

IMMUNIZATIONS: ADOLESCENTS

The U.S. immunization program, with its strong emphasis on infant and early childhood immunizations, has been a remarkable success. However, past-year preventive care doctor visits decline from infancy and early childhood to middle childhood and adolescence,¹ providing fewer opportunities for older children and teens to receive immunizations. *The Healthy People 2020* (HP2020) targets for vaccination coverage among adolescents aged 13–15 years are 80 percent coverage for one dose of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccine; one dose of meningococcal conjugate (MenACWY) vaccine; and for females, three doses of human papilloma virus (HPV) vaccine.² Tdap and MenACWY vaccines protect against bacterial infections that can cause breathing problems, paralysis, brain damage, and death, while the HPV vaccine protects against several viral strains that can cause cervical and anal cancer and genital warts.³

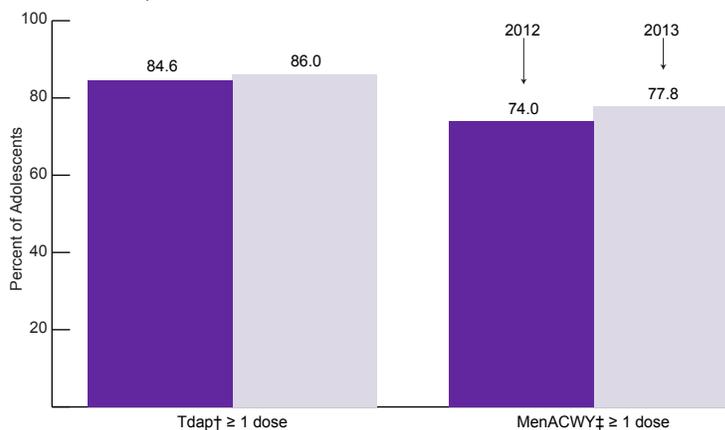
From 2012 to 2013, coverage increased from 84.6 to 86.0 percent for Tdap vaccination dose and from 74.0 to 77.8 percent for at least one MenACWY vaccination targets (figure 1). HPV vaccination coverage for adolescents was substantially lower with 37.6 percent of female adolescents and only 13.9 percent of male adolescents receiving the recommended 3 doses (figure 2). The HPV vaccine is the newest

routinely recommended vaccine for adolescents, having been recommended in 2006 for females aged 11–12 years and in 2010 for males of the same age with catch-up vaccination at later ages for females (13–26 years) and males (13–21 years) who have not completed the 3-dose series.³ Despite lower coverage, HPV vaccination has generally increased annually for both female and male adolescents for ≥ 1 , ≥ 2 , and ≥ 3 doses.

Adolescent HPV vaccination varied by age among females only, with ≥ 1 , ≥ 2 , and ≥ 3 HPV-dose coverage being higher among 15- to 17-year-old females compared with 13-year-old females in 2013. There were no differences by age or sex for Tdap or MenACWY vaccination.

In 2013, there were no racial and ethnic differences in Tdap vaccination coverage; however, MenACWY coverage was higher among Hispanic and non-Hispanic Asian adolescents compared with non-Hispanic Whites (83.4 and 83.8 percent, respectively, versus 75.6 percent). HPV vaccination also varied by race/ethnicity. For example, receipt of ≥ 1 dose of HPV vaccine was higher among Hispanic and non-Hispanic American Indian/Alaska Native females than non-Hispanic White females (67.5 and 73.3 percent, respectively, versus 53.1 percent) and higher among non-Hispanic Black and Hispanic males

Figure 1. Selected Vaccination Coverage* for Adolescents Aged 13–17 Years, 2012 and 2013**



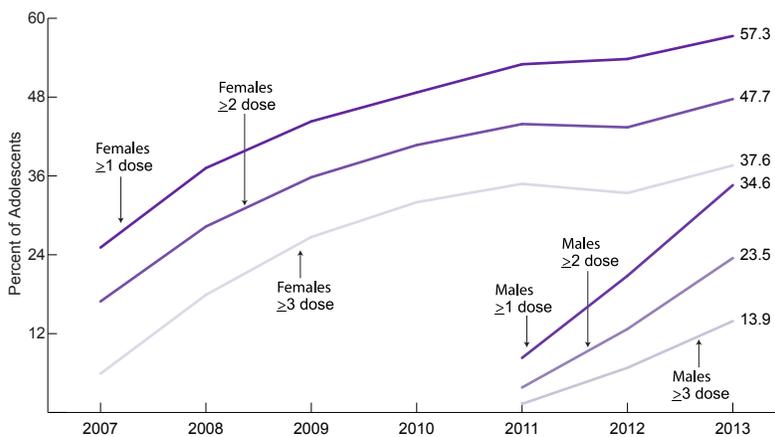
*The Advisory Committee on Immunization Practices recommends that adolescents routinely receive one dose of Tdap and two doses of MenACWY. **Adolescents (N = 18,264) in the 2013 National Immunization Survey–Teen were born January 11, 1995–February 13, 2001. †Includes percentages receiving Tdap vaccine at or after 10 years. ‡Includes percentages receiving MenACWY or meningococcal-unknown-type vaccine.

versus non-Hispanic White males (42.2 and 49.6 percent, respectively, versus 26.7 percent).

High Tdap coverage levels among adolescents aged 13–17 years indicate that similar coverage levels are attainable for other vaccines recommended for adolescents. Improved adherence of clinicians and parents to the Advisory Committee on Immunization Practices (ACIP) recommendation to administer all age-appropriate vaccines during a single visit could substantially increase lagging vaccination coverage

levels for HPV vaccination.⁴ Use of patient reminder and recall systems, immunization information systems, coverage assessment and feedback to clinicians, clinician reminders, standing orders, and other interventions can also help make use of every health care visit to ensure that adolescents are fully protected from vaccine-preventable infections and cancers, especially when such interventions are coupled with clinicians' vaccination recommendations.⁵

Figure 2. HPV Vaccination Coverage* for Adolescents Aged 13–17 Years, by Sex and Doses Received, 2007–2013



*The Advisory Committee on Immunization Practices recommends that adolescents routinely receive three doses of human papilloma virus vaccine.

Data Sources

Figure 1 and 2. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Immunization Survey - Teen. Retrieved from: <http://www.cdc.gov/vaccines/imz-managers/coverage/nis/teen/index.html>. Accessed September 18, 2014.

Endnotes

1. U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. National Survey of Children's Health 2011–2012. Available at: <http://www.childhealthdata.org/>. Accessed September 2, 2014.
2. U.S. Department of Health and Human Services. *Healthy People 2020*. Available at: <http://www.healthypeople.gov>. Accessed September 2, 2014.
3. Centers for Disease Control and Prevention. Vaccines Recommended for Preteens and Teens. Retrieved from: <http://www.cdc.gov/vaccines/who/teens/vaccines/index.html>. Accessed on September 4, 2014.
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Suggested Citation

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