

HPV OVERVIEW

For Immunizing Adolescents against Human Papillomavirus (HPV): What You Need to Know

HPV is the most common sexually-transmitted infection (STI) in the United States, and most sexually-active men and women will acquire HPV at some point in their lives.¹ Nearly half of the new cases of HPV each year are among individuals aged 15-24 years. HPV infection can cause cervical, vulvar, penile, anal, and oropharyngeal cancer as well as genital warts.² Vaccination against HPV infection can prevent thousands of deaths annually from these virus-related diseases.

In 2015, the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP) recommended routine HPV vaccination of females and males at age 11 or 12 with three doses of HPV vaccine.² ACIP also recommended catch-up vaccination for females aged 13 through 26 years and males aged 13 through 21 years not vaccinated previously. Vaccination is also recommended through age 26 years for men who have sex with men and for immunocompromised persons (including those with HIV infection) if not vaccinated previously. Although the 11-12-year-old wellness checkup is a convenient opportunity to begin the HPV immunization series, HPV vaccines can be administered to patients as young as nine years old.

ACIP's recommendations to vaccinate males and females routinely against HPV have influenced national healthcare policy recommendations. For example, the US Department of Health and Human Services' Healthy People 2020 objectives include increasing HPV vaccine completion rates (three doses) for females and males ages 13-15 years to 80 percent (Recommendations IID-11.4 and IID-11.5, respectively).^{3,4} Along with this, the current Healthcare Effectiveness and Data information Set (HEDIS) contain measures that assesses the percentage of female adolescents 13 years of age who have received three doses of the HPV vaccine by their 13th birthday.⁵ These are standardized measures developed by the National Committee for Quality Assurance (NCQA) and used by nearly all US health plans to measure performance.

Using data gathered as part of the National Immunization Survey–Teen (NIS-Teen), CDC tabulated the estimated vaccination coverage for 20,827 adolescents aged 13 to 17 years for routinely-recommended vaccines, including HPV.⁶ From 2013 to 2014, immunization rates among 13-17 year-olds who received ≥ 1 HPV vaccine increased from 56.7% to 60.0% in females and from 33.6% to 41.7% in males. Survey data indicate that vaccination coverage levels vary widely among states. The rates for Illinois relative to the nation are shown in the table below. Data are reported as % (95% CI).

	Females (n=10,084)			Males (n=10,743)		
	≥ 1 HPV	≥ 2 HPV	≥ 3 HPV	≥ 1 HPV	≥ 2 HPV	≥ 3 HPV
US Overall	60.0 (± 1.9)	50.3 (± 1.9)	39.7 (± 1.9)	41.7 (± 1.8)	31.4 (± 1.7)	21.6 (± 1.6)
Illinois	64.4 (± 6.5)	58.0 (± 6.7)	47.7 (± 6.9)	44.7 (± 6.6)	34.2 (± 6.3)	22.6 (± 5.7)

While these data suggest that HPV vaccination rates in Illinois are higher than the national average, less than half of female adolescents and less than one-fourth of male adolescents complete the ACIP’s recommended three-dose series. Moreover, an appreciable percentage of patients receive an incomplete series, obtaining only one or two of the recommended three vaccinations.

A recent review of barriers to HPV vaccination among US adolescents indicates that parents often report needing additional information before vaccinating their children.⁷ Commonly-cited concerns with vaccines include questions about safety, efficacy, and cost. Given the transmission of HPV through sexual contact, parents may be reluctant to discuss the HPV vaccine in the context of their adolescent’s potential sexual activity. In addition, parents may display a low perceived risk of HPV infection; some parents reported not vaccinating their sons because of the perceived lack of direct benefit. Moreover, HPV vaccine is relatively “new” from a generational standpoint; most contemporary parents did not receive the vaccine themselves as adolescents. While HPV vaccines are highly efficacious against the virus types for which they are indicated,⁸ parents may nonetheless question their long-term effectiveness. However, parents consistently cite *recommendation from a healthcare professional* as one of the most important factors in their decision to vaccinate their children.⁷

This QI program is designed to give providers the skills and information necessary to help address these parental concerns and to provide a strong recommendation for HPV vaccine, thereby increasing initiation of the vaccination series. This program will also provide tools and resources to help providers complete and/or schedule immunizations towards completing the vaccine series. By improving HPV immunization rates in providers’ practices, this QI program will help providers better meet national standards and ensure that patients receive the full benefit conferred by the three doses of vaccine.