

## Healthy People 2010 Operational Definition

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### **14-27. Increase routine vaccine coverage levels for adolescents.**

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

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|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>National Data Source</b>                                | National Health Interview Survey (NHIS), CDC, NCHS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>State Data Source</b>                                   | Not identified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Healthy People 2000 Objective</b>                       | Adapted from 20.11 (Immunization and Infectious Diseases).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Changes since the 2000 Publication</b>                  | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Measure</b>                                             | Percent.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Baseline (Year)</b>                                     | 93 (1997)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Target</b>                                              | 90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Target-Setting Method</b>                               | Consistent with Childhood Immunization Initiative.<br>For a discussion of target-setting methods, see Part A, section 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Numerator</b>                                           | Number of persons aged 13 to 15 years reported to be vaccinated with two or more doses of the tetanus and diphtheria antigens.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Denominator</b>                                         | Number of persons aged 13 to 15 years.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Population Targeted</b>                                 | U.S. civilian, noninstitutionalized population.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Questions Used To Obtain the National Baseline Data</b> | From the 1997 National Health Interview Survey: <ul style="list-style-type: none"><li>➤ <i>Are shot records available for (Child's name)?</i></li><li>➤ <i>Are all the immunizations the (Child's name) ever received included in this shot record?</i></li><li>➤ <i>Are there any OTHER immunizations listed on the shot record that I have NOT asked you about?</i><br/>[If yes:]<ul style="list-style-type: none"><li>○ <i>What are the names of OTHER immunizations listed on the shot record that I have NOT asked you about?</i><br/><i>Influenza</i></li></ul></li></ul> |

*Pneumococcal  
Hepatitis A  
Other immunizations*

- *Has (Child's name) ever received an additional tetanus-diphtheria (Td) shot?*

*[If yes:]*

- *How many additional tetanus-diphtheria (Td) 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)?*

*[If yes:]*

- *Has (Child's name) ever received a tetanus diphtheria (Td) shot?*

*[If yes:]*

- *How many tetanus-diphtheria (Td) shots did (Child's name) ever received?*

**Expected Periodicity** Annual.

**Comments** Between 1997 and 2003 the National Health Interview Survey was the only national source of immunization information for adolescents. Vaccination coverage estimates for these years are based on parental recall. There was no national data source for adolescent immunization information in 2004 and 2005. The NIS-Teen was implemented in 2006 and will be the source for annual national adolescent vaccination coverage levels. Vaccination coverage estimates from the NIS-Teen are based on provider-reported information. Differences in coverage estimates between 2003 and 2006 are due primarily to survey methodology. Because parental recall has been shown to be inaccurate,<sup>1, 2</sup> provider-reported data is considered to be the gold standard.

In 2005, the Advisory Committee on Immunization Practices recommended the tetanus-diphtheria-acellular pertussis (Tdap) vaccine for adolescents 11-18 years of age. The Tdap vaccine is intended to replace the Td vaccine. Teens who have received Td should wait approximately 5 years before receiving Tdap. Therefore, teens who have received either Td or Tdap are considered up-to-date with the series.

Between 1997 and 2003, the coverage estimate

reflects the receipt of one or more doses of Td vaccine. Beginning in 2006, the coverage estimate reflects the receipt of one or more doses of tetanus-diphtheria containing vaccine (i.e. Td or Tdap).

Objective 14-27 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. Objective 14-27 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.

For some measures, data do not meet the criteria for statistical reliability, data quality, or confidentiality and have been suppressed. Information on suppression of data for the major Healthy People 2010 data systems has been published in a *Healthy People Statistical Note*.<sup>3</sup>

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

## References

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1. Bolton, P.; Holt, E.; Ross, A.; et al. Estimating vaccination coverage using parental recall, vaccination cards, and medical records. *Public Health Reports*. 113:521-526. 1998.
2. Zell, E.R.; Peak, R.R.; Rodewald, L.E.; Ezzati-Rice, T.M. Letter to the Editor: Vaccine coverage. *Public Health Reports*. 114:3-4. 1999.
3. Klein, R.J.; Proctor, S.E.; Boudreault, M.A.; Turczyn, K.M. Healthy People 2010 Criteria for Data Suppression. *Statistical Notes* No. 24. Hyattsville, MD: National Center for Health Statistics. 2002.