Increase the percentage of pregnant women who are vaccinated annually against seasonal influenza	(Potential) National Health Interview Survey (NHIS), CDC/NCHS	Not Applicable
IID-13.1	Increase the percentage of noninstitutionalized adults aged 65 years and older who are vaccinated against pneumococcal disease	National Health Interview Survey (NHIS), CDC/NCHS	 
IID-13.2	Increase the percentage of noninstitutionalized high-risk adults aged 18 to 64 years who are vaccinated against pneumococcal disease	National Health Interview Survey (NHIS), CDC/NCHS	 
IID-13.3	Increase the percentage of institutionalized adults (persons aged 18 years and older in long-term or nursing homes) who are vaccinated against pneumococcal disease	Minimum Data Set (MDS), CMS	 
IID-14	Increase the percentage of adults who are vaccinated against zoster (shingles)	National Health Interview Survey (NHIS), CDC/NCHS	 
IID-15.1	(Developmental) Increase hepatitis B vaccine coverage among long-term hemodialysis patients	To be determined	Not Applicable
IID-15.2	(Developmental) Increase hepatitis B vaccine coverage among men who have sex with men	(Potential) National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	Not Applicable
IID-15.3	Increase hepatitis B vaccine coverage among health care personnel	National Health Interview Survey (NHIS), CDC/NCHS	 
IID-15.4	(Developmental) Increase hepatitis B vaccine coverage among injection drug users	(Potential) National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	Not Applicable
IID-16	(Archived) Increase the scientific knowledge on vaccine safety and adverse events	(Potential) Vaccine Adverse Event Reporting System (VAERS), CDC and FDA	Not Applicable
IID-17.1	Increase the percentage of public health providers who have had vaccination coverage levels among children in their practice population measured within the past year	Program Annual Progress Assessments (PAPA), CDC/NCIRD	

Table 23–1. Immunization and Infectious Diseases Objectives—Continued

LEGEND



Data for this objective are available in this chapter's Midcourse Progress Table.



Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.



A state or county level map for this objective is available at the end of the chapter.

Not Applicable

Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-17.2	Increase the percentage of private providers who have had vaccination coverage levels among children in their practice population measured within the past year	Program Annual Progress Assessments (PAPA), CDC/NCIRD	
IID-18	Increase the percentage of children under age 6 years whose immunization records are in a fully operational, population-based immunization information system (IIS)	Immunization Information Systems Annual Report (IISAR), CDC/NCIRD; Population Estimates, Census	
IID-19	Increase the number of states collecting kindergarten vaccination coverage data according to CDC minimum standards	Annual School Assessment Reports, CDC/NCIRD	
IID-20	Increase the number of states, the District of Columbia, and other reporting areas that have 80 percent of adolescents with 2 or more age-appropriate immunizations recorded in an immunization information system (IIS) among adolescents aged 11 to 18 years	Immunization Information Systems Annual Report (IISAR), CDC/NCIRD	
IID-21	Increase the number of states that use electronic data from rabies animal surveillance to inform public health prevention programs	Rabies Surveillance Network (RSN), CDC/NCEZID	
IID-22	Increase the number of public health laboratories monitoring influenza virus resistance to antiviral agents	State Public Health Laboratories Performing Antiviral Resistance Testing, CDC/NCIRD	
IID-23	Reduce hepatitis A	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census	
IID-24	Reduce chronic hepatitis B virus infections in infants and young children (perinatal infections)	National Vital Statistics System–Natality (NVSS–N), CDC/NCHS; Perinatal Hepatitis B Prevention Program (PHBPP), CDC/NCHHSTP	
IID-25.1	Reduce new hepatitis B infections in adults aged 19 and older	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census	
IID-25.2	Reduce new hepatitis B infections among high-risk populations—Injection drug users	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	

Table 23–1. Immunization and Infectious Diseases Objectives—Continued

LEGEND

 Data for this objective are available in this chapter's Midcourse Progress Table.	 Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.	 A state or county level map for this objective is available at the end of the chapter.
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Not Applicable

Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
IID-25.3	Reduce new hepatitis B infections among high-risk populations—Men who have sex with men	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS	
IID-26	Reduce new hepatitis C infections	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census	 
IID-27	Increase the proportion of persons aware they have a hepatitis C infection	National Health and Nutrition Examination Survey (NHANES), CDC/NCHS	
IID-28	(Developmental) Increase the proportion of persons who have been tested for hepatitis B virus within minority communities experiencing health disparities	(Potential) REACH (Racial and Ethnic Approaches to Community Health) Risk Factor Survey, CDC	Not Applicable
IID-29	Reduce tuberculosis (TB)	National TB Surveillance System (NTSS), CDC/NCHHSTP; Bridged-race Population Estimates, CDC/NCHS and Census	  
IID-30	Increase treatment completion rate of all tuberculosis patients who are eligible to complete therapy	National TB Surveillance System (NTSS), CDC/NCHHSTP	 
IID-31	Increase the percentage of contacts to sputum smear-positive tuberculosis cases who complete treatment after being diagnosed with latent tuberculosis infection (LTBI) and initiated treatment for LTBI	Aggregate Reports for Tuberculosis Program Evaluation, CDC/NCHHSTP; National TB Surveillance System (NTSS), CDC/NCHHSTP	
IID-32	Increase the proportion of culture-confirmed TB patients with a positive nucleic acid amplification test (NAAT) result reported within 2 days of specimen collection	National TB Surveillance System (NTSS), CDC/NCHHSTP	
IID-33	Increase the proportion of adults with tuberculosis (TB) who have been tested for HIV	National TB Surveillance System (NTSS), CDC/NCHHSTP	 

Table 23–2. Midcourse Progress for Measurable¹ Immunization and Infectious Diseases Objectives

LEGEND

	Target met or exceeded ^{2,3}		Improving ^{4,5}		Little or no detectable change ^{6–10}		Getting worse ^{11,12}		Baseline only ¹³		Informational ¹⁴
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	Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target ¹⁵	Movement Away From Baseline ¹⁶	Movement Statistically Significant ¹⁷
	³ IID-1.1 U.S.-acquired cases of congenital rubella syndrome in children (number, <1 year)	0 (2008)	0 (2014)	0			
	² IID-1.2 Cases of <i>Haemophilus influenzae</i> type b in children (per 100,000, <5 years)	0.30 (2008)	0.08 (2013)	0.27	733.3%		
	² IID-1.3 New cases of hepatitis B (per 100,000, 2–18 years)	0.1 (2007)	0.0 (2013)	0.0	100.0%		
	¹² IID-1.4 U.S.-acquired cases of measles (number)	115 (2008)	604 (2014)	30		425.2%	
	¹² IID-1.5 U.S.-acquired cases of mumps (number)	421 (2008)	1,183 (2014)	500		181.0%	
	¹² IID-1.6 Cases of pertussis in children (number, <1 year)	2,777 (2004–2008)	3,869 (2009–2013)	2,500		39.3%	
	¹² IID-1.7 Cases of pertussis in adolescents (number, 11–18 years)	3,995 (2000–2004)	6,701 (2009–2013)	2,000		67.7%	
	³ IID-1.8 U.S.-acquired cases of acute paralytic poliomyelitis (number)	0 (2008)	0 (2014)	0			
	³ IID-1.9 U.S.-acquired cases of rubella (number)	10 (2008)	4 (2014)	10			
	⁵ IID-1.10 Cases of varicella (chicken pox) (number, ≤17 years)	586,000 (2008)	145,000 (2013)	100,000	90.7%		
	² IID-2 Early onset group B streptococcal disease in newborns (per 1,000 live births, 0–6 days)	0.30 (2008)	0.25 (2013)	0.25	100.0%		
	² IID-3 Cases of meningococcal disease (number)	1,215 (2004–2008)	748 (2009–2013)	1,094	386.0%		
	² IID-4.1 New invasive pneumococcal infections in children (per 100,000 population, <5 years)	21.1 (2008)	9.6 (2013)	12.0	126.4%		
	² IID-4.2 New invasive pneumococcal infections in adults (per 100,000 population, 65+ years)	40.7 (2008)	30.5 (2013)	31.0	105.2%		
	² IID-4.3 Invasive antibiotic-resistant pneumococcal infections in children (per 100,000 population, <5 years)	8.3 (2008)	3.7 (2013)	6.0	200.0%		
	⁵ IID-4.4 Invasive antibiotic-resistant pneumococcal infections in adults (per 100,000 population, 65+ years)	12.2 (2008)	10.2 (2013)	9.0	62.5%		

Table 23–2. Midcourse Progress for Measurable¹ Immunization and Infectious Diseases Objectives—Continued

LEGEND

	Target met or exceeded ^{2,3}		Improving ^{4,5}		Little or no detectable change ^{6–10}		Getting worse ^{11,12}		Baseline only ¹³		Informational ¹⁴
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Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target ¹⁵	Movement Away From Baseline ¹⁶	Movement Statistically Significant ¹⁷
 ⁸ IID-5 Antibiotics prescribed for ear infections in children (percent, <5 years)	77.8% (2006–2007)	81.5% (2008–2009)	70.0%		4.8%	No
 ⁶ IID-6 Antibiotics prescribed for common cold (percent)	28.6% (2006–2007)	28.5% (2008–2009)	21.0%	1.3%		No
 ⁴ IID-7.1 Children receiving 4+ doses of DTaP vaccine by age 19–35 months (percent)	82.5% (2012)	84.2% (2014)	90.0%	22.7%		Yes
 ⁶ IID-7.2 Children receiving 3+ or 4+ doses of Hib vaccine by age 19–35 months (percent)	80.9% (2012)	82.0% (2014)	90.0%	12.1%		No
 ² IID-7.3 Children receiving 3+ doses of HepB vaccine by age 19–35 months (percent)	89.7% (2012)	91.6% (2014)	90.0%	633.3%		
 ³ IID-7.4 Children receiving 1+ doses of MMR vaccine by age 19–35 months (percent)	90.8% (2012)	91.5% (2014)	90.0%			
 ³ IID-7.5 Children receiving 3+ doses of polio vaccine by age 19–35 months (percent)	92.8% (2012)	93.3% (2014)	90.0%			
 ³ IID-7.6 Children receiving 1+ doses of varicella vaccine by age 19–35 months (percent)	90.2% (2012)	91.0% (2014)	90.0%			
 ⁶ IID-7.7 Children receiving 4+ doses of PCV by age 19–35 months (percent)	81.9% (2012)	82.9% (2014)	90.0%	12.3%		No
 ⁴ IID-7.8 Children receiving 2+ doses of HepA vaccine by age 19–35 months (percent)	53.0% (2012)	57.5% (2014)	85.0%	14.1%		Yes
 ⁴ IID-7.9 Children receiving a birth dose of HepB vaccine within 3 days of birth (percent)	70.6% (2010–2012)	73.2% (2012–2014)	85.0%	18.1%		Yes
 ⁴ IID-7.10 Children receiving 2+ doses of rotavirus vaccine by age 19–35 months (percent)	68.6% (2012)	71.7% (2014)	80.0%	27.2%		Yes
 ⁴ IID-8 Children receiving the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella and PCV vaccines by age 19–35 months (percent)	68.4% (2012)	71.6% (2014)	80.0%	27.6%		Yes
 ¹⁴ IID-9 Children receiving 0 doses of recommended vaccines by age 19–35 months (percent)	0.8% (2012)	0.8% (2014)				
 ³ IID-10.1 Children in kindergarten who received 4+ doses of DTaP vaccine (percent)	97.2% (2009–2010)	95.0% (2013–2014)	95.0%			
 ⁹ IID-10.2 Children in kindergarten who received 2+ doses of MMR vaccine (percent)	95.0% (2009–2010)	94.7% (2013–2014)	95.0%		0.3%	

Table 23–2. Midcourse Progress for Measurable¹ Immunization and Infectious Diseases Objectives—Continued

LEGEND											
	Target met or exceeded ^{2,3}		Improving ^{4,5}		Little or no detectable change ^{6–10}		Getting worse ^{11,12}		Baseline only ¹³		Informational ¹⁴
	Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target¹⁵	Movement Away From Baseline¹⁶	Movement Statistically Significant¹⁷				
	³ IID-10.3 Children in kindergarten who received 3+ doses of polio vaccine (percent)	96.2% (2009–2010)	95.1% (2013–2014)	95.0%							
	³ IID-10.4 Children in kindergarten who received 3+ doses of HepB vaccine (percent)	97.0% (2009–2010)	95.8% (2013–2014)	95.0%							
	⁵ IID-10.5 Children in kindergarten who received 2+ doses of varicella vaccine (percent)	91.3% (2009–2010)	93.3% (2013–2014)	95.0%	54.1%						
	³ IID-11.1 Adolescents receiving 1+ doses of Tdap booster vaccine by age 13–15 years (percent)	85.3% (2012)	88.3% (2014)	80.0%							
	⁴ IID-11.2 Adolescents receiving 2+ doses of varicella vaccine by age 13–15 years (percent)	76.8% (2012)	82.1% (2014)	90.0%	40.2%		Yes				
	⁴ IID-11.3 Adolescents receiving 1+ doses of meningococcal vaccine by age 13–15 years (percent)	73.8% (2012)	79.4% (2014)	80.0%	90.3%		Yes				
	⁴ IID-11.4 Female adolescents receiving 3+ doses of HPV vaccine by age 13–15 years (percent)	28.1% (2012)	34.4% (2014)	80.0%	12.1%		Yes				
	⁴ IID-11.5 Male adolescents receiving 3+ doses of HPV vaccine by age 13–15 years (percent)	6.9% (2012)	20.6% (2014)	80.0%	18.7%		Yes				
	⁴ IID-12.11 Children vaccinated against seasonal influenza (percent, 6 months–17 years)	46.9% (2010–2011)	50.5% (2012–2013)	70.0%	15.6%		Yes				
	⁴ IID-12.12 Adults vaccinated against seasonal influenza (percent, 18+ years)	38.1% (2010–2011)	42.6% (2012–2013)	70.0%	14.1%		Yes				
	⁴ IID-12.13 Health care personnel vaccinated against seasonal influenza (percent, 18+ years)	55.8% (2010–2011)	66.9% (2012–2013)	90.0%	32.5%		Yes				
	⁸ IID-13.1 Noninstitutionalized adults vaccinated against pneumococcal disease (percent, 65+ years)	60.0% (2008)	59.7% (2013)	90.0%		0.5%	No				
	⁴ IID-13.2 Noninstitutionalized high risk adults vaccinated against pneumococcal disease (percent, 18–64 years)	16.6% (2008)	21.0% (2013)	60.0%	10.1%		Yes				
	⁵ IID-13.3 Adults in long-term care or nursing homes vaccinated against pneumococcal disease (percent, 18+ years)	67.4% (2006)	79.3% (2013)	90.0%	52.7%						
	⁴ IID-14 Adults vaccinated against zoster (shingles) (percent, 60+ years)	6.7% (2008)	24.2% (2013)	30.0%	75.1%		Yes				
	⁸ IID-15.3 Health care personnel vaccinated against HepB (percent)	64.3% (2008)	61.8% (2013)	90.0%		3.9%	No				

Table 23–2. Midcourse Progress for Measurable¹ Immunization and Infectious Diseases Objectives—Continued

LEGEND

 Target met or exceeded ^{2,3}	 Improving ^{4,5}	 Little or no detectable change ^{6–10}	 Getting worse ^{11,12}	 Baseline only ¹³	 Informational ¹⁴
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Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target ¹⁵	Movement Away From Baseline ¹⁶	Movement Statistically Significant ¹⁷
 ⁹ IID-17.1 Public health providers who had their childhood vaccine coverage levels measured (percent)	40.0% (2009)	36.8% (2014)	50.0%		8.0%	
 ⁹ IID-17.2 Private providers who had their childhood vaccine coverage levels measured (percent)	33.0% (2009)	31.9% (2014)	50.0%		3.3%	
 ⁵ IID-18 Children participating in population-based immunization information systems (percent, <6 years)	75.0% (2008)	89.7% (2013)	95.0%	73.5%		
 ⁷ IID-19 States collecting kindergarten vaccination coverage data per CDC minimum standards (number of states and D.C.)	11 (2009–2010)	13 (2013–2014)	51	5.0%		
 ⁵ IID-20 States with 80%+ of adolescents 11–18 years having 2+ age-appropriate immunizations in an immunization information system (number of states, D.C., and other reporting areas)	11 (2012)	15 (2013)	40	13.8%		
 ⁵ IID-21 States using electronic rabies animal surveillance data to inform public health prevention programs (number of states)	8 (2010)	14 (2014)	52	13.6%		
 ⁵ IID-22 Public health laboratories monitoring influenza-virus resistance to antiviral agents (number)	3 (2009)	21 (2015)	25	81.8%		
 ⁵ IID-23 New cases of hepatitis A (per 100,000 population)	1.0 (2007)	0.6 (2013)	0.3	57.1%		
 ¹³ IID-24 Chronic perinatal hepatitis B virus infections (number, 1–24 months)	799 (2007)		400			
 ² IID-25.1 New hepatitis B infections in adults (per 100,000 population, 19+ years)	2.0 (2007)	1.3 (2013)	1.5	140.0%		
 ¹² IID-25.2 New hepatitis B infections in injection drug users (number)	285 (2007)	329 (2013)	215		15.4%	
 ² IID-25.3 New hepatitis B infections in men who have sex with men (number)	62 (2007)	45 (2013)	45	100.0%		
 ¹² IID-26 New cases of hepatitis C (per 100,000 population)	0.28 (2007)	0.73 (2013)	0.25		160.7%	
 ⁵ IID-27 Persons with hepatitis C who are aware of their infection (percent)	53.0% (2003–2008)	54.0% (2013–2014)	60.0%	14.3%		
 ⁵ IID-29 New cases of tuberculosis (per 100,000 population)	4.8 (2005)	3.0 (2013)	1.0	47.4%		

Table 23–2. Midcourse Progress for Measurable¹ Immunization and Infectious Diseases Objectives—Continued

LEGEND

 Target met or exceeded ^{2,3}	 Improving ^{4,5}	 Little or no detectable change ^{6–10}	 Getting worse ^{11,12}	 Baseline only ¹³	 Informational ¹⁴
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Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target ¹⁵	Movement Away From Baseline ¹⁶	Movement Statistically Significant ¹⁷
 ⁵ IID-30 Tuberculosis patients completing curative therapy within 12 months (percent)	81.9% (2005)	84.4% (2011)	93.0%	22.5%		
 ⁹ IID-31 Persons who were diagnosed with latent TB infection and started treatment who completed a course of treatment (percent)	68.1% (2007)	67.7% (2010)	79.0%		0.6%	
 ¹³ IID-32 Patients with TB who had their laboratory tests confirmed within 2 days of specimen collection (percent)	32.0% (2008)		77.0%			
 ² IID-33 TB patients tested for HIV (percent, 25–44 years)	73.3% (2008)	94.0% (2013)	80.6%	283.6%		

NOTES

See HealthyPeople.gov for all Healthy People 2020 data. The [Technical Notes](#) provide more information on the measures of progress.

FOOTNOTES

¹**Measurable** objectives had a national baseline value.

Target met or exceeded:

²At baseline the target was not met or exceeded and the midcourse value was equal to or exceeded the target. (The percentage of targeted change achieved was equal to or greater than 100%.)

³The baseline and midcourse values were equal to or exceeded the target. (The percentage of targeted change achieved was not assessed.)

Improving:

⁴Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was statistically significant.

⁵Movement was toward the target, standard errors were not available, and the objective had achieved 10% or more of the targeted change.

Little or no detectable change:

⁶Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was not statistically significant.

⁷Movement was toward the target, standard errors were not available, and the objective had achieved less than 10% of the targeted change.

⁸Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was not statistically significant.

⁹Movement was away from the baseline and target, standard errors were not available, and the objective had moved less than 10% relative to the baseline.

¹⁰There was no change between the baseline and the midcourse data point.

Getting worse:

¹¹Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was statistically significant.

¹²Movement was away from the baseline and target, standard errors were not available, and the objective had moved 10% or more relative to the baseline.

¹³**Baseline only:** The objective only had one data point, so progress toward target attainment could not be assessed.

¹⁴**Informational:** A target was not set for this objective, so progress toward target attainment could not be assessed.

FOOTNOTES—Continued

¹⁵For objectives that **moved toward** their targets, movement toward the target was measured as the percentage of targeted change achieved (unless the target was already met or exceeded at baseline):

$$\text{Percentage of targeted change achieved} = \frac{\text{Midcourse value} - \text{Baseline value}}{\text{HP2020 target} - \text{Baseline value}} \times 100$$

¹⁶For objectives that **moved away** from their baselines and targets, movement away from the baseline was measured as the magnitude of the percentage change from baseline:

$$\text{Magnitude of percentage change from baseline} = \frac{|\text{Midcourse value} - \text{Baseline value}|}{\text{Baseline value}} \times 100$$

¹⁷Statistical significance was tested when the objective had a target and at least two data points, standard errors of the data were available, and a normal distribution could be assumed. Statistical significance of the percentage of targeted change achieved or the magnitude of the percentage change from baseline was assessed at the 0.05 level using a normal one-sided test.

DATA SOURCES

IID-1.1	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-1.2	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Population Estimates, Census
IID-1.3	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census
IID-1.4	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-1.5	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-1.6	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-1.7	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-1.8	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-1.9	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-1.10	National Health Interview Survey (NHIS), CDC/NCHS

Table 23–2. Midcourse Progress for Measurable¹ Immunization and Infectious Diseases Objectives—Continued

DATA SOURCES—Continued

IID-2	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; National Vital Statistics System–Natality (NVSS–N), CDC/NCHS
IID-3	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-4.1	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census
IID-4.2	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census
IID-4.3	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census
IID-4.4	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census
IID-5	National Ambulatory Medical Care Survey (NAMCS), CDC/NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC/NCHS
IID-6	National Ambulatory Medical Care Survey (NAMCS), CDC/NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC/NCHS
IID-7.1	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.2	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.3	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.4	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.5	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.6	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.7	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.8	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.9	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.10	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-8	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-9	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-10.1	Annual School Assessment Reports, CDC/NCIRD
IID-10.2	Annual School Assessment Reports, CDC/NCIRD
IID-10.3	Annual School Assessment Reports, CDC/NCIRD
IID-10.4	Annual School Assessment Reports, CDC/NCIRD
IID-10.5	Annual School Assessment Reports, CDC/NCIRD
IID-11.1	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS
IID-11.2	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS
IID-11.3	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS
IID-11.4	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS
IID-11.5	National Immunization Survey–Teen (NIS–Teen), CDC/NCIRD and CDC/NCHS

DATA SOURCES—Continued

IID-12.11	National Health Interview Survey (NHIS), CDC/NCHS
IID-12.12	National Health Interview Survey (NHIS), CDC/NCHS
IID-12.13	National Health Interview Survey (NHIS), CDC/NCHS
IID-13.1	National Health Interview Survey (NHIS), CDC/NCHS
IID-13.2	National Health Interview Survey (NHIS), CDC/NCHS
IID-13.3	Minimum Data Set (MDS), CMS
IID-14	National Health Interview Survey (NHIS), CDC/NCHS
IID-15.3	National Health Interview Survey (NHIS), CDC/NCHS
IID-17.1	Program Annual Progress Assessments (PAPA), CDC/NCIRD
IID-17.2	Program Annual Progress Assessments (PAPA), CDC/NCIRD
IID-18	Immunization Information Systems Annual Report (IISAR), CDC/NCIRD; Population Estimates, Census
IID-19	Annual School Assessment Reports, CDC/NCIRD
IID-20	Immunization Information Systems Annual Report (IISAR), CDC/NCIRD
IID-21	Rabies Surveillance Network (RSN), CDC/NCEZID
IID-22	State Public Health Laboratories Performing Antiviral Resistance Testing, CDC/NCIRD
IID-23	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census
IID-24	National Vital Statistics System–Natality (NVSS–N), CDC/NCHS; Perinatal Hepatitis B Prevention Program (PHBPP), CDC/NCHHSTP
IID-25.1	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census
IID-25.2	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-25.3	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS
IID-26	National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census
IID-27	National Health and Nutrition Examination Survey (NHANES), CDC/NCHS
IID-29	National TB Surveillance System (NTSS), CDC/NCHHSTP; Bridged-race Population Estimates, CDC/NCHS and Census
IID-30	National TB Surveillance System (NTSS), CDC/NCHHSTP
IID-31	Aggregate Reports for Tuberculosis Program Evaluation, CDC/NCHHSTP; National TB Surveillance System (NTSS), CDC/NCHHSTP
IID-32	National TB Surveillance System (NTSS), CDC/NCHHSTP
IID-33	National TB Surveillance System (NTSS), CDC/NCHHSTP

Table 23–3. Midcourse Health Disparities¹ for Population-based Immunization and Infectious Diseases Objectives

Most favorable (least adverse) and least favorable (most adverse) group rates and summary disparity ratios^{2,3} for selected characteristics at the midcourse data point

Population-based Objectives		Sex		Race and Ethnicity							Education ⁴						Family Income ⁵					Disability		Location							
		Male	Female	Summary Disparity Ratio ²	American Indian or Alaska Native	Asian	Native Hawaiian or other Pacific Islander	Two or more races	Hispanic or Latino	Black, not Hispanic	White, not Hispanic	Summary Disparity Ratio ³	Less than high school	High school graduate	At least some college	Associate's degree	4-year college degree	Advanced degree	Summary Disparity Ratio ³	Poor	Near-poor	Middle	Near-high	High	Summary Disparity Ratio ³	Persons with disabilities	Persons without disabilities	Summary Disparity Ratio ²	Metropolitan	Nonmetropolitan	Summary Disparity Ratio ²
IID-1.2 Cases of <i>Haemophilus influenzae</i> type b in children (per 100,000, <5 years) (2013)				1.143 ¹																											
IID-2 Early onset group B streptococcal disease in newborns (per 1,000 live births, 0–6 days) (2013)												1.909 ¹																			
IID-4.1 New invasive pneumococcal infections in children (per 100,000 population, <5 years) (2013)				1.087 ¹								2.616 ¹																			
IID-4.2 New invasive pneumococcal infections in adults (per 100,000 population, 65+ years) (2013)				1.103 ¹								1.295 ¹																			
IID-4.3 Invasive antibiotic-resistant pneumococcal infections in children (per 100,000 population, <5 years) (2013)				1.355 ¹								3.462 ¹																			
IID-4.4 Invasive antibiotic-resistant pneumococcal infections in adults (per 100,000 population, 65+ years) (2013)				1.020 ¹								1.106 ¹																			
IID-5 Antibiotics prescribed for ear infections in children (percent, <5 years) (2008–2009)				1.054								1.022																			
IID-6 Antibiotics prescribed for common cold (percent) (2008–2009)				1.008								1.148																			

Table 23–3. Midcourse Health Disparities¹ for Population-based Immunization and Infectious Diseases Objectives—Continued

Most favorable (least adverse) and least favorable (most adverse) group rates and summary disparity ratios^{2,3} for selected characteristics at the midcourse data point

Population-based Objectives	Sex		Race and Ethnicity							Education ⁴					Family Income ⁵					Disability		Location							
	Male	Female	American Indian or Alaska Native	Asian	Native Hawaiian or other Pacific Islander	Two or more races	Hispanic or Latino	Black, not Hispanic	White, not Hispanic	Less than high school	High school graduate	At least some college	Associate's degree	4-year college degree	Advanced degree	Poor	Near-poor	Middle	Near-high	High	Persons with disabilities	Persons without disabilities	Metropolitan	Nonmetropolitan					
	Summary Disparity Ratio ²	Summary Disparity Ratio ²	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³					
IID-7.1 Children receiving 4+ doses of DTaP vaccine by age 19–35 months (percent) (2014)			1.029*								1.062							1.102*						1.090*					1.016
IID-7.2 Children receiving 3+ or 4+ doses of Hib vaccine by age 19–35 months (percent) (2014)			1.015							1.048							1.109*						1.097*					1.005	
IID-7.3 Children receiving 3+ doses of HepB vaccine by age 19–35 months (percent) (2014)			1.004							1.026							1.025						1.006					1.005	
IID-7.4 Children receiving 1+ doses of MMR vaccine by age 19–35 months (percent) (2014)			1.005							1.042							1.059*						1.037*					1.004	
IID-7.5 Children receiving 3+ doses of polio vaccine by age 19–35 months (percent) (2014)			1.010							1.009							1.036*						1.021					1.008	
IID-7.6 Children receiving 1+ doses of varicella vaccine by age 19–35 months (percent) (2014)			1.004							1.039							1.047*						1.029					1.016	
IID-7.7 Children receiving 4+ doses of PCV by age 19–35 months (percent) (2014)			1.019							1.117*							1.111*						1.081*					1.000	
IID-7.8 Children receiving 2+ doses of HepA vaccine by age 19–35 months (percent) (2014)			1.018							1.145*							1.088						1.097*					1.144*	

Table 23–3. Midcourse Health Disparities¹ for Population-based Immunization and Infectious Diseases Objectives—Continued

Most favorable (least adverse) and least favorable (most adverse) group rates and summary disparity ratios^{2,3} for selected characteristics at the midcourse data point

LEGEND

At the midcourse data point  Group with the most favorable (least adverse) rate  Group with the least favorable (most adverse) rate  Data are available, but this group did not have the highest or lowest rate.  Data are not available for this group because the data were statistically unreliable, not collected, or not analyzed.

Population-based Objectives	Characteristics and Groups																													
	Sex		Race and Ethnicity							Education ⁴					Family Income ⁵					Disability		Location								
	Male	Female	Summary Disparity Ratio ²	American Indian or Alaska Native	Asian	Native Hawaiian or other Pacific Islander	Two or more races	Hispanic or Latino	Black, not Hispanic	White, not Hispanic	Summary Disparity Ratio ³	Less than high school	High school graduate	At least some college	Associate's degree	4-year college degree	Advanced degree	Summary Disparity Ratio ³	Poor	Near-poor	Middle	Near-high	High	Summary Disparity Ratio ³	Persons with disabilities	Persons without disabilities	Summary Disparity Ratio ²	Metropolitan	Nonmetropolitan	Summary Disparity Ratio ²
IID-7.9 Children receiving a birth dose of HepB vaccine within 3 days of birth (percent) (2012–2014)			1.002								1.092	 b	 b	 b	 b	 b	 b	1.082*						1.053						1.084*
IID-7.10 Children receiving 2+ doses of rotavirus vaccine by age 19–35 months (percent) (2014)			1.018								1.074	 b	 b	 b	 b	 b	 b	1.180*						1.150*						1.054*
IID-8 Children receiving the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella, and PCV vaccines by age 19–35 months (percent) (2014)			1.037*								1.078	 b	 b	 b	 b	 b	 b	1.136*						1.116*						1.007
IID-9 Children receiving 0 doses of recommended vaccines by age 19–35 months (percent) (2014)			1.043								1.368	 b	 b					1.368						1.242						2.104*
IID-11.1 Adolescents receiving 1+ doses of Tdap booster vaccine by age 13–15 years (percent) (2014)			1.020								1.078	 b	 b	 b	 b	 b	 b	1.042*						1.036*						1.028
IID-11.2 Adolescents receiving 2+ doses of varicella vaccine by age 13–15 years (percent) (2014)			1.029*								1.069	 b	 b	 b	 b	 b	 b	1.033						1.025						1.025
IID-11.3 Adolescents receiving 1+ doses of meningococcal vaccine by age 13–15 years (percent) (2014)			1.011								1.160	 b	 b	 b	 b	 b	 b	1.051						1.060*						1.176*
IID-11.4 Female adolescents receiving 3+ doses of HPV vaccine by age 13–15 years (percent) (2014)											1.334	 b	 b	 b	 b	 b	 b	1.398*						1.200*						1.077

Table 23–3. Midcourse Health Disparities¹ for Population-based Immunization and Infectious Diseases Objectives—Continued

Most favorable (least adverse) and least favorable (most adverse) group rates and summary disparity ratios^{2,3} for selected characteristics at the midcourse data point

LEGEND

At the midcourse data point		Group with the most favorable (least adverse) rate		Group with the least favorable (most adverse) rate		Data are available, but this group did not have the highest or lowest rate.		Data are not available for this group because the data were statistically unreliable, not collected, or not analyzed.
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Population-based Objectives	Characteristics and Groups																							
	Sex		Race and Ethnicity							Education ⁴					Family Income ⁵					Disability		Location		
	Male	Female	American Indian or Alaska Native	Asian	Native Hawaiian or other Pacific Islander	Two or more races	Hispanic or Latino	Black, not Hispanic	White, not Hispanic	Less than high school	High school graduate	At least some college	Associate's degree	4-year college degree	Advanced degree	Poor	Near-poor	Middle	Near-high	High	Persons with disabilities	Persons without disabilities	Metropolitan	Nonmetropolitan
IID-11.5 Male adolescents receiving 3+ doses of HPV vaccine by age 13–15 years (percent) (2014)										1.317														1.058
IID-12.11 Children vaccinated against seasonal influenza (percent, 6 months–17 years) (2012–2013)			1.004							1.155														1.170*
IID-12.12 Adults vaccinated against seasonal influenza (percent, 18+ years) (2012–2013)			1.184*							1.284*														1.363*
IID-12.13 Health care personnel vaccinated against seasonal influenza (percent, 18+ years) (2012–2013)			1.010							1.314*														1.361*
IID-13.1 Noninstitutionalized adults vaccinated against pneumococcal disease (percent, 65+ years) (2013)			1.082*							1.346*														1.147*
IID-13.2 Noninstitutionalized high risk adults vaccinated against pneumococcal disease (percent, 18–64 years) (2013)			1.228*							1.239														1.105
IID-13.3 Adults in long-term care or nursing homes vaccinated against pneumococcal disease (percent, 18+ years) (2013)			1.050†							1.072†														
IID-14 Adults vaccinated against zoster (shingles) (percent, 60+ years) (2013)			1.122*							1.708*														1.655*

Table 23–3. Midcourse Health Disparities¹ for Population-based Immunization and Infectious Diseases Objectives—Continued

NOTES

See [HealthyPeople.gov](https://www.healthypeople.gov) for all Healthy People 2020 data. The [Technical Notes](#) provide more information on the measures of disparities.

FOOTNOTES

¹**Health disparities** were assessed among population groups within specified demographic characteristics (sex, race and ethnicity, educational attainment, etc.). This assessment did not include objectives that were not population-based, such as those based on states, worksites, or those monitoring the number of events.

²When there were only two groups (e.g., male and female), the **summary disparity ratio** was the ratio of the higher to the lower rate.

³When there were three or more groups (e.g., white non-Hispanic, black non-Hispanic, Hispanic) and the most favorable rate (R_b) was the highest rate, the **summary disparity ratio** was calculated as R_b/R_a , where R_a = the average of the rates for all other groups. When there were three or more groups and the most favorable rate was the lowest rate, the summary disparity ratio was calculated as R_a/R_b .

⁴Unless otherwise footnoted, data do not include persons under age 25 years.

⁵Unless otherwise footnoted, the poor, near-poor, middle, near-high, and high income groups are for persons whose family incomes were less than 100%, 100%–199%, 200%–399%, 400%–599%, and at or above 600% of the poverty threshold, respectively.

*The summary disparity ratio was significantly greater than 1.000. Statistical significance was assessed at the 0.05 level using a normal one-sided test on the natural logarithm scale.

[†]The summary disparity ratio was not tested for statistical significance because standard errors of the data were not available or normality on the natural logarithm scale could not be assumed.

^aData include persons of Hispanic origin.

^bEducation level of the mother.

^cData are for persons whose family income was 400% to 499% of the poverty threshold.

^dData are for persons whose family income was 500% or more of the poverty threshold.

^eData do not include persons of Hispanic origin.

DATA SOURCES

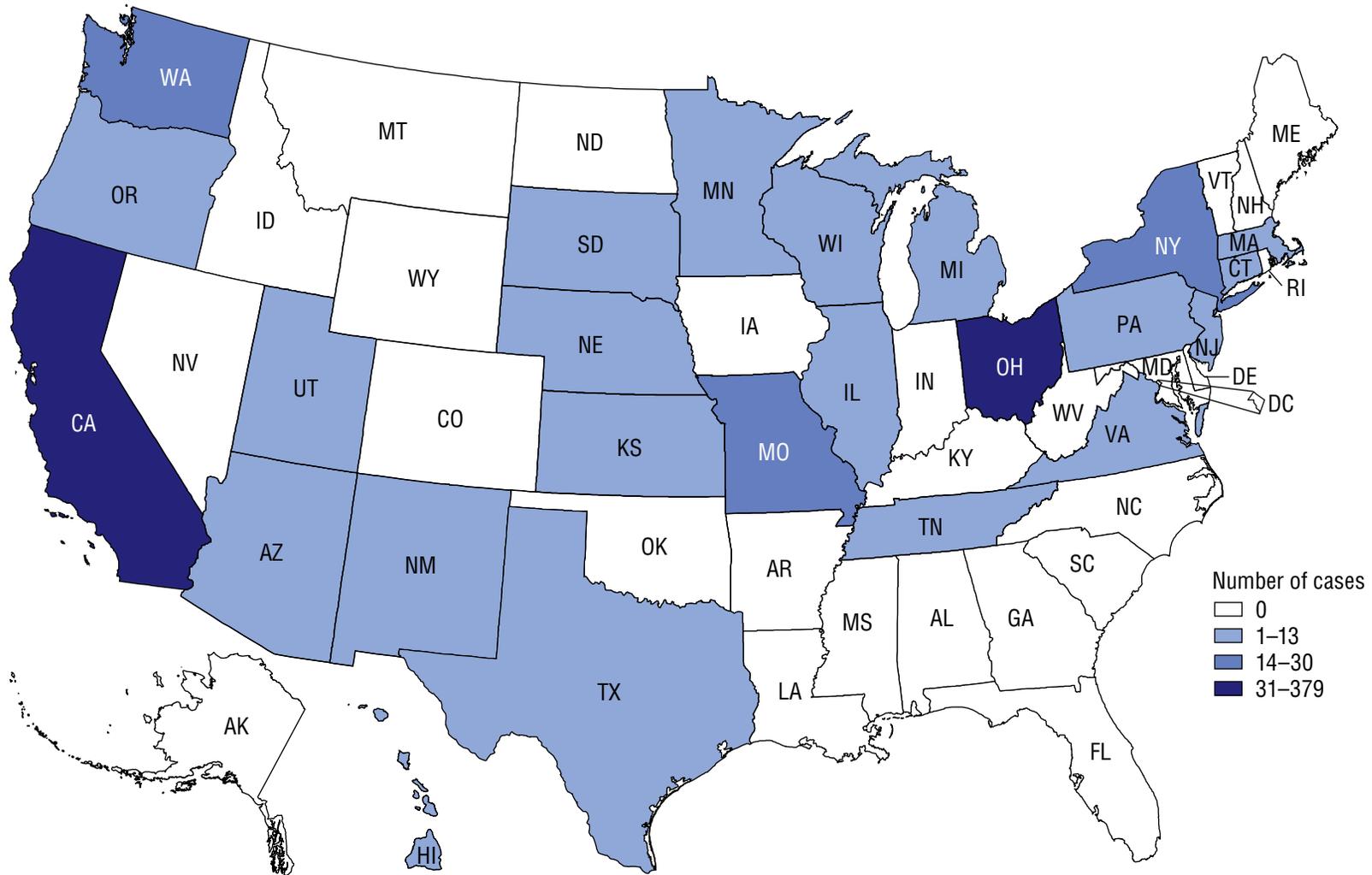
IID-1.2	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Population Estimates, Census
IID-2	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; National Vital Statistics System–Natality (NVSS–N), CDC/NCHS
IID-4.1	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census
IID-4.2	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census
IID-4.3	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census
IID-4.4	Active Bacterial Core Surveillance (ABCS), CDC/NCIRD; Bridged-race Population Estimates, CDC/NCHS and Census

DATA SOURCES—Continued

IID-5	National Ambulatory Medical Care Survey (NAMCS), CDC/NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC/NCHS
IID-6	National Ambulatory Medical Care Survey (NAMCS), CDC/NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC/NCHS
IID-7.1	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.2	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.3	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.4	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.5	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.6	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.7	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.8	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.9	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-7.10	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-8	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-9	National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS
IID-11.1	National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS
IID-11.2	National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS
IID-11.3	National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS
IID-11.4	National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS
IID-11.5	National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS
IID-12.11	National Health Interview Survey (NHIS), CDC/NCHS
IID-12.12	National Health Interview Survey (NHIS), CDC/NCHS
IID-12.13	National Health Interview Survey (NHIS), CDC/NCHS
IID-13.1	National Health Interview Survey (NHIS), CDC/NCHS
IID-13.2	National Health Interview Survey (NHIS), CDC/NCHS
IID-13.3	Minimum Data Set (MDS), CMS
IID-14	National Health Interview Survey (NHIS), CDC/NCHS
IID-15.3	National Health Interview Survey (NHIS), CDC/NCHS
IID-23	National Notifiable Diseases Surveillance System (NNDS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census
IID-25.1	National Notifiable Diseases Surveillance System (NNDS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census
IID-26	National Notifiable Diseases Surveillance System (NNDS), CDC/CSELS; Bridged-race Population Estimates, CDC/NCHS and Census
IID-29	National TB Surveillance System (NTSS), CDC/NCHHSTP; Bridged-race Population Estimates, CDC/NCHS and Census
IID-30	National TB Surveillance System (NTSS), CDC/NCHHSTP
IID-33	National TB Surveillance System (NTSS), CDC/NCHHSTP

Map 23–1. U.S.-acquired Cases of Measles, by State: 2014

Healthy People 2020 Objective IID-1.4 • National Target = 30 cases • National Total = 604 cases

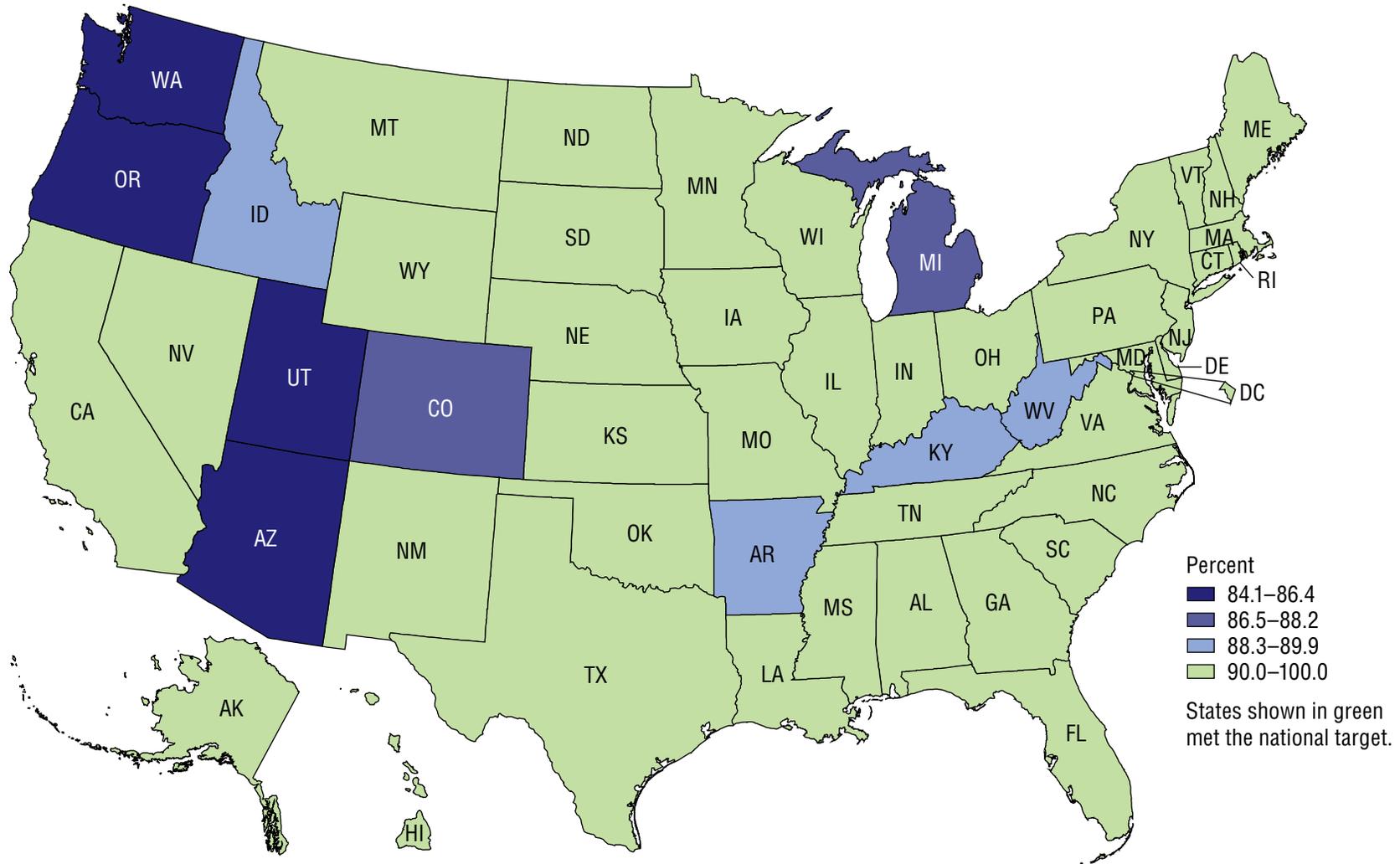


NOTES: Data are the number of U.S.-acquired measles cases reported by each state and the District of Columbia in 2014. Data are displayed by a Jenks classification for U.S. states which creates categories that minimize within-group variation and maximize between-group variation. The [Technical Notes](#) provide more information on the data and methods.

DATA SOURCE: National Notifiable Diseases Surveillance System (NNDSS), CDC/CSELS

Map 23–2. Children (19–35 months) Who Received 1+ Doses of Measles-Mumps-Rubella (MMR) Vaccine, by State: 2014

Healthy People 2020 Objective IID-7.4 • National Target = 90.0% • National Rate = 91.5%

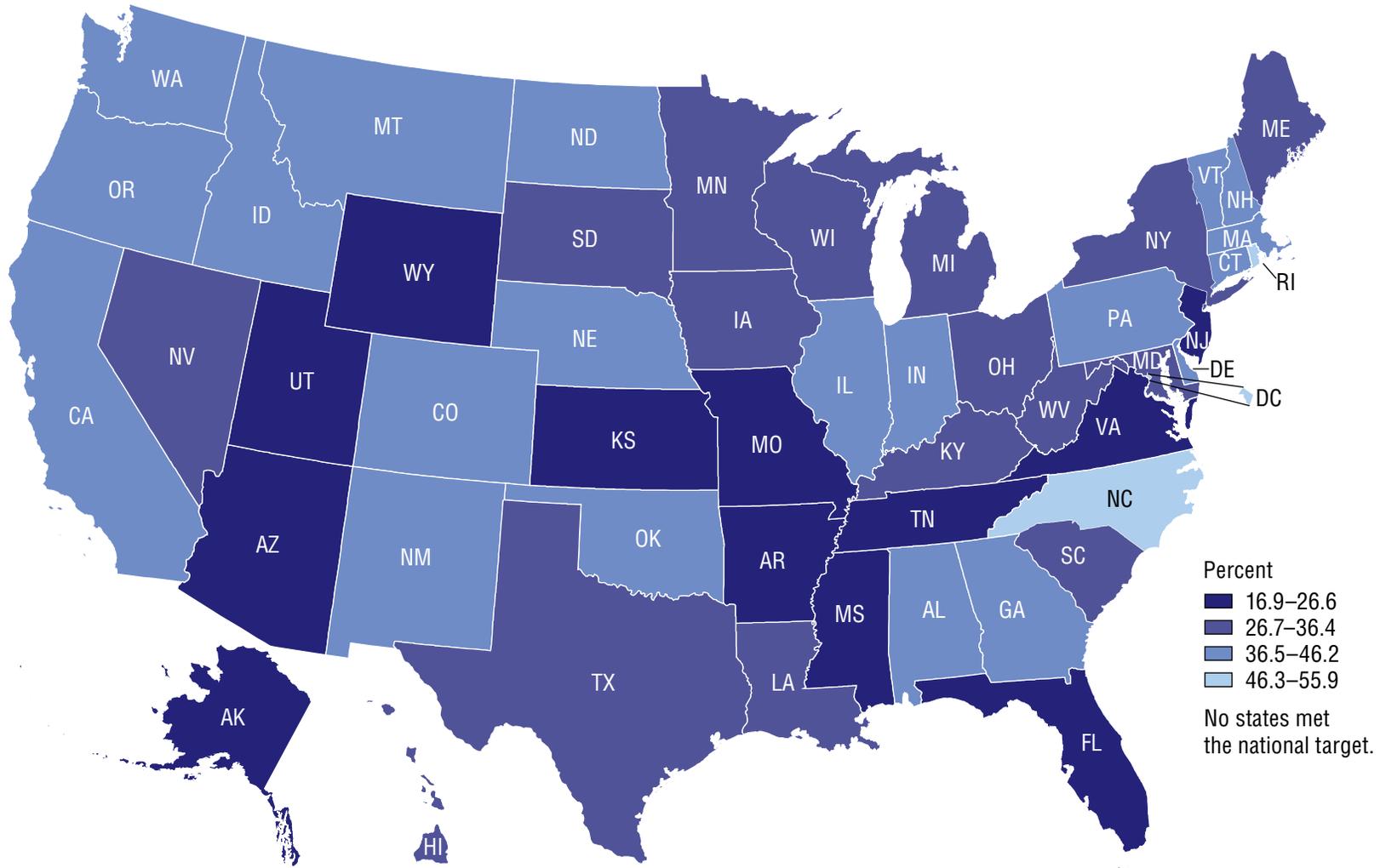


NOTES: Data are for children aged 19–35 months who received at least 1 dose of the combination of measles, mumps, and rubella antigens in 2014. Data are displayed by a modified Jenks classification for U.S. states which creates categories that minimize within-group variation and maximize between-group variation. The [Technical Notes](#) provide more information on the data and methods.

DATA SOURCE: National Immunization Survey (NIS), CDC/NCIRD and CDC/NCHS

Map 23–4. Female Adolescents (13–15 years) Who Received 3+ Doses of Human Papillomavirus Vaccine (HPV), by State: 2014

Healthy People 2020 Objective IID-11.4 • National Target = 80.0% • National Rate = 34.4%

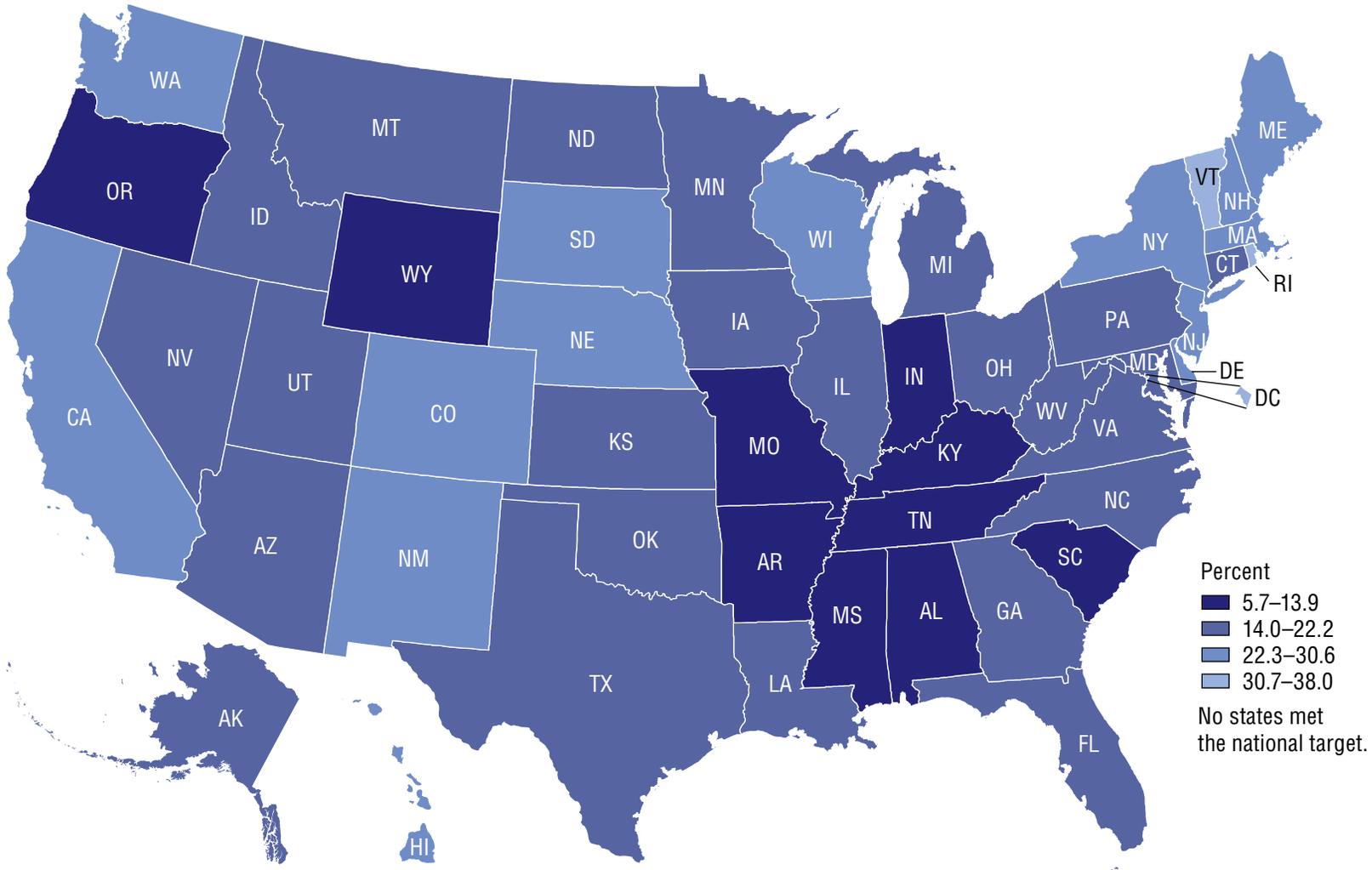


NOTES: Data are for females aged 13–15 years who received at least 3 doses of the human papillomavirus (HPV) vaccine. Data are displayed by a Jenks classification for U.S. states which creates categories that minimize within-group variation and maximize between-group variation. The [Technical Notes](#) provide more information on the data and methods.

DATA SOURCE: National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS

Map 23–5. Male Adolescents (13–15 years) Who Received 3+ Doses of Human Papillomavirus Vaccine (HPV), by State: 2014

Healthy People 2020 Objective IID-11.5 • National Target = 80.0% • National Rate = 20.6%

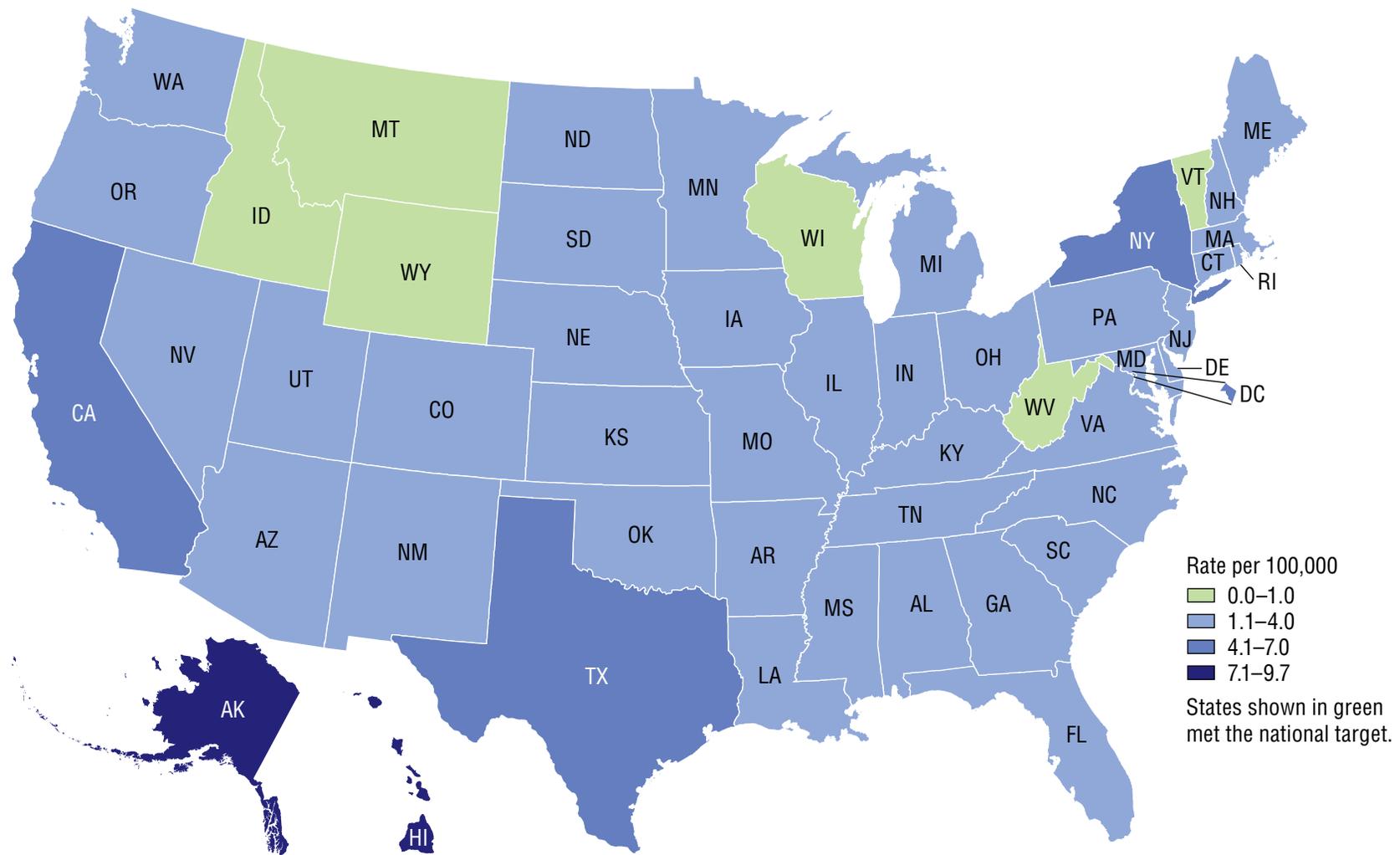


NOTES: Data are for males aged 13–15 years who have received at least 3 doses of the human papillomavirus (HPV) vaccine. Data are displayed by a Jenks classification for U.S. states which creates categories that minimize within-group variation and maximize between-group variation. The [Technical Notes](#) provide more information on the data and methods.

DATA SOURCE: National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS

Map 23–6. New Cases of Tuberculosis, by State: 2013

Healthy People 2020 Objective IID-29 • National Target = 1.0 per 100,000 population • National Rate = 3.0 per 100,000 population



NOTES: Data are for confirmed new cases of tuberculosis reported to CDC by local health departments in all 50 States and the District of Columbia. Data are displayed by a modified Jenks classification for U.S. states which creates categories that minimize within-group variation and maximize between-group variation. The [Technical Notes](#) provide more information on the data and methods.

DATA SOURCES: National TB Surveillance System (NTSS), CDC/NCHHSTP; Bridged-race Population Estimates, Census