



Cervical Cancer Screening – A Guide for Physicians and Patients

If cancer screening rates could be improved, death from cervical cancers could be decreased.
(CDC, 2015d)

Cervical Cancer Facts

Most cases of cervical cancer occur in women under 50. Some cases have been found in women over 65, but this is unusual if the woman was screened regularly. Cervical cancer rarely occurs in women younger than 20. (American Cancer Society, 2015)

Hispanic women are more likely to develop cervical cancer than African American or white women, but more African American women will die as a result of the disease. (American Cancer Society, 2015)

Compared to other parts of the country, more women in Appalachia, Ohio, and West Virginia develop cervical cancer and die as a result of the disease. (CCHHD, n.d.)

Most cervical cancers are caused by human papilloma virus (HPV) - the most common sexually transmitted infection in the U.S. Anyone who is sexually active can acquire the virus, even if they are active with only one person. (CDC, 2015b; Markowitz et al., 2014)

Most people are exposed to HPV at some point in their lives, but most will not realize they have been infected. (CDC, 2015a, 2015c) It may take decades after exposure to HPV for cancer to develop. (Hariri et al., 2015)

Most HPV infections have no symptoms, but persistent infection can lead to cervical cancer in women and cancers of the mouth and genital warts in women and men. (CDC, 2015a; Markowitz et al., 2014)

Each year HPV infection is responsible for 9,000 cancers in men and 17,000 cancers in women. The majority of HPV infections occur in women ages 15 to 24 years of age. (2015a), (Hariri et al., 2011; Markowitz et al., 2014; Satterwhite et al., 2013)

Screening for Cervical Cancer

Screening for cervical cancer will not prevent HPV infection. However, it can prevent most cases of cervical cancer from developing if appropriate follow-up care and treatment are provided when a woman has abnormal screening. (Markowitz et al., 2014)

Screening should begin at age 21. Women between the ages of 21 and 65 should be screened via Pap every three years. (Markowitz et al., 2014) Women between the ages of 30 and 65 who wish to lengthen the time between tests can be screened for cervical cancer every five years with a combination of Pap and HPV testing. (Markowitz et al., 2014)

Cervical Cancer Screening: A Guide for Physicians and Patients – Ohio
TJ Barrett (2015)

Organizations Supporting Cervical Cancer Screening Beginning at age 21

- U.S. Preventive Services Task Force (USPSTF)
- American Cancer Society (ACS)
- American Society for Colposcopy and Cervical Pathology (ASCCP)
- American Society for Clinical Pathology (ASCP)
- American College of Obstetrics and Gynecology (ACOG)

Guidelines for Cervical Cancer Screening

Adapted from [USPSTF Guidelines](#) and [Choosing Wisely](#)

| Who | What | Why |
|----------------|---|--|
| Women 21 to 65 | Screening Pap smear every 3 years beginning at age 21 | It is rare for a woman under 21 to develop cervical cancer even if sexually active. In younger women abnormal cells usually return to normal without treatment. |
| Women 30 to 65 | Combination of Pap smear and HPV testing every 5 years if there is a desire to lengthen time between screenings | High certainty that the net benefit is substantial |

Why Not Screen...

- ... Women younger than 30 with HPV testing, alone or in combination with Pap
- ... Women younger than 21
- ... Women Older than 65, who have had adequate prior screening
- ... Women who have had a hysterectomy and no high-grade precancerous lesion or cervical cancer

The evidence shows no net benefit or that the harm outweighs the benefit. For example, a Pap test can be uncomfortable and cause some bleeding or the results of the test may cause anxiety and unneeded follow-up treatments when something does not look normal but would go away on its own.

Immunization to Reduce Risk

Human papilloma virus (HPV) is the most common sexually transmitted infection in the U.S. The majority of HPV infections occur in women between the ages 15 to 24 years of age (Hariri et al., 2011; Markowitz et al., 2014; Satterwhite et al., 2013). Vaccines are now available to prevent the development of cervical cancer caused by HPV. The Advisory Committee on Immunization Practices (ACIP) recommends the following immunization schedule for HPV (CDC, 2015e):

- Routine vaccination of females 11 or 12 years of age (can also be given as young as age 9) and females through 26 years of age who have not been vaccinated previously or who have not completed the 3-dose series.
- Routine vaccination of males 11 or 12 years of age (can also be given as young as age 9) and males through 21 years of age who have not been vaccinated previously or who have not completed the 3-dose series.
- Vaccination for men who have sex with men and immunocompromised men (including those with HIV infection) through age 26 years if not vaccinated previously.

Even with the HPV vaccine, screening for cervical cancer remains an important part of women's healthcare, as screening will detect most cervical pre-cancer and cancers not prevented by the current vaccines. (Lowy & Schiller, 2012)

References

- American Cancer Society. (2015). Cervical Cancer, from <http://www.cancer.org/cancer/cervicalcancer/detailedguide/cervical-cancer-key-statistics>
- CCHHD. (n.d.). Ohio State University: Reducing cervical cancer in Appalachia. *Current Centers for Population Health and Health Disparities*. Retrieved October, 2015, from <http://cancercontrol.cancer.gov/populationhealthcenters/cphhd/centers-osu.html>
- CDC. (2015a). Burden of HPV cancer. *Human Papillomavirus (HPV)*, from <http://www.cdc.gov/hpv/hcp/known-facts.html>
- CDC. (2015b). Genital HPV infection - Fact sheet. *Human Papillomavirus (HPV)*, from <http://www.cdc.gov/std/hpv/stdfact-hpv.htm>
- CDC. (2015c). HPV vaccine resources for healthcare professionals. *Preteen and teen vaccines*, from <http://www.cdc.gov/vaccines/who/teens/for-hcp/hpv-resources.html>
- CDC. (2015d). National Breast and Cervical Cancer Early Detection Program (NBCCEDP). *Cancer Home*, from <http://www.cdc.gov/cancer/nbccedp/about.htm>
- CDC. (2015e). Recommended immunization schedule for persons aged 0 through 18 years. *Immunization schedules*, from <http://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html>
- Hariri, S., Markowitz, L. E., Bennett, N. M., Nicolai, L. M., Schafer, S., Bloch, K., . . . Group, H.-I. W. (2015). Monitoring effect of Human Papillomavirus Vaccines in US population, Emerging Infections Program, 2008–2012. *Emerging Infectious Diseases*, 21(9), 1557-1561. doi: 10.3201/eid2109.141841
- Hariri, S., Unge, E. R., Sternberg, M., Dunne, E. F., Swan, D., Patel, S., & Markowitz, L. E. (2011). Prevalence of genital human papillomavirus among females in the United States, the National Health and Nutrition Examination Survey, 2003–2006. *The Journal of Infectious Diseases*, 204, 566-573. doi: 10.1093/infdis/jir341
- Lowy, D. R., & Schiller, J. T. (2012). Reducing HPV-associated cancer globally. *Cancer Prev Res (Phila)*, 5(1), 18-23.
- Markowitz, L. E., Dunne, E. F., Saraiya, M., Chesson, H. W., Curtis, C. R., Gee, J., . . . Unger, E. R. (2014). Human Papillomavirus Vaccination: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*, 63(5), 1-30.
- Satterwhite, C. L., Torrone, E., Meites, E., Dunne, E. F., Mahajan, R., Ocfemia, M. C. B., . . . Weinstock, H. (2013). Sexually transmitted infections among US women and men: Prevalence and incidence estimates, 2008. *Sexually Transmitted Diseases*, 40(3), 187-193.