

14

Immunization and Infectious Diseases

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Diseases Preventable Through Universal Vaccination

14-1. Reduce or eliminate indigenous cases of vaccine-preventable diseases.

14-1a. Congenital rubella syndrome (children under age 1 year).

National Data Source	National Congenital Syndrome Registry, CDC, NCID.
State Data Source	National Congenital Syndrome Registry, CDC, NCID.
Healthy People 2000 Objective	20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	7 (1998).
Numerator	Number of confirmed and probable cases of congenital rubella syndrome among children under age 1 year.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Congenital Rubella Syndrome Case Report, Form 71.17, Rev. 03/97.
Expected Periodicity	Annual.
Comments	A case definition for confirmed and probable cases of congenital rubella syndrome is available from CDC. ¹ See Appendix A for focus area contact information.



14-1b. Diphtheria (persons under age 35 years).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.

Healthy People 2000 Objective	Adapted from 20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	1 (1998).
Numerator	Number of confirmed cases of diphtheria among persons under age 35 years.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Diphtheria Worksheet.
Expected Periodicity	Annual.
Comments	<p>A case definition for confirmed cases of diphtheria is available from CDC.¹</p> <p>This objective is a modification of Healthy People 2000 objective 20.1, which tracked the number of confirmed cases of diphtheria among persons aged 25 years and under. This measure tracks the number of confirmed cases of diphtheria among persons under age 35 years.</p> <p>See Part C for a description of NNDSS and Appendix A for focus area contact information.</p>



14-1c. *Haemophilus influenzae* type b (children under age 5 years).

National Data Sources	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Active Bacterial Core Surveillance (ABCs), Emerging Infection Programs, CDC, NCID.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	163 (1998).

Numerator	Estimated number of all reported confirmed and probable cases of <i>Haemophilus influenzae</i> invasive disease (see Comments).
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC National Bacterial Meningitis and Bacteremia Case Report, CDC 52.15N, Rev. 02/93.
Expected Periodicity	Annual.
Comments	<p>This measure includes confirmed cases of H. influenzae type b disease and cases in which the isolate of H. influenzae is of unknown serotype (based on the eight States with specific regions under surveillance).</p> <p>A case definition for confirmed and probable cases of <i>Haemophilus influenzae</i> type b is available from CDC.¹</p> <p>This objective is a modification of Healthy People 2000 objective 20.1, which tracked the number of cases of vaccine-preventable diseases. <i>Haemophilus influenzae</i> type b was previously not included as a vaccine-preventable disease.</p> <p>See Part C for a description of NNDSS and Appendix A for focus area contact information.</p>



14-1d. Hepatitis B (persons aged 2 to 18 years).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	945 (1997).

Numerator	Number of laboratory-confirmed new symptomatic hepatitis B cases among persons aged 2 to 18 years.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.
Comments	<p>A case definition for laboratory-confirmed new symptomatic cases of hepatitis B is available from CDC.¹</p> <p>This objective is a modification of Healthy People 2000 objective 20.1, which tracked the number of cases of vaccine-preventable diseases. Hepatitis B previously was not included as a vaccine-preventable disease.</p> <p>See Part C for a description of NNDSS and Appendix A for focus area contact information.</p>



14-1e. Measles (persons of all ages).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	74 (1998).
Numerator	Number of confirmed indigenous measles cases.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Measles Surveillance Worksheet, Rev. 05/98.

Expected Periodicity	Annual.
Comments	A case definition for confirmed indigenous cases of measles is available from CDC. ¹ See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-1f. Mumps (persons of all ages).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	666 (1998).
Numerator	Number of confirmed and probably indigenous cases of mumps.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Mumps Surveillance Worksheet.
Expected Periodicity	Annual.
Comments	A case definition for confirmed and probable indigenous cases of mumps is available from CDC. ¹ See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-1g. Pertussis (children under age 7 years).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
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State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	3,417 (1998).
Numerator	Number of confirmed and probable cases of pertussis (including cases identified in outbreak settings) among children under age 7 years.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Pertussis Report, Form 71.14A, Rev. 06/86.
Expected Periodicity	Annual.
Comments	<p>A case definition for confirmed and probable cases of pertussis (including cases identified in outbreak settings) is available from CDC.¹</p> <p>This objective is a modification of Healthy People 2000 objective 20.1, which tracked the number of confirmed and probable cases of pertussis among persons of all ages. This measure tracks the number of confirmed and probable cases among children under age 7 years.</p> <p>See Part C for a description of NNDSS and Appendix A for focus area contact information.</p>



14-1h. Polio (wild-type virus) (persons of all ages).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	20.1 (Immunization and Infectious Diseases).
Measure	Number.

Baseline	0 (1998).
Numerator	Number of indigenously acquired cases of polio (wild-type virus, excludes imported or vaccine-associated cases).
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Suspected Polio Case Worksheet.
Expected Periodicity	Annual.
Comments	A case definition for indigenously acquired cases of polio (wild-type virus, excluding imported or vaccine-associated cases) is available from CDC. ¹ See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-1i. Rubella (persons of all ages).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	364 (1998).
Numerator	Number of confirmed indigenous cases of rubella.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Rubella Surveillance Worksheet.
Expected Periodicity	Annual.
Comments	A case definition for confirmed indigenous cases of rubella is available from CDC. ¹

See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-1j. Tetanus (persons under age 35 years).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.1 (Immunization and Infectious Diseases).
Measure	Number.
Baseline	14 (1998).
Numerator	Number of confirmed cases of tetanus among persons under age 35 years.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Tetanus Surveillance Case Report, Form 71.16, Rev. 06/86.
Expected Periodicity	Annual.
Comments	<p>A case definition for confirmed cases of tetanus is available from CDC.¹</p> <p>This objective is a modification of Healthy People 2000 objective 20.1, which tracked the number of confirmed cases of tetanus among persons aged 25 years and under. This measure tracks the number of confirmed cases of tetanus among persons under age 35 years.</p> <p>See Part C for a description of NNDSS and Appendix A for focus area contact information.</p>



14-1k. Varicella (chicken pox) (persons under age 18 years).

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.1 (Immunization and Infectious Diseases).
Measure	Number (4-year average).
Baseline	4 million (1990–94).
Numerator	Number of persons (all ages) who are reported to have had chicken pox (varicella) in the past year.
Denominator	Not applicable.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1999 National Health Interview Survey (see Comments): ➤ <i>Has (<u>Sample child</u>) ever had chicken pox?</i> [If yes:] ○ <i>Has (<u>Sample child</u>) had chicken pox during the past 12 months?</i>
Expected Periodicity	Annual.
Comments	A case of chicken pox is identified as any person who reported missing either more than half of 1 day of school or work due to an illness or injury or staying in bed more than half of a day due to an illness or injury and who also reported that the condition that caused the day(s) of missed school/work or day(s) of staying in bed was varicella or chicken pox. These data are adjusted from a 2-week incidence to a 12-month incidence by multiplying the estimates by a factor of 26.

The baseline data for persons of all ages are a proxy measure for this objective and were calculated using the 1990–94 NHIS. NHIS was redesigned in 1997 to measure prevalence, and starting in 1999 NHIS included questions on incidence and asks if children aged under 18 years have ever had chicken pox, and if they had a case of the chicken pox/varicella in the past 12 months. This annual estimate will be the measure used to track this objective over the course of the decade.

The responses to questions on medical conditions are self-reports and are not validated. However, varicella is a distinct rash illness that is diagnosed easily by the lay public.

This objective is a modification of Healthy People 2000 objective 20.1, which tracked the number of cases of vaccine-preventable diseases. Varicella (chicken pox) previously was not included as a vaccine-preventable disease.

See Part C for a description of NHIS and Appendix A for focus area contact information.



14-2. Reduce chronic hepatitis B virus infections in infants and young children (perinatal infections).

National Data Sources	Perinatal Hepatitis B Prevention Program, CDC, NCID; National Vital Statistics System (NVSS), CDC, NCHS.
State Data Sources	State Perinatal Hepatitis B Prevention Programs; State Vital Statistics Systems.
Healthy People 2000 Objective	20.3f (Immunization and Infectious Diseases).
Measure	Number.
Baseline	1,682 (1995).
Numerator	Number of estimated chronic hepatitis B virus (HBV) infections occurring among infants and children aged 2 years and younger of HBV-infected mothers (see Comments).
Denominator	Not applicable.

Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.
Comments	<p>Using data collected by the Perinatal Hepatitis B Prevention Program and NVSS, this measure is based on the following estimation procedure:^{1, 2, 3, 4, 5}</p> <p>(1) Multiply the total births per year to HBsAg-positive women by the proportion of pregnant women screened for HBsAg and then by the proportion of infants born to identified HBsAg-positive women who receive the vaccine (this estimates the number of infants who were born to identified HBsAg-positive women and received at least one dose of vaccine).</p> <p>(2) Multiply the total number of infants who were born to HBsAg-positive women and received at least one dose of vaccine by the proportion of vaccinated infants who will remain susceptible, and add to the number of infants born to HBsAg-positive women who are not vaccinated (this estimates the number of infants born to HBsAg-positive women who remain susceptible).</p> <p>(3) Finally, multiply number of infants born to HBsAg-positive women remaining susceptible by the proportion of susceptible infants who will become infected and then by the proportion of infected infants who will remain chronically infected with HBV.</p> <p>The estimated number of births to HBV-infected mothers is derived by applying race- and ethnicity-specific estimates of the prevalence of hepatitis B surface antigen to NVSS annual natality data.</p> <p>See Part C for a description of NVSS (natality) and Appendix A for focus area contact information.</p>



14-3. Reduce hepatitis B.

Adults

14-3a. 19 to 24 years.

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.3 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	24.0 (1997).
Numerator	Number of estimated cases of hepatitis B among persons aged 19 to 24 years.
Denominator	Number of persons aged 19 to 24 years.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.
Comments	<p>To determine the estimated number of hepatitis B cases by year of age, the number of hepatitis B cases reported to NNDSS by year of age is multiplied by age-specific ratios of infections to reported cases and divided by the age-specific proportions of infections which are symptomatic.^{6, 7}</p> <p>To determine the estimated hepatitis B rate for a specific age group, the estimated number of cases for each year of age included in the group are added together and divided by the total population in that age group.</p> <p>This measure is a modification of its comparable Healthy People 2000 objective 20.3, which tracked all ages. This measure tracks specific age groups.</p> <p>See Part C for a description of NNDSS and Appendix A for focus area contact information.</p>



14-3b. 25 to 39 years.

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.3 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	20.2 (1997).
Numerator	Number of estimated cases of hepatitis B among persons aged 25 to 39 years.
Denominator	Number of persons aged 25 to 39 years.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-3 for more information.



14-3c. 40 years and older.

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.3 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	15.0 (1997).
Numerator	Number of estimated cases of hepatitis B among persons aged 40 years and older.
Denominator	Number of persons aged 40 years and older.
Population Targeted	U.S. resident population.

Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-3 for more information.



High-risk groups

14-3d. Injection drug users.

National Data Sources	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.
State Data Sources	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.
Healthy People 2000 Objective	20.3a (Immunization and Infectious Diseases).
Measure	Number.
Baseline	7,232 (1997).
Numerator	Number of estimated hepatitis B cases multiplied by the proportion of hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that were attributable to injection drug use.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.
Comments	To determine the estimated number of hepatitis B cases occurring in injection drug users nationwide, the estimated total number of hepatitis B cases in all age groups (for complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in injection drug users.

To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to injection drug use.

See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-3e. Heterosexually active persons.

National Data Sources	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.
State Data Sources	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.
Healthy People 2000 Objective	20.3b (Immunization and Infectious Diseases) (also part of 19.7).
Measure	Number.
Baseline	15,225 (1997).
Numerator	Number of estimated hepatitis B cases multiplied by the proportion of new symptomatic hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that occurred among heterosexually active persons.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.

Comments

To determine the estimated number of hepatitis B cases occurring in heterosexually active persons nationwide, the estimated total number of hepatitis B cases in all age groups (for complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in heterosexually active persons.

To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to heterosexual activity.

See Part C for a description of NNDSS and Appendix A for focus area contact information.

**14-3f. Men who have sex with men.****National Data Sources**

National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.

State Data Sources

National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.

Healthy People 2000 Objective

20.3c (Immunization and Infectious Diseases) (also part of 19.7).

Measure

Number.

Baseline

7,232 (1997).

Numerator

Number of estimated hepatitis B cases multiplied by the proportion of hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that were attributable to male homosexual behavior.

Denominator

Not applicable.

Population Targeted

U.S. resident population.

Questions Used To Obtain the National Data

CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.

Expected Periodicity

Annual.

Comments

To determine the estimated number of hepatitis B cases occurring in homosexual males nationwide, the estimated total number of hepatitis B cases in all age groups (for complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in homosexual males.

To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to male homosexual activity.

See Part C for a description of NNDSS and Appendix A for focus area contact information.

**14-3g. Occupationally exposed workers.****National Data Sources**

National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.

State Data Sources

National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.

Healthy People 2000 Objective

20.3e (Immunization and Infectious Diseases) (also 10.5).

Measure

Number.

Baseline

249 (1997).

Numerator

Number of estimated hepatitis B cases multiplied by the proportion of hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that were attributed to occupational exposure.

Denominator

Not applicable.

Population Targeted

U.S. resident population.

Questions Used To Obtain the National Data

CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.

Expected Periodicity

Annual.

Comments

To determine the estimated number of hepatitis B cases occurring in occupationally exposed workers nationwide, the estimated total number of hepatitis B cases in all age groups (for a complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in occupationally exposed workers.

To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to occupational exposure.

See Part C for a description of NNDSS and Appendix A for focus area contact information.

**14-4. Reduce bacterial meningitis in young children.**

National Data Source	Active Bacterial Core Surveillance (ABCs), Emerging Infection Programs, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.7 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population
Baseline	13.0 (1998) (selected regions in eight States—see Comments).
Numerator	Number of laboratory culture confirmed cases with bacterial meningitis in children aged 1 to 23 months.
Denominator	Number of children aged 1 to 23 months.
Population Targeted	Resident population in the eight States with specific regions under surveillance (see Comments).
Questions Used To Obtain the National Data	CDC Active Surveillance Bacterial Meningitis and Bacteremia Case Report, Form 52.15A, Rev. 12/97.
Expected Periodicity	Annual.

Comments

A laboratory culture-confirmed case of bacterial meningitis is defined as either the isolation of *Haemophilus influenzae*, *Neisseria meningitidis*, group B *Streptococcus*, groups A *Streptococcus*, or *Streptococcus pneumoniae* from cerebral spinal fluid or a positive culture of *Haemophilus influenzae*, *Neisseria meningitidis*, group B *Streptococcus*, groups A *Streptococcus*, or *Streptococcus pneumoniae* from a different normally sterile site (blood, pleural fluid, etc.) and a clinical diagnosis of meningitis.¹

ABCs is an active and laboratory-based case surveillance system. Data are collected from acute care hospitals and reference laboratories for laboratory-confirmed cases as well as from case report forms.

Data are based on surveillance of selected regions in eight States: California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee.

This measure is a modification of Healthy People 2000 objective 20.7, which tracked bacterial meningitis for all ages using the Bacterial Meningitis Surveillance System, CDC, NCID. This measure tracks bacterial meningitis for children aged 1 to 23 months using ABCs.

See Appendix A for focus area contact information.



14-5. Reduce invasive pneumococcal infections.

New invasive pneumococcal infections

14-5a. Children under age 5 years.

National Data Source	Active Bacterial Core Surveillance (ABCs), Emerging Infection Programs, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.10 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population

Baseline	76 (1997) (selected regions in eight States—see Comments).
Numerator	Number of children under age 5 years with a laboratory-confirmed invasive pneumococcal infection (see Comments) in the past 12 months.
Denominator	Number of children under age 5 years.
Population Targeted	Resident population in the eight States with specific regions under surveillance (see Comments).
Questions Used To Obtain the National Data	CDC Active Surveillance Bacterial Meningitis and Bacteremia Case Report, Form 52.15A, Rev. 12/97.
Expected Periodicity	Annual.
Comments	<p>An invasive pneumococcal infection is defined as a laboratory-confirmed isolation of <i>Streptococcus pneumoniae</i> from a normally sterile site (blood, cerebral spinal fluid, etc.).¹</p> <p>ABCs is an active and laboratory-based case surveillance system. Data are collected from acute care hospitals and reference laboratories for laboratory-confirmed cases as well as from case report forms.</p> <p>Data are based on surveillance of selected regions in eight States: California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee. Data for Alaska Natives are measured by the Arctic Investigations Program, CDC, NCID.</p> <p>This measure is a modification of Healthy People 2000 objective 20.10, which tracked restricted activity days among children under age 5 years using the National Health Interview Survey (NHIS), CDC, NCHS. This objective tracks the incidence of pneumococcal infections among children under age 5 years using ABCs.</p> <p>See Appendix A for focus area contact information.</p>



14-5b. Adults aged 65 years and older.

National Data Source Active Bacterial Core Surveillance (ABCs), Emerging Infection Programs, CDC, NCID.

State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.10 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population
Baseline	62 (1997) (selected regions in eight States—see Comments).
Numerator	Number of adults aged 65 years and older with a laboratory-confirmed invasive pneumococcal infection (see Comments) in the past 12 months.
Denominator	Number of adults aged 65 years and older.
Population Targeted	Resident population in the eight States with specific regions under surveillance (see Comments).
Questions Used To Obtain the National Data	CDC Active Surveillance Bacterial Meningitis and Bacteremia Case Report, Form 52.15A, Rev. 12/97.
Expected Periodicity	Annual.
Comments	<p>An invasive pneumococcal infection is defined as a laboratory-confirmed isolation of <i>Streptococcus pneumoniae</i> from a normally sterile site (blood, cerebral spinal fluid, etc.).¹</p> <p>ABCs is an active and laboratory-based case surveillance system. Data are collected from acute care hospitals and reference laboratories for laboratory-confirmed cases as well as from case report forms.</p> <p>Data are based on surveillance of selected regions in eight States: California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee. Data for Alaska Natives are measured by the Arctic Investigations Program, CDC, NCID.</p> <p>This measure is a modification of Healthy People 2000 objective 20.10, which tracked restricted activity days among adults aged 65 years and older years using the National Health Interview Survey (NHIS), CDC, NCHS. This objective tracks the incidence of pneumococcal infections among adults aged 65 years and older using ABCs.</p> <p>See Appendix A for focus area contact information.</p>



Invasive penicillin-resistant pneumococcal infections

14-5c. Children under age 5 years.

National Data Source	Active Bacterial Core Surveillance (ABCs), Emerging Infection Programs, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.10 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	16 (1997) (selected regions in eight States—see Comments).
Numerator	Number of children under age 5 years with a laboratory-confirmed invasive penicillin-resistant pneumococcal infection (see Comments) in the past 12 months.
Denominator	Number of children under age 5 years.
Population Targeted	Resident population in the eight States with specific regions under surveillance (see Comments).
Questions Used To Obtain the National Data	CDC Active Surveillance Bacterial Meningitis and Bacteremia Case Report, Form 52.15A, Rev. 12/97.
Expected Periodicity	Annual.
Comments	<p>A laboratory-confirmed invasive penicillin-resistant pneumococcal infection is defined as the isolation of <i>Streptococcus pneumoniae</i> from a normally sterile site (blood, cerebral spinal fluid, etc.) with a penicillin minimum inhibitory concentration of greater than 2 µg/ml.</p> <p>ABCs is an active and laboratory-based case surveillance system. Data are collected from acute care hospitals and reference laboratories for laboratory-confirmed cases as well as from case report forms.</p> <p>Data are based on surveillance of selected regions in eight States: California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee. Data for Alaska Natives are measured by the Arctic Investigations Program, CDC, NCID.</p>

This measure is a modification of Healthy People 2000 objective 20.10, which tracked restricted activity days among children under age 5 years using the National Health Interview Survey (NHIS), CDC, NCHS. This objective tracks the incidence of penicillin-resistant pneumococcal infections among children under age 5 years using ABCs.

See Appendix A for focus area contact information.



14-5d. Adults aged 65 years and older.

National Data Source	Active Bacterial Core Surveillance (ABCs), Emerging Infection Programs, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.10 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	9 (1997) (selected regions of eight States—see Comments).
Numerator	Number of adults aged 65 years and older with a laboratory-confirmed invasive penicillin-resistant pneumococcal infection (see Comments) in the past 12 months.
Denominator	Number of adults aged 65 years and older.
Population Targeted	Resident population in the eight States with specific regions under surveillance (see Comments).
Questions Used To Obtain the National Data	CDC Active Surveillance Bacterial Meningitis and Bacteremia Case Report, Form 52.15A, Rev. 12/97.
Expected Periodicity	Annual.
Comments	A laboratory-confirmed invasive penicillin-resistant pneumococcal infection is defined as the isolation of <i>Streptococcus pneumoniae</i> from a normally sterile site (blood, cerebral spinal fluid, etc.) with a penicillin minimum inhibitory concentration of greater than 2 µg/ml.

ABCs is an active and laboratory-based case surveillance system. Data are collected from acute care hospitals and reference laboratories for laboratory-confirmed cases as well as from case report forms.

Data are based on surveillance of selected regions in eight States: California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee. Data for Alaska Natives are measured by the Arctic Investigations Program, CDC, NCID.

This measure is a modification of Healthy People 2000 objective 20.10, which tracked restricted activity days among adults aged 65 years and older using the National Health Interview Survey (NHIS), CDC, NCHS. This objective tracks the incidence of penicillin-resistant pneumococcal infections among adults aged 65 years and older using ABCs.

See Appendix A for focus area contact information.



Diseases Preventable Through Targeted Vaccination

14-6. Reduce hepatitis A.

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	20.3 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	11.3 (1997).
Numerator	Number of new symptomatic hepatitis A cases reported in the past 12 months.
Denominator	Number of persons.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.

Expected Periodicity	Annual.
Comments	A case definition for new symptomatic cases of hepatitis A is available from CDC. ¹ See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-7. Reduce meningococcal disease.

National Data Sources	Active Bacterial Core Surveillance (ABCs), Emerging Infections Program Network, CDC, NCID; National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Sources	Active Bacterial Core Surveillance (ABCs), Emerging Infections Program Network, CDC, NCID; National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Adapted from 20.7 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	1.3 (1997) (selected regions in eight States—see Comments).
Numerator	Number of new laboratory-confirmed meningococcal disease cases reported in past 12 months.
Denominator	Number of persons.
Population Targeted	Resident population (selected regions in eight States—see Comments).
Questions Used To Obtain the National Data	CDC National Bacterial Meningitis and Bacteremia Case Report, Form 52.15N, Rev. 02/93.
Expected Periodicity	Annual.
Comments	A case definition for laboratory-confirmed cases of meningococcal disease is available from CDC. ¹ ABCs is an active and laboratory-based case surveillance system. Data are collected from acute care hospitals and reference laboratories for laboratory-confirmed cases as well as from case report forms.

Data are based on surveillance of selected regions in eight States: California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee.

This measure is a modification of Healthy People 2000 objective 20.10, which tracked bacterial meningitis cases using the Bacterial Meningitis Surveillance System, CDC, NCID. This measure tracks meningococcal disease (meningitis and/or meningococemia) using both NNDSS and ABCs.

See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-8. Reduce Lyme disease.

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Not applicable.
Measure	Rate per 100,000 population (5-year average).
Baseline	17.4 (1992–96) (selected States in endemic regions—see Comments).
Numerator	Number of reported cases of Lyme disease.
Denominator	Number of persons.
Population Targeted	Resident population (selected States in endemic regions—see Comments).
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	A case definition is available from CDC. ¹ Baseline endemic regions include Connecticut, Delaware, Maryland, Massachusetts, Minnesota, New Jersey, New York, Pennsylvania, and Rhode Island.

Data were unavailable by gender for Pennsylvania in 1992–93. Therefore, Pennsylvania was excluded from baseline estimates by gender.

See Part C for a description of NNDSS and Appendix A for focus area contact information.



Infectious Diseases and Emerging Antimicrobial Resistance

14-9. Reduce hepatitis C.

National Data Source	Sentinel Counties Study of Viral Hepatitis, CDC, NCID.
State Data Source	Viral Hepatitis Surveillance Program, CDC, NCID.
Healthy People 2000 Objective	20.3 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	2.4 (1996).
Numerator	Number of new symptomatic hepatitis C cases.
Denominator	Number of persons.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity	Annual.
Comments	<p>A case definition for new symptomatic cases of hepatitis C is available from CDC.¹</p> <p>To estimate the incidence of new symptomatic hepatitis C, the incidence rate of reported non-A, non-B hepatitis per 100,000 population in the sentinel counties is multiplied by an underreporting adjustment factor of 2.4 and then by the a factor of 0.9, the proportion of non-A, non-B hepatitis that is attributable to hepatitis C virus (HCV) infection, weighted to the U.S. population. The estimates from sentinel counties are then weighted to the U.S. resident population.</p>

Because reporting of new symptomatic hepatitis C to national surveillance systems has been unreliable to date, the national incidence of hepatitis C is based on cases reported through the Sentinel Counties Study of Viral Hepatitis.

See Appendix A for focus area contact information.



14-10. (Developmental) Increase the proportion of persons with chronic hepatitis C infection identified by State and local health departments.

Comments

An operational definition could not be specified at the time of publication.

A proposed national data source is the National Health and Nutrition Examination Survey, CDC, NCHS. A proposed State data source are the State and local health departments.

Establishment of registries for HCV-infected persons will be needed to determine the cumulative number of HCV-infected persons reported to State and local health departments.

See Appendix A for focus area contact information.



14-11. Reduce tuberculosis.

National Data Source	National TB Surveillance System, CDC, NCHSTP.
State Data Source	State TB Surveillance Systems.
Healthy People 2000 Objective	20.4 (Immunization and Infectious Diseases).
Measure	Rate per 100,000 population.
Baseline	6.8 (1998).
Numerator	Number of confirmed new cases of tuberculosis reported to CDC by local health departments in all 50 States and the District of Columbia.
Denominator	Number of persons.

Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Report of Verified Case of Tuberculosis, Form 72.9A, Rev. 05/93, and Forms 72.9B-C, Rev. 12/92.
Expected Periodicity	Annual.
Comments	A confirmed case definition for tuberculosis is available from CDC. ¹ Data for this measure are also included in Reported Tuberculosis in the United States, 1998. ⁸ See Appendix A for focus area contact information.



14-12. Increase the proportion of all tuberculosis patients who complete curative therapy within 12 months.

National Data Source	National TB Surveillance System, CDC, NCHSTP.
State Data Source	State TB Surveillance Systems.
Healthy People 2000 Objective	Not applicable.
Measure	Percent.
Baseline	74 (1996).
Numerator	Number of persons with confirmed new cases of tuberculosis who were alive at diagnosis, with an initial drug regimen of one or more drugs prescribed, who did not die during therapy, and who completed curative therapy within 12 months of diagnosis.
Denominator	Number of persons with confirmed new cases of tuberculosis who were alive at diagnosis, with an initial drug regimen of one or more drugs prescribed, and who did not die during therapy.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Report of Verified Case of Tuberculosis, Form 72.9A, Rev. 05/93, and Forms 72.9B-C, Rev. 12/92.
Expected Periodicity	Annual.
Comments	A confirmed case definition for tuberculosis is available from CDC. ¹

Data for this measure are also included in Reported Tuberculosis in the United States, 1998.⁸

See Appendix A for focus area contact information.



14-13. Increase the proportion of contacts and other high-risk persons with latent tuberculosis infection who complete a course of treatment.

National Data Source	Aggregate Reports for TB Reports Evaluation, CDC, NCHSTP.
State Data Source	State TB Surveillance Systems.
Healthy People 2000 Objective	Adapted from 20.18 (Immunization and Infectious Diseases).
Measure	Percent.
Baseline	62 (1997).
Numerator	Number of contacts, tuberculin converters, and others placed on treatment for latent TB infection who complete the recommended therapy.
Denominator	Number of contacts, tuberculin converters, and other persons placed on treatment for latent TB infection.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Report of Verified Case of Tuberculosis, Form 72.9A, Rev. 05/93, and Forms 72.9B-C, Rev. 12/92; CDC Tuberculosis Program Management Report, Completion of Preventive Therapy, Form 72.21 (formerly 5.63), Rev. 01/97.
Expected Periodicity	Annual.
Comments	A confirmed case definition for tuberculosis is available from CDC. ¹

High-risk persons are defined by the CDC Tuberculosis Program Management Report form. “Contacts” are all persons who have recently shared the same air space with a person who has pulmonary tuberculosis. “Recent tuberculin converters” are those who have had a tuberculin skin test conversion within the past 2 years exclusive of those persons eligible for the contact category. “Others placed on treatment for latent TB infection” include all other persons started on therapy for latent tuberculosis infection during the time period.

See Appendix A for focus area contact information.



14-14. Reduce the average time for a laboratory to confirm and report tuberculosis cases.

National Data Source	Survey of State Public Health Laboratories, CDC, NCHSTP.
State Data Source	Survey of State Public Health Laboratories, CDC, NCHSTP.
Healthy People 2000 Objective	Not applicable.
Measure	Mean number of days per State health laboratory.
Baseline	21 (1996).
Numerator	Sum of the mean number of days (from receipt of an initial diagnostic specimen from a suspected case to confirming it as coming from a case of tuberculosis among the most rapidly confirmed 75 percent of laboratory-confirmed tuberculosis cases), as reported by all participating State health laboratories.
Denominator	Sum of the number of all the cases of tuberculosis confirmed by each State health laboratory, as reported by all participating State health laboratories, multiplied by a factor of 0.75.
Questions Used To Obtain the National Data	From the 1996 National Survey of State Public Health Laboratories:

[NUMERATOR:]

- *For the most rapidly confirmed 75% of the laboratory-confirmed tuberculosis cases, what was the mean number of days or hours from receipt of an initial diagnostic specimen from a suspected case to confirming it as coming from a case of tuberculosis*
 mean number of days (hours) to confirm 75% of tuberculosis cases

[DENOMINATOR:]

- *How many cases of tuberculosis were confirmed by your laboratory?*
 number of laboratory-confirmed tuberculosis cases

Expected Periodicity Periodic.

Comments The mean number of days was calculated by each State health laboratory by summing the mean number of days it takes to confirm 75 percent of the most rapidly confirmed cases out of all its laboratory-confirmed cases of tuberculosis and was then divided by the total number of confirmed cases that constituted the 75 percent most rapidly confirmed cases. This mean was then summed with all participating State health laboratories and divided by the number of laboratories.^{9, 10}

See Appendix A for focus area contact information.



14-15. (Developmental) Increase the proportion of international travelers who receive recommended prevention services when traveling in areas of risk for select infectious diseases: hepatitis A, malaria, and typhoid.

Comments An operational definition could not be specified at the time of publication.

This objective is a modification of Healthy People 2000 objective 20.6, which tracked the number of cases of typhoid fever, hepatitis A, and malaria using, respectively, the Typhoid Surveillance System, CDC NCID; Sentinel Counties of Acute Viral Hepatitis, CDC, NCID and NNDSS, CDC, EPO; and Malaria Surveillance System, CDC, NCID.

The proposed measure will track the proportion of travelers receiving the recommended prevention services. A proposed data source is the *Abstract of International Travel to and from the United States*, Department of Commerce. The number of international travelers from the United States has increased an average of 3 percent a year for the past decade. Recognition of such increases will be factored into the analysis for denominator data.

Travelers to risk areas will be defined as those travelers to moderate and high prevalence areas of hepatitis A as identified in the most recent edition of CDC's Health Information for International Travel. Travelers who received either hepatitis A vaccine or immune globulin according to current Advisory Committee on Immunization Practices (ACIP) recommendations will be considered protected.

An appropriate prescription of antimalarial prophylaxis medications constitutes recommended preventive services for this disease. Risk areas will be identified by referencing the malaria section in the most recent edition of Health Information for International Travel.

Travelers to risk countries will be considered those persons who visit countries with intermediate to high endemicity for typhoid fever infection. Three vaccines currently are available in the United States for prevention of typhoid fever, and all these are considered adequate protection. If new vaccines are approved and identified by CDC as efficacious, they also could be included.

See Appendix A for focus area contact information.



14-16. Reduce invasive early onset group B streptococcal disease.

National Data Sources	Active Bacterial Core Surveillance (ABCs), Emerging Infections Program Network, CDC, NCID; National Vital Statistics System, CDC, NCHS.
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State Data Source	Not identified.
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Healthy People 2000 Objective	Not applicable.
Measure	Rate per 1,000 live births.
Baseline	1.0 (1996) (selected regions in eight States).
Numerator	Number of newborns aged 0 to 6 days with a newly reported laboratory-confirmed case of early-onset group B streptococcal disease in the past 12 months.
Denominator	Number of live births.
Population Targeted	Resident population (selected regions in eight States) (see Comments).
Questions Used To Obtain the National Data	CDC Active Surveillance Bacterial Meningitis and Bacteremia Case Report, Form 52.15A, Rev. 12/97.
Expected Periodicity	Annual.
Comments	<p>A laboratory-confirmed case of group B Streptococcus is defined as either the isolation of group B Streptococcus from cerebrospinal fluid or a positive culture of group B Streptococcus from a different normally sterile site (blood, pleural fluid, etc.) in a newborn aged 0 to 6 days in the surveillance area.</p> <p>ABCs is an active and laboratory-based case surveillance system. Data are collected from acute care hospitals and reference laboratories for laboratory-confirmed cases as well as from case report forms.</p> <p>Data are based on surveillance of selected regions in eight States: California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee.</p> <p>More information on laboratory-based surveillance for meningococcal disease (including group B streptococcal disease) is provided by CDC.¹¹</p> <p>See Appendix A for focus area contact information.</p>



14-17. Reduce hospitalizations caused by peptic ulcer disease in the United States.

National Data Source	National Hospital Discharge Survey (NHDS), CDC, NCHS.
State Data Source	State hospital discharge data systems.
Healthy People 2000 Objective	Adapted from 17.21 (Diabetes and Chronic Disabling Conditions).
Measure	Rate per 100,000 population.
Baseline	71 (1998).
Numerator	Number of hospitalizations with uncomplicated ulcers or ulcers complicated by bleeding or perforation as the principal diagnosis (ICD-9-CM codes 531-534).
Denominator	Number of persons.
Population Targeted	U.S. civilian population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	<p>Principal diagnosis is the diagnosis chiefly responsible for admission of the person to the hospital.</p> <p>This measure is a modification from its comparable Healthy People 2000 objective 17.21, which tracked the proportion of persons in the U.S. civilian, noninstitutionalized population who reported having an ulcer in the past 12 months, using self-reported conditions, from the National Health Interview Survey (NHIS), CDC, NCHS. This measure tracks the number of hospitalizations with uncomplicated ulcers or ulcers complicated by bleeding or perforation as the first-listed diagnosis (ICD-9-CM codes 531-534) in the U.S. civilian population using NHDS.</p> <p>See Appendix A for focus area contact information.</p>



14-18. Reduce the number of courses of antibiotics for ear infections for young children.

National Data Sources National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.

State Data Source Not identified.

Healthy People 2000 Objective Adapted from 20.9 (Immunization and Infectious Diseases).

Measure Rate per 100 children (2-year average).

Baseline 108 (1996–97).

Numerator Number of antibiotic courses ordered, supplied, administered, or continued at a specific visit for children under age 5 years diagnosed with an ear infection (ICD-9-CM codes 381.0, 381.4, 382.0, 382.4, or 382.9).

Denominator Number of children under age 5 years.

Population Targeted U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data From the 1996–97 National Ambulatory Medical Care Survey/National Hospital Ambulatory Medical Care Survey:

➤ *Physician's diagnosis for this visit. As specifically as possible, list diagnoses related to this visit including chronic conditions (e.g. depression, obesity, asthma, etc.).*

- 1. *Primary diagnosis:* _____
- 2. *Other:* _____
- 3. *Other:* _____

➤ *Medications/injections. List names of up to 6 medications that were ordered, supplied, administered, or continued during this visit. Include L and OTC medications, immunizations, allergy shots, and anesthetics.*

None

Check the box next to drug name if it is from the patient's insurance formulary list.

Check here if NO drugs are from a formulary list

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____

Expected Periodicity	Annual.
Comments	<p>The number of courses of antibiotics for ear infections among young children (and for the sole diagnosis of the common cold among all ages) are the sum of cases reported by NAMCS and NHAMCS that are listed as any diagnosis (including the primary diagnosis).</p> <p>NAMCS and NHAMCS are being redesigned in 2000, and modifications to survey questions on medications may affect the trend of this measure.</p> <p>This objective differs from Healthy People 2000 objective 20.9, which tracked restricted activity days due to ear infections among children aged 4 years and under using the National Health Interview Survey (NHIS), CDC, NCHS.</p> <p>See Part C for descriptions of NAMCS and NHAMCS and Appendix A for focus area contact information.</p>



14-19. Reduce the number of courses of antibiotics prescribed for the sole diagnosis of the common cold.

National Data Sources	National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Not applicable.
Measure	Rate per 100,000 population (2-year average).
Baseline	2,535 (1996–97).
Numerator	Number of antibiotic courses ordered, supplied, administered, or continued at a specific visit for persons diagnosed with the common cold (ICD-9-CM codes 460.0, 465, or 472.0).
Denominator	Number of persons.
Population Targeted	U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data	See Questions Used To Obtain the National Data provided with objective 14-18.
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-18 for more information.



14-20. Reduce hospital-acquired infections in intensive care unit patients.

Intensive care unit patients

14-20a. Catheter-associated urinary tract infection.

National Data Source	National Nosocomial Infections Surveillance (NNIS) System, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.5 (Immunization and Infectious Diseases).
Measure	Rate per 1,000 days' use.
Baseline	5.9 (1998).
Numerator	Number of hospital-acquired indwelling urinary catheter-associated urinary tract infections among intensive care unit patients.
Denominator	Number of indwelling urinary catheter-days among intensive care unit patients.
Population Targeted	Acute care general hospital patient population.
Questions Used To Obtain the National Data	Numerator: CDC National Nosocomial Infections Surveillance System Infection Worksheet, Form 57.58D, Rev. 01/98. Denominator: CDC National Nosocomial Infections Surveillance System Adult and Pediatric Intensive Care Unit (ICU) Monthly Report Form, Form 57.58B, Rev. 01/98.
Expected Periodicity	Annual.
Comments	The 1998 point estimate represents an aggregate of data from all types of ICUs during January 1992 through March 1999.

Data may not be representative of all U.S. hospitals. For each year of data collection, not all participating hospitals are represented.

Detailed surveillance protocols used in NNIS System, including all data field definitions, can be found in the *NNIS Manual*, May 1999 (available by request to NNIS hospitals, State health departments, and international ministries of health).¹² Definitions of infections and key data fields and a description of the protocols are available.^{13, 14}

This objective is a modification of Healthy People 2000 objective 20.5, which tracked the urinary tract infection rates per 1,000 device days among patients by specific type of intensive care unit categories (surgical ICUs, medical ICUs, and pediatric ICUs). This measure tracks catheter-associated urinary tract infection rates per 1,000 days' use among patients in all ICUs.

See Appendix A for focus area contact information.



14-20b. Central line-associated bloodstream infection.

National Data Source	National Nosocomial Infections Surveillance (NNIS) System, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.5 (Immunization and Infectious Diseases).
Measure	Rate per 1,000 days' use.
Baseline	5.3 (1998).
Numerator	Number of hospital-acquired central line-associated bloodstream infections among intensive care unit patients.
Denominator	Number of central line-days among intensive care unit patients.
Population Targeted	Acute care general hospital patient population.

Questions Used To Obtain the National Data

Numerator: CDC National Nosocomial Infections Surveillance System Infection Worksheet, Form 57.58D, Rev. 01/98.

Denominator: CDC National Nosocomial Infections Surveillance System Adult and Pediatric Intensive Care Unit (ICU) Monthly Report Form, Form 57.58B, Rev. 01/98, and CDC National Nosocomial Infections Surveillance Infection Worksheet, Forms 57.58 B and D, Rev. 01/98.

Expected Periodicity

Annual.

Comments

The 1998 point estimate represents an aggregate of data from all types of ICUs from January 1992 through March 1999.

Data may not be representative of all U.S. hospitals. For each year of data collection, not all participating hospitals are represented.

Detailed surveillance protocols used in NNIS System, including all data field definitions, can be found in the *NNIS Manual*, May 1999 (available by request to *NNIS hospitals*, State health departments, and international ministries of health).¹² Definitions of infections and key data fields and a description of the protocols are available.^{13, 14}

This objective is a modification of Healthy People 2000 objective 20.5, which tracked bloodstream infection rates per 1,000 device days among patients by specific type of intensive care unit categories (surgical ICUs, medical ICUs, and pediatric ICUs). This measure tracks central line-associated bloodstream infection rates per 1,000 days' use among patients in all ICUs.

See Appendix A for focus area contact information.



14-20c. Ventilator-associated pneumonia.

National Data Source

National Nosocomial Infections Surveillance (NNIS) System, CDC, NCID.

State Data Source

Not identified.

Healthy People 2000 Objective	Adapted from 20.5 (Immunization and Infectious Diseases).
Measure	Rate per 1,000 days' use.
Baseline	11.1 (1998).
Numerator	Number of hospital-acquired ventilator-associated pneumonia infections among intensive care unit patients.
Denominator	Number of ventilator-days among intensive care unit patients.
Population Targeted	Acute care general hospital patient population.
Questions Used To Obtain the National Data	<p>Numerator: CDC National Nosocomial Infections Surveillance System Infection Worksheet, Form 57.58D, Rev. 01/98.</p> <p>Denominator: CDC National Nosocomial Infections Surveillance System Adult and Pediatric Intensive Care Unit (ICU) Monthly Report Form, Form 57.58B, Rev. 01/98.</p>
Expected Periodicity	Annual.
Comments	<p>The 1998 point estimate represents an aggregate of data from all types of ICUs from January 1992 through March 1999.</p> <p>Data may not be representative of all U.S. hospitals. For each year of data collection, not all participating hospitals are represented.</p> <p>Detailed surveillance protocols used in NNIS System, including all data field definitions, can be found in the <i>NNIS Manual</i>, May 1999 (available by request to NNIS hospitals, State health departments, and international ministries of health).¹² Definitions of infections and key data fields and a description of the protocols are available.^{13, 14}</p> <p>This objective is a modification of Healthy People 2000 objective 20.5, which tracked pneumonia infection rates per 1,000 device days among patients by specific type of intensive care unit categories (surgical ICUs, medical ICUs, and pediatric ICUs). This measure tracks ventilator-associated pneumonia infection rates per 1,000 days' use among all ICUs.</p> <p>See Appendix A for focus area contact information.</p>

Infants weighing 1,000 grams or less at birth in intensive care

14-20d. Central line-associated bloodstream infection.

National Data Source	National Nosocomial Infections Surveillance (NNIS) System, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.5 (Immunization and Infectious Diseases).
Measure	Rate per 1,000 days' use.
Baseline	12.2 (1998).
Numerator	Number of hospital-acquired central line-associated bloodstream infections among infants with a birth weight of 1,000 grams or less.
Denominator	Number of central line-days among infants with a birth weight of 1,000 grams or less.
Population Targeted	Acute care general hospital patient population.
Questions Used To Obtain the National Data	<p>Numerator: CDC National Nosocomial Infections Surveillance System Infection Worksheet, Form 57.58D, Rev. 01/98.</p> <p>Denominator: CDC National Nosocomial Infections Surveillance System High Risk Nursery (HRN) Surveillance Monthly Report Form, Form 57.58H, Rev. 01/98.</p>
Expected Periodicity	Annual.
Comments	<p>The 1998 point estimate represents an aggregate of data from high-risk nurseries (level II-III neonatal intensive care units) from January 1990 through May 1999.</p> <p>Data may not be representative of all U.S. hospitals. For each year of data collection, not all participating hospitals are represented.</p> <p>Detailed surveillance protocols used in NNIS System, including all data field definitions, can be found in the <i>NNIS Manual</i>, May 1999 (available by request to NNIS hospitals, State health departments, and international ministries of health).¹² Definitions of infections and key data fields and a description of the protocols are available.^{13, 14}</p>

This objective is a modification of Healthy People 2000 objective 20.5, which tracked bloodstream infection rates per 1,000 device days among patients by specific type of intensive care unit categories (surgical ICUs, medical ICUs, and pediatric ICUs). This measure tracks central line-associated bloodstream infection rates per 1,000 days' use among infants weighing 1,000 grams or less at birth in all level II-III neonatal ICUs.

See Appendix A for focus area contact information.



14-20e. Ventilator-associated pneumonia.

National Data Source National Nosocomial Infections Surveillance (NNIS) System, CDC, NCID.

State Data Source Not identified.

Healthy People 2000 Objective Adapted from 20.5 (Immunization and Infectious Diseases)

Measure Rate per 1,000 days' use.

Baseline 4.9 (1998).

Numerator Number of hospital-acquired ventilator-associated pneumonia infections among infants with a birth weight of 1,000 grams or less.

Denominator Number of ventilator-days among infants with a birth weight of 1,000 grams or less.

Population Targeted Acute care general hospital patient population.

Questions Used To Obtain the National Data Numerator: CDC National Nosocomial Infections Surveillance System Infection Worksheet, Form 57.58D, Rev. 01/98.
Denominator: CDC National Nosocomial Infections Surveillance System High Risk Nursery (HRN) Surveillance Monthly Report Form, Form 57.58H, Rev. 01/98, and CDC National Nosocomial Infections Surveillance System High Risk Nursery (HRN) Surveillance Monthly Report Form, Form 57.58H, Rev. 01/98.

Expected Periodicity Annual.

Comments

The 1998 point estimate represents an aggregate of data from high-risk nurseries (level II-III neonatal intensive care units) from January 1990 through May 1999.

Data may not be representative of all U.S. hospitals. For each year of data collection, not all participating hospitals are represented.

Detailed surveillance protocols used in NNIS System, including all data field definitions, can be found in the *NNIS Manual*, May 1999 (available by request to NNIS hospitals, State health departments, and international ministries of health).¹² Definitions of infections and key data fields and a description of the protocols are available.^{13, 14}

This objective is a modification of Healthy People 2000 objective 20.5, which tracked pneumonia infection rates per 1,000 device days among patients in pediatric ICUs. This measure tracks ventilator-associated pneumonia infection rates per 1,000 days' use among infants weighing 1,000 grams or less at birth in all level II-III neonatal ICUs.

See Appendix A for focus area contact information.

**14-21. Reduce antimicrobial use among intensive care unit patients.**

National Data Source	National Nosocomial Infections Surveillance (NNIS) System, CDC, NCID.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.5 (Immunization and Infectious Diseases).
Measure	Rate per 1,000 Intensive Care Unit (ICU) days.
Baseline	150 (1995).
Numerator	Number of defined daily doses of FDA-approved antimicrobial agents or grams per day of FDA-approved antimicrobial agents of all patients hospitalized in the intensive care unit.
Denominator	Number of all the days of all the patients that are hospitalized in the ICU (number of patient-days).

Population Targeted	Acute care general hospital patient population.
Questions Used To Obtain the National Data	CDC National Nosocomial Infections Surveillance System Antimicrobial Use and Resistance Component Monthly Report Form.
Expected Periodicity	Annual.
Comments	<p>The 1995 point estimate represents an aggregate of data for 1994–95.</p> <p>Grams of specific antibiotics used in intensive care units are based on reports by participating NNIS hospitals. Defined daily dose estimates are available for most FDA-approved antimicrobial agents.</p> <p>Data may not be representative of all U.S. hospitals. Not all antimicrobial agents are included in the surveillance system. For each year of data collection, not all participating hospitals are necessarily represented. The appropriateness of antibiotic therapies is not addressed in this measure.</p> <p>Agents dosed by patient weight (i.e., aminoglycosides, macrolides) are defined by total grams administered daily.</p> <p>See Appendix A for focus area contact information.</p>



Vaccination Coverage and Strategies

14-22. Achieve and maintain effective vaccination coverage levels for universally recommended vaccines among young children.

4-22a. 4 doses of diphtheria-tetanus-acellular pertussis (DTaP) vaccine.

National Data Source	National Immunization Survey (NIS), CDC, NIP and NCHS.
State Data Source	National Immunization Survey (NIS), CDC, NIP and NCHS.
Healthy People 2000 Objective	Adapted from 20.11 (Immunization and Infectious Diseases).
Measure	Percent.

Baseline	84 (1998).
Numerator	Number of children aged 19 to 35 months receiving at least four or more doses of the combination of diphtheria, tetanus, and acellular pertussis antigens.
Denominator	Children aged 19 to 35 months.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	<p>From the 1998 National Immunization Survey Household Survey:</p> <ul style="list-style-type: none"> ➤ <i>How many D-T-P or D-T shots (sometimes called a D-P-T shot, diphtheria-tetanus-pertussis shot, baby shot, three-in-one shot) has (<u>Sample child</u>) ever received?</i> ➤ <i>Other shots received?</i> <p>From the 1998 National Immunization Survey Provider Record Check:</p> <ul style="list-style-type: none"> ➤ <i>Specify month, day and year that each immunization was given, either by the office or another provider (OP), as documented in the records.</i>
Expected Periodicity	Annual.
Comments	The National Immunization Survey (NIS) is a continuing nationwide telephone sample survey among children aged 19 to 35 months. Estimates of vaccine-specific coverage are available for the United States, each State, and 28 urban areas considered to be high risk for under-vaccination. NIS uses a two-phase sample design. First, a random-digit-dialing (RDD) sample of telephone numbers is drawn. In 1995, 69 percent of households with age-eligible children completed vaccination interviews, yielding data for 31,997 children.

The interviewer also asks for permission to contact the vaccination provider. In the second phase, all vaccination providers are contacted by mail. Vaccination information from providers' records was obtained for 52 percent of all children who were eligible for provider followup in 1995 and 64 percent in 1996. Providers' responses are combined with information obtained from households to provide a more accurate estimate of vaccination coverage levels. Final estimates are adjusted for noncoverage of nontelephone households.

For further information, visit the National Immunization Survey Web site at <http://www.nisabt.org/>.

Statistical adjustments are made to minimize bias due to (1) lower coverage among children living in households without telephones, (2) discrepancies between vaccinations reported by household compared with immunization providers, and (3) differences in race/ethnic population distribution in sample compared to race/ethnic population distribution at birth.

This measure is a modification of its comparable Healthy People 2000 objective 20.11, which tracked the number of children aged 19 to 35 months receiving three or more doses of the combination of diphtheria, tetanus, and pertussis antigens (DTP).

This baseline measure tracks the number of children aged 19 to 35 months receiving four or more doses of the combination of diphtheria, tetanus, and acellular pertussis antigens (DTaP) as well as those children who received the combination of diphtheria, tetanus, and pertussis antigens (DTP).

See Appendix A for focus area contact information.



14-22b. 3 doses Haemophilus influenzae type b (Hib) vaccine.

National Data Source National Immunization Survey (NIS), CDC, NIP and NCHS.

State Data Source National Immunization Survey (NIS), CDC, NIP and NCHS.

Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases).
Measure	Percent.
Baseline	93 (1998).
Numerator	Number of children aged 19 to 35 months receiving at least three doses of the <i>Haemophilus influenzae</i> B antigen.
Denominator	Children aged 19 to 35 months.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	<p>From the 1998 National Immunization Survey Household Survey:</p> <ul style="list-style-type: none"> ➤ <i>How many H-I-B shots (this is for Meningitis and is called Haemophilus Influenzae), H-I-B vaccine, or H flu vaccine has (<u>Sample child</u>) ever received?</i> ➤ <i>Other shots received?</i> <p>From the 1998 National Immunization Survey Provider Record Check:</p> <ul style="list-style-type: none"> ➤ <i>Specify month, day and year that each immunization was given, either by the office or another provider (OP), as documented in the records.</i>
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-22a for more information.



14-22c. 3 doses hepatitis B (hep B) vaccine.

National Data Source	National Immunization Survey (NIS), CDC, NIP and NCHS.
State Data Source	National Immunization Survey (NIS), CDC, NIP and NCHS.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases)
Measure	Percent.
Baseline	87 (1998).

Numerator	Number of children aged 19 to 35 months receiving at least three doses of the hepatitis B antigen.
Denominator	Children aged 19 to 35 months.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	<p>From the 1998 National Immunization Survey Household Survey:</p> <ul style="list-style-type: none"> ➤ <i>How many Hepatitis B shots has (<u>Sample child</u>) ever received?</i> ➤ <i>Other shots received?</i> <p>From the 1998 National Immunization Survey Provider Record Check:</p> <ul style="list-style-type: none"> ➤ <i>Specify month, day and year that each immunization was given, either by the office or another provider (OP), as documented in the records.</i>
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-22a for more information.



14-22d. 1 dose measles-mumps-rubella (MMR) vaccine.

National Data Source	National Immunization Survey (NIS), CDC, NIP and NCHS.
State Data Source	National Immunization Survey (NIS), CDC, NIP and NCHS.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases).
Measure	Percent.
Baseline	92 (1998).
Numerator	Number of children aged 19 to 35 months receiving at least one dose of the combination of measles, mumps, and rubella antigens.
Denominator	Children aged 19 to 35 months.
Population Targeted	U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data

From the 1998 National Immunization Survey Household Survey:

- *How many measles or M-M-R (Measles-Mumps-Rubella) shots has (Sample child) ever received?*
- *Other shots received?*

From the 1998 National Immunization Survey Provider Record Check:

- *Specify month, day and year that each immunization was given, either by the office or another provider (OP), as documented in the records.*

Expected Periodicity

Annual.

Comments

The MMR estimate for 1998 is based on all measles-containing vaccines.

See Comments provided with objective 14-22a for more information.



14-22e. 3 doses polio vaccine.

National Data Source

National Immunization Survey (NIS), CDC, NIP and NCHS.

State Data Source

National Immunization Survey (NIS), CDC, NIP and NCHS.

Healthy People 2000 Objective

20.11 (Immunization and Infectious Diseases).

Measure

Percent.

Baseline

91 (1998).

Numerator

Number of children aged 19 to 35 months receiving at least three doses of the polio antigen.

Denominator

Children aged 19 to 35 months.

Population Targeted

U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data

From the 1998 National Immunization Survey Household Survey:

- *How many polio vaccine shots (by mouth, pink drops, or by a polio shot) has (Sample child) ever received?*
- *Other shots received?*

From the 1998 National Immunization Survey
Provider Record Check:

- *Specify month, day and year that each immunization was given, either by the office or another provider (OP), as documented in the records.*

Expected Periodicity Annual.

Comments See Comments provided with objective 14-22a for more information.



14-22f. 1 dose varicella vaccine.

National Data Source National Immunization Survey (NIS), CDC, NIP and NCHS.

State Data Source National Immunization Survey (NIS), CDC, NIP and NCHS.

Healthy People 2000 Objective Not applicable.

Measure Percent.

Baseline 43 (1998).

Numerator Number of children aged 19 to 35 months receiving at least one dose of the varicella antigen.

Denominator Children aged 19 to 35 months.

Population Targeted U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data From the 1998 National Immunization Survey Household Survey:

- *How many chicken pox (or Varicella) shots has (Sample child) ever received?*
- *Other shots received?*

From the 1998 National Immunization Survey
Provider Record Check:

- *Specify month, day and year that each immunization was given, either by the office or another provider (OP), as documented in the records.*

Expected Periodicity Annual.

Comments See Comments provided with objective 14-22a for more information.

14-23. Maintain vaccination coverage levels for children in licensed day care facilities and children in kindergarten through the first grade.

Children in day care

14-23a. Diphtheria-tetanus-acellular pertussis (DTaP) vaccine.

National Data Source	Annual Immunization Assessment Reports, CDC, NIP.
State Data Source	Annual Immunization Assessment Reports, CDC, NIP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases).
Measure	Percent (2-year average).
Baseline	96 (1997–98).
Numerator	Number of surveyed enrollees in day care centers who received the combination of diphtheria, tetanus, and either acellular pertussis or pertussis antigens.
Denominator	Number of surveyed enrollees in day care centers.
Population Targeted	U.S. day care center population.
Questions Used To Obtain the National Data	CDC Annual Immunization Assessment Report: Day Care Centers, Head Start Centers, and Schools.
Expected Periodicity	Biennial.
Comments	<p>Baseline includes enrollees who received the combination of diphtheria, tetanus, and pertussis antigens.</p> <p>States may collect and/or report data on selective antigens depending upon school entry requirements.</p> <p>Overall (national) mean coverage levels are estimated by weighting the vaccine-specific coverage levels reported by States and territories to their respective birth cohorts.</p> <p>Sampling methodology may vary by State.</p> <p>See Appendix A for focus area contact information.</p>



14-23b. Measles/mumps/rubella vaccines.

National Data Source	Annual Immunization Assessment Reports, CDC, NIP.
State Data Source	Annual Immunization Assessment Reports, CDC, NIP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases).
Measure	Percent (2-year average).
Baseline	89 (1997–98).
Numerator	Number of surveyed enrollees in day care centers who received the combination of measles, mumps, and rubella antigens.
Denominator	Number of surveyed enrollees in day care centers.
Population Targeted	U.S. day care center population.
Questions Used To Obtain the National Data	CDC Annual Immunization Assessment Report: Day Care Centers, Head Start Centers, and Schools.
Expected Periodicity	Biennial.
Comments	See Comments provided with objective 14-23a for more information.



14-23c. Polio vaccine.

National Data Source	Annual Immunization Assessment Reports, CDC, NIP.
State Data Source	Annual Immunization Assessment Reports, CDC, NIP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases)
Measure	Percent (2-year average).
Baseline	96 (1997–98).
Numerator	Number of surveyed enrollees in day care centers who received the polio antigen.
Denominator	Number of surveyed enrollees in day care centers.
Population Targeted	U.S. day care center population.

Questions Used To Obtain the National Data

CDC Annual Immunization Assessment Report: Day Care Centers, Head Start Centers, and Schools.

Expected Periodicity

Biennial.

Comments

See Comments provided with objective 14-23a for more information.



14-23d. (Developmental) Hepatitis B vaccine.

Comments

An operational definition could not be specified at the time of publication.

The proposed national and State data sources are the Annual Immunization Assessment Reports, CDC, NIP.

The proposed numerator is the number of surveyed enrollees in day care centers who received the hepatitis B antigen. The proposed denominator is the number of surveyed enrollees in day care centers.

See Appendix A for focus area contact information.



14-23e. (Developmental) Varicella vaccine.

Comments

An operational definition could not be specified at the time of publication.

The proposed national and State data sources are the Annual Immunization Assessment Reports, CDC, NIP.

The proposed numerator is the number of surveyed enrollees in day care centers who received the varicella antigen. The proposed denominator is the number of surveyed enrollees in day care centers.

See Appendix A for focus area contact information.



Children in K through 1st grade

14-23f. Diphtheria-tetanus-acellular pertussis (DTaP) vaccine.

National Data Source	Annual Immunization Assessment Reports, CDC, NIP.
State Data Source	Annual Immunization Assessment Reports, CDC, NIP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases).
Measure	Percent (2-year average).
Baseline	97 (1997–98).
Numerator	Number of surveyed enrollees in kindergarten and/or first grade who received the combination of diphtheria, tetanus, and either acellular pertussis or pertussis antigens.
Denominator	Number of surveyed enrollees in kindergarten and/or first grade.
Population Targeted	U.S. kindergarten and first grade student population.
Questions Used To Obtain the National Data	CDC Annual Immunization Assessment Report: Day Care Centers, Head Start Centers, and Schools.
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-23a for more information.



14-23g. Measles/mumps/rubella vaccines.

National Data Source	Annual Immunization Assessment Reports, CDC, NIP.
State Data Source	Annual Immunization Assessment Reports, CDC, NIP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases).
Measure	Percent (2-year average).
Baseline	96 (1997–98).

Numerator	Number of surveyed enrollees in kindergarten and/or first grade who received the combination of measles, mumps, and rubella antigens.
Denominator	Number of surveyed enrollees in kindergarten and/or first grade.
Population Targeted	U.S. kindergarten and first grade student population.
Questions Used To Obtain the National Data	CDC Annual Immunization Assessment Report: Day Care Centers, Head Start Centers, and Schools.
Expected Periodicity	Annual.
Comments	See Comments with objective 14-23a for more information.



14-23h. Polio vaccine.

National Data Source	Annual Immunization Assessment Reports, CDC, NIP.
State Data Source	Annual Immunization Assessment Reports, CDC, NIP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases)
Measure	Percent (2-year average).
Baseline	97 (1997–98).
Numerator	Number of surveyed enrollees in kindergarten and/or first grade who received the polio antigen.
Denominator	Number of surveyed enrollees in kindergarten and/or first grade.
Population Targeted	U.S. kindergarten and first grade student population.
Questions Used To Obtain the National Data	CDC Annual Immunization Assessment Report: Day Care Centers, Head Start Centers, and Schools.
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-23a for more information.



14-23i. (Developmental) Hepatitis B vaccine.

Comments

An operational definition could not be specified at the time of publication.

The proposed national and State data sources are the Annual Immunization Assessment Reports, CDC, NIP.

The proposed numerator is the number of surveyed enrollees in kindergarten and/or first grade who received the hepatitis B antigen. The proposed denominator is the number of surveyed enrollees in kindergarten and/or first grade.

See Appendix A for focus area contact information.



14-23j. (Developmental) Varicella vaccine.

Comments

An operational definition could not be specified at the time of publication.

The proposed national and State data sources are the Annual Immunization Assessment Reports, CDC, NIP.

The proposed numerator is the number of surveyed enrollees in kindergarten and/or first grade who received the varicella antigen. The proposed denominator is the number of surveyed enrollees in kindergarten and/or first grade.

See Appendix A for focus area contact information.



14-24. Increase the proportion of young children and adolescents who receive all vaccines that have been recommended for universal administration for at least 5 years.

14-24a. Children aged 19 to 35 months who received the recommended vaccines (4 DTaP, 3 polio, 1 MMR, 3 Hib, 3 hepatitis B).

National Data Source

National Immunization Survey (NIS), CDC, NIP and NCHS.

State Data Source	National Immunization Survey (NIS), CDC, NIP and NCHS.
Healthy People 2000 Objective	Adapted from 20.11 (Immunization and Infectious Diseases).
Leading Health Indicator	Immunization.
Measure	Percent.
Baseline	73 (1998).
Numerator	Number of children aged 19 to 35 months receiving at least four doses of diphtheria-tetanus-acellular pertussis (DTaP), at least three doses of polio, at least one dose of measles-mumps-rubella (MMR), at least three doses of <i>Haemophilus influenzae</i> B (Hib), and at least three doses of hepatitis B antigens.
Denominator	Children aged 19 to 35 months.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	<p>From the 1998 National Immunization Survey Household Survey:</p> <ul style="list-style-type: none"> ➤ <i>How many D-T-P or D-T shots (sometimes called a D-P-T shot, diphtheria-tetanus-pertussis shot, baby shot, three-in-one shot) has (Sample child) ever received?</i> ➤ <i>How many polio vaccine shots (by mouth, pink drops, or by a polio shot) has (Sample child) ever received?</i> ➤ <i>How many measles or M-M-R (Measles-Mumps-Rubella) shots has (Sample child) ever received?</i> ➤ <i>How many H-I-B shots (this is for Meningitis and is called Haemophilus Influenzae), H-I-B vaccine, or H flu vaccine has (Sample child) ever received?</i> ➤ <i>How many Hepatitis B shots has (Sample child) ever received?</i> ➤ <i>Other shots received?</i> <p>From the 1998 National Immunization Survey Provider Record Check:</p> <ul style="list-style-type: none"> ➤ <i>Specify month, day and year that each immunization was given, either by the office or another provider (OP), as documented in the records.</i>
Expected Periodicity	Annual.

Comments

Any new vaccines that have been universally recommended for at least 5 years will be added to the series over the course of Healthy People 2010.

See Comments provided with objective 14-22a for more information on NIS.

This objective differs from the comparable measure in Healthy People 2000 objective 20.11, which tracked children aged 19 to 35 months with at least four doses of diphtheria-tetanus-pertussis (DTAP), at least three doses of polio, and at least one dose of measles-mumps-rubella (MMR) only. This objective adds Haemophilus influenzae type B and hepatitis B.

This objective is one of the measures used to track the Immunization Leading Health Indicator. See Appendix H for a complete listing.

See Appendix A for focus area contact information.



14-24b. (Developmental) Adolescents aged 13 to 15 years who received the recommended vaccines.

Comments

An operational definition could not be provided at the time of publication.

The proposed source is the National Health Interview Survey (NHIS), CDC, NCHS.

Currently there are no vaccines for adolescents aged 13 to 15 years that have been universally recommended for at least 5 years. As vaccines for adolescents aged 13 to 15 years are identified over the course of Healthy People 2010, they will be tracked.

See Part C for a description of NHIS and Appendix A for focus area contact information.



14-25. Increase the proportion of providers who have measured the vaccination coverage levels among children in their practice population within the past 2 years.

14-25a. Public health providers.

National Data Source	Immunization Program Annual Reports, CDC, NIP.
State Data Source	Immunization Program Annual Reports, CDC, NIP.
Healthy People 2000 Objective	Not applicable.
Measure	Percent.
Baseline	66 (1997).
Numerator	Number of public provider sites that routinely provided immunizations in the past 2 years to children under age 6 years and participated in a provider assessment at least once in the past 2 years.
Denominator	Number of public provider sites that routinely provided immunizations in the past 2 years to children under age 6 years.
Questions Used To Obtain the National Data	<p>From the 1997 Immunization Program Annual Report:</p> <ul style="list-style-type: none">➤ <i>Enter the number of public provider sites, by type, that routinely provide immunizations to children aged less than 6 years:</i><ul style="list-style-type: none">_____ <i>Health department clinics</i>_____ <i>Community/migrant health centers</i>_____ <i>Indian Health Service/Tribal clinics</i>_____ <i>Other public providers</i>➤ <i>How many private provider sites in your jurisdiction provide immunizations to preschool children?</i>➤ <i>Status of Assessment and Feedback of Provider Immunization Practices:</i><ul style="list-style-type: none">_____ <i>Number of public provider sites (by type of public provider) that participated in a clinic assessment</i>_____ <i>Number of private provider sites (by type of private provider) that participated in a provider assessment</i>
Expected Periodicity	Annual.

Comments

A provider site is a service delivery location that maintains permanent records, excluding temporary locations or mobile immunization clinics or fairs and the like. Well-child clinics and immunization-only clinics in the same location should be counted as separate sites only if they maintain separate sets of records.

Public providers include health department clinics, community/migrant health centers, Indian Health Service/Tribal health clinics, or other public providers (for example, any other public clinic that provides immunizations, such as a county medical center outpatient clinic).

Private providers are individual or group primary care or pediatric practices and may include providers for which some or all of their clients are members of different managed care plans or managed care organizations.

A public provider assessment is an assessment that includes a review of a random sample (or 100 percent) of immunization records of 2-year-olds. The assessment may have been conducted by project, clinic, or contractual personnel.

A private provider assessment is an assessment that includes a review of a random sample (or 100 percent) of immunization records of 2-year-olds. The assessment may have been conducted either by immunization project staff or through a contractual agreement that provides this service.

See Appendix A for focus area contact information.

**14-25b. Private providers.**

National Data Source	Immunization Program Annual Reports, CDC, NIP.
State Data Source	Immunization Program Annual Reports, CDC, NIP.
Healthy People 2000 Objective	Not applicable.
Measure	Percent.
Baseline	6 (1997).

Numerator	Number of private provider sites that routinely provided immunizations in the past 2 years to children under age 6 years and participated in a provider assessment at least once in the past 2 years.
Denominator	Number of private provider sites that routinely provided immunizations in the past 2 years to children under age 6 years.
Questions Used To Obtain the National Data	See Questions Used To Obtain the National Data provided with objective 14-25a.
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-25a for more information.



14-26. Increase the proportion of children who participate in fully operational population-based immunization registries.

National Data Source	Immunization Program Annual Reports, CDC, NIP.
State Data Sources	State Immunization Program Survey, CDC, NIP; Community Population-Based Registry Reports.
Healthy People 2000 Objective	Not applicable.
Measure	Percent.
Baseline	32 (1999).
Numerator	Number of children under age 6 years who have at least one immunization record in the registry.
Denominator	Number of children under age 6 years.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	From the 1998 State Immunization Program Survey: ➤ <i>How many children less than 6 years old (0-5 year olds) are in your catchment area?</i>

- *How many children less than 6 years old (0-5 year olds) are in your registry and have at least one vaccination recorded (excluding the first hepatitis B dose at birth)?*

Expected Periodicity Annual.

Comments Baseline is a proxy measure. By 2005, data from the registry systems will be used to track this objective, instead of the current survey data from immunization program grantees.

Starting in 2000, questions will be asked about children under age 6 years who are in the registry and have two vaccinations recorded.

See Appendix A for focus area contact information.



14-27. Increase routine vaccination coverage levels for adolescents.

14-27a. 3 or more doses of hepatitis B.

National Data Source	National Health Interview Survey (NHIS), CDC, NHIS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.11 (Immunization and Infectious Diseases).
Measure	Percent.
Baseline	48 (1997).
Numerator	Number of adolescents aged 13 to 15 years reported to be vaccinated with three or more doses of the hepatitis B antigens.
Denominator	Number of adolescents aged 13 to 15 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1997 National Health Interview Survey: <ul style="list-style-type: none"> ➤ <i>Are shot records available for (<u>Child's name</u>)?</i> ➤ <i>Are all the immunizations the (<u>Child's name</u>) ever received included in this shot record?</i>

- *Are there any OTHER immunizations listed on the shot record that I have NOT asked you about?*

[If yes:]

- *What are the names of OTHER immunizations listed on the shot record that I have NOT asked you about?*

Influenza

Pneumococcal

Hepatitis A

Other immunizations

- *Has (Child's name) ever received an additional Hepatitis B shot?*

[If yes:]

- *How many additional Hepatitis B shots has (Child's name) ever received?*

[If no shot record (or incomplete):]

- *Has (Child's name) ever received an immunization (that is a shot or drops)?*

Expected Periodicity Annual.

Comments This objective is a modification of Healthy People 2000 objective 20.11, which tracked immunization coverage for selected antigens (three or more doses of DTP, three or more doses of polio, one or more doses of measles-containing, three or more doses of Haemophilus influenzae type B, and three or more doses of hepatitis B) among children aged 19 to 35 months. This objective tracks selected antigens (two or more doses of MMR, three or more doses of hepatitis B, one or more doses of varicella if indicated, and one or more doses of tetanus-diphtheria booster) among adolescents aged 13 to 15 years.

See Part C for a description of NHIS and Appendix A for focus area contact information.



14-27b. 2 or more doses of measles, mumps, rubella.

National Data Source National Health Interview Survey (NHIS), CDC, NHIS.

State Data Source Not identified.

Healthy People 2000 Objective	Adapted from 20.11 (Immunization and Infectious Diseases).
Measure	Percent.
Baseline	89 (1997).
Numerator	Number of adolescents aged 13 to 15 years reported to be vaccinated with two or more doses of the measles, mumps, and rubella antigens.
Denominator	Number of adolescents aged 13 to 15 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	<p>From the 1997 National Health Interview Survey:</p> <ul style="list-style-type: none"> ➤ <i>Are shot records available for <u>(Child's name)</u>?</i> ➤ <i>Are all the immunizations the <u>(Child's name)</u> ever received included in this shot record?</i> ➤ <i>Are there any OTHER immunizations listed on the shot record that I have NOT asked you about?</i> <ul style="list-style-type: none"> [If yes:] <ul style="list-style-type: none"> ○ <i>What are the names of OTHER immunizations listed on the shot record that I have NOT asked you about?</i> <ul style="list-style-type: none"> <i>Influenza</i> <i>Pneumococcal</i> <i>Hepatitis A</i> <i>Other immunizations</i> ➤ <i>Has <u>(Child's name)</u> ever received an additional measles or MMR (measles, mumps, rubella) shot?</i> <ul style="list-style-type: none"> [If yes:] <ul style="list-style-type: none"> ○ <i>How many additional measles or MMR (measles, mumps, rubella) shots has <u>(Child's name)</u> ever received?</i> [If no shot record (or incomplete):] <ul style="list-style-type: none"> ○ <i>Has <u>(Child's name)</u> ever received an immunization (that is a shot or drops)?</i>
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-27a for more information.



14-27c. 1 or more doses of tetanus-diphtheria booster.

National Data Source	National Health Interview Survey (NHIS), CDC, NHIS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.11 (Immunization and Infectious Diseases).
Measure	Percent.
Baseline	93 (1997).
Numerator	Number of adolescents aged 13 to 15 years reported to be vaccinated with two or more doses of the tetanus and diphtheria antigens.
Denominator	Number of adolescents aged 13 to 15 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	<p>From the 1997 National Health Interview Survey:</p> <ul style="list-style-type: none">➤ <i>Are shot records available for (Child's name)?</i>➤ <i>Are all the immunizations the (Child's name) ever received included in this shot record?</i>➤ <i>Are there any OTHER immunizations listed on the shot record that I have NOT asked you about?</i><ul style="list-style-type: none">[If yes:]<ul style="list-style-type: none">○ <i>What are the names of OTHER immunizations listed on the shot record that I have NOT asked you about?</i><ul style="list-style-type: none"><i>Influenza</i><i>Pneumococcal</i><i>Hepatitis A</i><i>Other immunizations</i>➤ <i>Has (Child's name) ever received an additional tetanus-diphtheria (Td) shot?</i><ul style="list-style-type: none">[If yes:]<ul style="list-style-type: none">○ <i>How many additional tetanus-diphtheria (Td) shots has {Child's name} ever received?</i>[If no shot record (or incomplete):]<ul style="list-style-type: none">○ <i>Has (Child's name) ever received an immunization (that is a shot or drops)?</i>
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-27a for more information.

14-27d. 1 or more doses of varicella.

National Data Source	National Health Interview Survey (NHIS), CDC, NHIS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 20.11 (Immunization and Infectious Diseases).
Measure	Percent.
Baseline	45 (1997).
Numerator	Number of adolescents aged 13 to 15 years reported to be vaccinated with two or more doses of the varicella antigen, excluding those who are reported to ever have had varicella (chicken pox).
Denominator	Number of adolescents aged 13 to 15 years excluding those who are reported to ever have had varicella (chicken pox).
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1997 National Health Interview Survey:

[NUMERATOR:]

- *Are shot records available for (Child's name)?*
- *Are all the immunizations the (Child's name) ever received included in this shot record?*
- *Are there any OTHER immunizations listed on the shot record that I have NOT asked you about?*

[If yes:]

- *What are the names of OTHER immunizations listed on the shot record that I have NOT asked you about?*

*Influenza
Pneumococcal
Hepatitis A
Other immunizations*

- *Has (Child's name) ever received an additional chicken pox shot?*

[If yes:]

- *How many additional chicken pox shots has (Child's name) ever received?*

[If no shot record (or incomplete):]

- *Has (Child's name) ever received an immunization (that is a shot or drops)?*

[DENOMINATOR:]

- *Has (Child's name) EVER had chicken pox?*

Expected Periodicity Annual.

Comments See Comments provided with objective 14-27a for more information.



14-28. Increase hepatitis B vaccine coverage among high-risk groups.

14-28a. Long-term hemodialysis patients.

National Data Source Annual Survey of Chronic Hemodialysis Centers, CDC, NCID and HCFA.

State Data Source Not identified.

Healthy People 2000 Objective Not applicable.

Measure Percent.

Baseline 35 (1995).

Numerator Number of patients receiving chronic hemodialysis who have ever received at least three doses of hepatitis B vaccine.

Denominator Number of patients receiving chronic hemodialysis.

Population Targeted U.S. chronic hemodialysis patient population.

Questions Used To Obtain the National Data From the 1995 Annual Survey of Chronic Hemodialysis Centers:

- *How many patients were assigned to your hemodialysis center as of (date of survey)?*
- *How many of these patients had ever in their lives received at least 3 doses of hepatitis B vaccine?*

Expected Periodicity Annual.

Comments See Appendix A for focus area contact information.

14-28b. Men who have sex with men.

Comments A complete operational definition was not provided at the time of publication.

The national data source is the Young Men's Survey, National Center for HIV, STD, and TB Prevention, CDC, NCHSTP.

This objective is comparable to one of the measures in Healthy People 2000 objective 20.11 (Immunization and Infectious Diseases).

See Appendix A for focus area contact information.



14-28c. Occupationally exposed workers.

National Data Source	Periodic Vaccine Coverage Surveys, CDC, NCID (See Comments).
State Data Source	Not identified.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases) (also 10.9).
Measure	Percent.
Baseline	71 (1995).
Numerator	Number of health care workers reported by participating facilities to have received at least three doses of hepatitis B vaccine.
Denominator	Number of health care workers employed at participating facilities.
Population Targeted	U.S. health care worker population.
Questions Used To Obtain the National Data	From the 1995 survey: ^{15, 16} <ul style="list-style-type: none">➤ <i>How many full-time and part-time staff who had direct contact with patients were employed at your center?</i>➤ <i>How many of these staff had ever received at least 3 doses of hepatitis B vaccine?</i>
Expected Periodicity	Periodic.

Comments Methodology on measuring this objective has been previously published.^{15, 16}

The expected periodicity for measuring this objective is every 5 years.

See Appendix A for focus area contact information.



14-29. Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

Noninstitutionalized adults aged 65 years and older

14-29a. Influenza vaccine.

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases), age adjusted to the 2000 standard population.
Leading Health Indicator	Immunization.
Measure	Percent (age adjusted—see Comments).
Baseline	64 (1998).
Numerator	Number of adults aged 65 years and older who report receiving an influenza vaccination in the past 12 months.
Denominator	Number of adults aged 65 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey: ➤ <i>During the PAST 12 MONTHS, have you had a flu shot? A flu shot is usually given in the fall and protects against influenza for the flu season.</i>
Expected Periodicity	Annual.

Comments Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion on age adjustment, see Part A, section 5.

This objective is one of the measures used to track the Immunization Leading Health Indicator. See Appendix H for a complete listing.

See Part C for a description of NHIS and BRFSS and Appendix A for focus area contact information.



14-29b. Pneumococcal vaccine.

National Data Source National Health Interview Survey (NHIS), CDC, NCHS.

State Data Source Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

Healthy People 2000 Objective 20.11 (Immunization and Infectious Diseases), age adjusted to the 2000 standard population.

Leading Health Indicator Immunization.

Measure Percent (age adjusted—see Comments).

Baseline 46 (1998).

Numerator Number of adults aged 65 years and older who report ever receiving a pneumococcal vaccination.

Denominator Number of adults aged 65 years and older.

Population Targeted U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data From the 1998 National Health Interview Survey:

➤ *Have you EVER had a pneumonia vaccination? This shot is usually given only once in a person's lifetime and is different from the flu shot.*

Expected Periodicity Annual.

Comments See Comments provided with objective 14-29a for more information.

Noninstitutionalized high-risk adults aged 18 to 64 years

14-29c. Influenza vaccine.

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases), age adjusted to the 2000 standard population.
Measure	Percent (age adjusted—see Comments).
Baseline	26 (1998).
Numerator	Number of high-risk persons aged 18 to 64 years who report receiving an influenza vaccination in the past 12 months.
Denominator	Number of high-risk persons aged 18 to 64 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey:

[NUMERATOR:]

- *During the PAST 12 MONTHS, have you had a flu shot? A flu shot is usually given in the fall and protects against influenza for the flu season.*

[DENOMINATOR:]

- *Have you EVER been told by a doctor or other health professional that you had...*
 - ... Hypertension, also called high blood pressure?*
 - ... Coronary heart disease?*
 - ... Angina, also called angina pectoris?*
 - ... A heart attack (also called myocardial infarction)?*
 - ... Any kind of heart condition or heart disease (other than the ones I just asked about)?*
 - ... A stroke*
 - ... Emphysema?*
 - ... Asthma?*
- *During the PAST 12 MONTHS, have you had an episode of asthma or asthma attack?*
- *Have you EVER been told by a doctor or other health professional that you had ...*
 - ... Cancer or a malignancy of any kind?*

[If yes:]

○ *What kind of cancer was it?*

- (1) *Bladder*
- (2) *Blood*
- (3) *Bone*
- (4) *Brain*
- (5) *Breast*
- (6) *Cervix*
- (7) *Colon*
- (8) *Esophagus*
- (9) *Gallbladder*
- (10) *Kidney*
- (11) *Larynx - windpipe*
- (12) *Leukemia*
- (13) *Liver*
- (14) *Lung*
- (15) *Lymphoma*
- (16) *Melanoma*
- (17) *Mouth/tongue/lip*
- (18) *Ovary*
- (19) *Pancreas*
- (20) *Prostate*
- (21) *Rectum*
- (22) *Skin (non-melanoma)*
- (23) *Skin (DK what kind)*
- (24) *Soft Tissue (muscle or fat)*
- (25) *Stomach*
- (26) *Testes*
- (27) *Throat - pharynx*
- (28) *Thyroid*
- (29) *Uterus*
- (30) *Other*
- (96) *More than 3 kinds*

- *(Other than during pregnancy,) Have you EVER been told by a doctor or health professional that you have diabetes or sugar diabetes?*
- *During the PAST 12 MONTHS, have you been told by a doctor or other health professional that you had..*
 - ... Chronic bronchitis?*
 - ... Weak or failing kidneys? - Do not include kidney stones, bladder infections or incontinence.*
 - ... Any kind of liver condition?*
- *Are you currently pregnant?*

Expected Periodicity Annual.

Comments

A high-risk person is defined as a respondent who answered “yes” to one or more of the conditions listed in the questions above. The only condition not included in the definition of high risk is skin cancer (see conditions 22 and 23 listed in Questions Used To Obtain the National Data above). High-risk adults are defined by the Advisory Committee on Immunization Practices (ACIP).

Not all high-risk conditions for complications of influenza and pneumococcal disease can be ascertained by NHIS (for example, immunocompromised), and the sample size may be too small for some groups.

This objective is a modification of Healthy People 2000 objective 20.11, which tracked influenza vaccinations in the past 12 months among persons aged 65 years and older. This measure tracks high-risk persons aged 18 to 64 years.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion on age adjustment, see Part A, section 5.

See Part C for a description of NHIS and BRFSS, and Appendix A for focus area contact information.

**14-29d. Pneumococcal vaccine.**

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases), age adjusted to the 2000 standard population.
Measure	Percent (age adjusted—see Comments).
Baseline	13 (1998).
Numerator	Number of high-risk persons aged 18 to 64 years who report ever receiving a pneumococcal vaccination.
Denominator	Number of high-risk persons aged 18 to 64 years.

Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	See Questions Used To Obtain the National Data for objectives 14-29b (numerator only) and 14-29c (denominator only).
Expected Periodicity	Annual.
Comments	See Comments provided with objective 14-29c for more information.



Institutionalized adults (persons in long-term care or nursing homes)

14-29e. Influenza vaccine.

National Data Source	National Nursing Home Survey (NNHS), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases), age adjusted to the 2000 standard population.
Measure	Percent (age adjusted—see Comments).
Baseline	59 (1997).
Numerator	Number of persons in long-term care facilities and nursing homes reported to have received an influenza vaccination in the past 12 months.
Denominator	Number of persons in long-term care facilities and nursing homes.
Population Targeted	U.S. resident population (see Comments).
Questions Used To Obtain the National Data	From the 1997 National Nursing Home Survey: ➤ <i>During the past 12 months, has (<u>Name</u>) had a flu shot at this facility or any other location?</i>
Expected Periodicity	Biennial.
Comments	Data are from the population residing in long-term care facilities or nursing homes and exclude residents in facilities providing only room and board or serving special health problems such as mental retardation or alcoholism.

Vaccination status is ascertained by the staff member completing the survey based on available records; sampled residents are not queried. In the 1995 NNHS, the percentage of sampled residents for whom vaccination status could not be ascertained was 21 percent for influenza vaccination and 43 percent for pneumococcal vaccination.

The percent vaccinated calculation will include persons with unknown vaccination status in the denominator. Improvements to administration of the survey will be made in 1999 to minimize the reporting of unknown vaccination status.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion on age adjustment, see Part A, section 5.

See Appendix A for focus area contact information.



14-29f. Pneumococcal vaccine.

National Data Source	National Nursing Home Survey (NNHS), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	20.11 (Immunization and Infectious Diseases), age adjusted to the 2000 standard population.
Measure	Percent (age adjusted—see Comments).
Baseline	25 (1997).
Numerator	Number of persons in long-term care facilities and nursing homes reported to have ever received a pneumococcal vaccination.
Denominator	Number of persons in long-term facilities and nursing homes.
Population Targeted	U.S. resident population (see Comments).
Questions Used To Obtain the National Data	From the 1997 National Nursing Home Survey: ➤ <i>Has (Name) ever had a pneumococcal vaccine, that is, a pneumonia vaccination?</i>

Expected Periodicity	Biennial.
Comments	See Comments provided with objective 14-19e for more information.



Vaccine Safety

14-30. Reduce vaccine-associated adverse events.

14-30a. Eliminate vaccine-associated paralytic polio (VAPP).

National Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective	Not applicable.
Measure	Number.
Baseline	5 (1997).
Numerator	Number of confirmed cases of vaccine-associated paralytic poliomyelitis.
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	CDC Suspected Polio Case Worksheet, Rev. 08/98.
Expected Periodicity	Annual.
Comments	A case definition for paralytic poliomyelitis is available from CDC. ¹

A confirmed case of vaccine-associated paralytic poliomyelitis is defined as a person who (1) was vaccinated 4 to 30 days prior to the onset of illness; (2) was exposed to someone vaccinated 4 to 75 days after oral polio vaccine (OPV) was fed to a recipient in contact with a patient, and contact occurred within 30 days before the onset of illness; or (3) had no history of receiving OPV or of contact with an OPV recipient, but the virus was isolated and characterized as vaccine-related. In addition, the person has a neurologic deficit 60 days after the onset of initial symptoms, has died, or has unknown followup status.

All suspected paralytic poliomyelitis cases are reviewed by an external committee and are classified following confirmation by this committee.

See Part C for a description of NNDSS and Appendix A for focus area contact information.



14-30b. Reduce febrile seizures following pertussis vaccines.

National Data Sources	Vaccine Adverse Event Reporting System (VAERS), HRSA, FDA, CDC; Vaccine Safety Datalink (VSD), CDC, NIP.
State Data Source	Not identified.
Healthy People 2000 Objective	Not applicable.
Measure	Number.
Baseline	152 (1998).
Numerator	Number of children with febrile seizures (observed or reported muscular contractions and loss of consciousness lasting from several minutes to more than 15 minutes and not accompanied by focal neurological signs or symptoms, with these seizures or convulsions associated with fever in children aged 0 to 9 years) that occur within 48 hours after receipt of a pertussis-containing vaccine.
Denominator	Not applicable.
Population Targeted	U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	<p>In addition to incident cases of febrile seizures caused by pertussis vaccines, CDC monitors the net number of doses of pertussis-containing vaccines distributed by year and by type through the Biologics Survey to verify that reductions are not due to decreases in the number of vaccine doses administered.</p> <p>Estimates may also be available based on extrapolations from the National Immunization Survey.</p> <p>VAERS reports of febrile seizures are coded using Coding Terms for a Thesaurus of Adverse Reaction Terms (COSTART). VAERS is a passive surveillance system.</p> <p>See Appendix A for focus area contact information.</p>



14-31. Increase the number of persons under active surveillance for vaccine safety via large linked databases.

National Data Source	Vaccine Safety Datalink (VSD), CDC, NIP.
State Data Source	Vaccine Safety Datalink (VSD), CDC, NIP.
Healthy People 2000 Objective	Not applicable.
Measure	Number.
Baseline	6 million persons (1999).
Numerator	Number of persons enrolled in all health plans with large-linked databases in the past year.
Denominator	Number of persons.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.

Expected Periodicity	Not specified.
Comments	Data are collected from computer databases of participating health plans. Quality of health plan databases on vaccinations and medical encounters varies. See Appendix A for focus area contact information.



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