

Clinical Education Initiative, New York State Department of Health STD Center of Excellence

ACIP Recommendations for HPV Vaccination – Updates – March 2017

“Safe, effective, and long-lasting protection against HPV cancers with two visits instead of three means more Americans will be protected from cancer.” (CDC Director Tom Frieden, MD, MPH)

Human Papillomavirus (HPV) is a very common virus that is spread through skin to skin contact including sexual contact. There are approximately 40 types of genital HPV. Most persons with genital HPV are asymptomatic and thus unaware of their infection. Some HPV types can cause cervical cancer in women as well as other cancers in both men and women. Other types can cause genital warts in both males and females. The CDC’s Advisory Committee on Immunization Practices (ACIP) announced an alternative immunization schedule from the traditional three doses down to two – for adolescents who initiate the vaccination at ages 9 through 14 years of age.

This two-dose schedule is considered a “prime-boost” if given at 0 and 6 months. Memory B cells require a minimum of four to six months to mature and differentiate into high-affinity B cells. The second vaccination – at least six months post-initial dose allows these memory B cells to be efficiently reactivated. The three-dose regimen requires two “prime” doses, with the third being the “boost” dose. Starting the vaccine in the preteen years effectively stimulates the immune response, requiring only one “prime” dose, which is the rationale for the age recommendation; the two-dose regimen must be initiated **before** the fifteenth birthday. However, for those who have already received one dose before the that birthday and have since reached the age of 15, the two-dose regimen is advised, as long as it is within a 6-12 months of the first dose.

There is evidence that HPV vaccination – even with relatively low rates in the US – have lowered the incidence of cervical neoplasia <http://www.cdc.gov/std/stats15/other.htm> (10/19/16). The World Health Organization (WHO) has recommended simplification of HPV Vaccine schedules to improve immunization rates. Reducing the dose number to two is an important strategy in achieving this. Many countries have changed to the two-dose schedule.

One other change is that the bivalent HPV vaccine is no longer recommended, nor are they being manufactured as of 2016. Though the quadrivalent vaccine is still available, the 9-valent vaccine recommended as first-line. There are no “catch up” recommendations for those who received the quadrivalent vaccine series with additional doses of the 9-valent vaccine.

ACIP has updated the vaccine schedules, the *Pink Book*, provider tools, and patient materials; check the website, <https://www.cdc.gov/vaccines/schedules/hcp/index.html> (3/8/17).

