

Cancers Associated with Human Papillomavirus (HPV) in Ohio



FACT SHEET

2016



**YOU ARE THE KEY TO
CANCER PREVENTION**

WHAT IS HPV AND CAN IT LEAD TO CANCER?

HPV is short for Human Papillomavirus, which is a group of more than 200 related viruses and is the most commonly sexually transmitted disease. As of 2015, approximately **79 million Americans are currently infected with HPV** and **14 million people become newly infected each year**. In most people, HPV infections are without symptoms and cleared from the body within one to two years. In some cases, however, the infection persists or returns. Persistent infections with high-risk HPV types can lead to cell changes that, if untreated, may progress to cancer. Each year in the United States, an estimated **26,000 new cancers** occurred as a result of HPV, about **17,000 in women** and **9,000 in men**.

HOW IS HPV SPREAD?

HPV can be easily spread through direct sexual (vaginal, anal and oral) contact, from the skin and mucous membranes of infected people to the skin and mucous membranes of their partners.

WHAT ARE SOME CURRENT FACTS ABOUT HPV ASSOCIATED CANCERS IN OHIO?

- In Ohio, in 2008-2012, approximately **1,157** cases of cancer occurred as a result of HPV each year.
- For all HPV-associated cancers combined, incidence rates were **48 percent higher among females** compared to males and **6 percent higher among whites** compared to blacks.
- Mortality (death) rates for all HPV-associated cancers combined were **two times higher among females** compared to males and **32 percent higher among blacks** compared to whites.
- **HPV-associated cancer** incidence rates increased from 1996 to 2012 for cancers of the vulva, anus and oropharynx; oropharyngeal cancer incidence rates approximately **doubled in Ohio** during this time period.
- The **majority** of counties with the highest HPV-associated cancer incidence rates were located in the **Appalachian region** of Ohio.
- For all HPV-associated cancers combined, females were more likely to be diagnosed early stage (*in situ* and local), whereas **males were more likely to be diagnosed late stage** (regional and distant).
- The 2005-2011 U.S. **five-year survival** probability for each HPV-associated cancer site/type was **lower among blacks** compared to whites, with the exception of vulvar cancer.

How can HPV be prevented?



The **key to prevention** is HPV vaccines. Vaccines are the **best way to protect** males and females **against** some of the most common types of HPV that can be associated with development of cancer. HPV vaccines are safe and effective. The vaccine is administered in three doses over six months. HPV vaccines are most effective when given at **11 or 12 years old** but can be given as early as **9 years old**. Current vaccine recommendations include the following:

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Girls and women:

- **Three vaccines** (Cervarix, Gardasil and Gardasil 9) are available to protect females against the types of HPV that cause most cervical cancers.
- Gardasil and Gardasil 9 also protect against most genital warts and additional HPV-associated cancers.
- These vaccines are recommended for 11 or 12 year-old girls, and for females through 26 years of age, who did not get any or all of the doses when they were younger.

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Boys and men:

- **Two vaccines** (Gardasil and Gardasil 9) protect males against most genital warts and anal cancers.
- These vaccines are recommended for boys aged 11 or 12 years, and for males through 21 years of age, who did not get any or all doses when they were younger.
- These vaccines are also recommended for gay and bisexual young men (or any young man who has sex with men) and also for young men with compromised immune systems (including HIV) through age 26, if they did not get HPV vaccine when they were younger.

Despite the demonstrated effectiveness and safety of the HPV vaccines, vaccination rates remain well below the Healthy People 2020 goal of **80 percent** for both females and males.

Ohio females ages 13 to 17:

- **less than 2/3** had initiated the HPV vaccine
- **just over 1/3** had completed the recommended 3 dose vaccine series

Ohio males ages 13 to 17:

- **less than 1/3** had initiated the HPV vaccine
- **less than 1/4** had completed the recommended 3 dose vaccine series

What types of cancer are associated with HPV?

HPV is associated with cancers of the cervix, vagina, vulva, anus, penis and oropharynx (mouth/throat).