

Oropharyngeal Cancer and the Human Papillomavirus (HPV) Questions and Answers

What is oropharyngeal cancer?

Cancer of the oropharynx is a type of head and neck cancer that includes the tonsils, the back of the mouth and the base of the tongue. When cancer is diagnosed in this area, it is called **oropharyngeal cancer**.

Most head and neck cancers begin in cells called squamous cells. These cells line the moist areas of the head and neck, such as the inside of the mouth, nose and throat.

What causes oropharyngeal cancer?

While cigarette smoking is still one of the main causes of head and neck cancer, there have been fewer head and neck cancer cases in recent years, because fewer people are smoking.

Even though the overall number of head and neck cancers has gone down, oropharyngeal cancer is on the rise. Research studies have shown that the **human papillomavirus (HPV)** can cause oropharyngeal cancer, especially in younger people who are at an increased risk for having HPV infection.

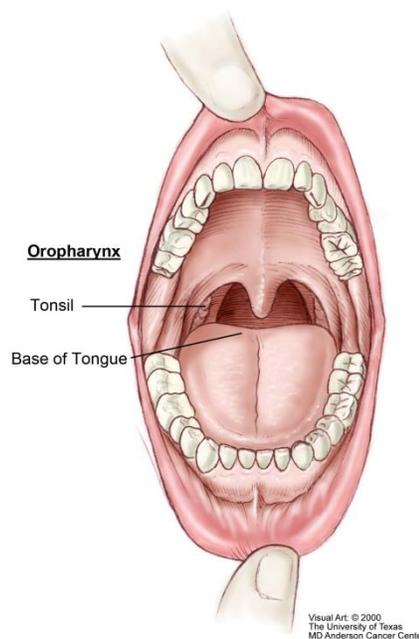
How common is oropharyngeal cancer?

The American Cancer Society estimates that in 2015 about 15,520 people will get oropharyngeal cancer. More than 70% of oropharyngeal cancers are now caused by HPV.

What is the HPV virus?

HPV is a group of common viruses that can cause the growth of abnormal cells. In some cases, these abnormal cells become cancer. There are about 150 types of HPV. HPV spreads through skin contact. More than 30 are transmitted through sexual contact, making HPV the most common sexually transmitted infection in the world. Most people are infected with HPV shortly after they start having sex. The risk of HPV infection increases with:

- Every sexual encounter with a new partner
- Having sex at an early age
- Having sex with a partner who has had many partners



HPV can also be transmitted through oral sex and even deep mouth kissing.

Different types of HPV have different symptoms. Some types cause common warts that grow on the hands and feet. Other types cause genital warts that are transmitted through sexual activity. The types that can cause cancer usually have no symptoms at all.

How does HPV cause cancer?

HPV infects cells that line the inside of the body, such as the cervix and tonsils. Most people's bodies are able to fight off an HPV infection. The infection can usually clear on its own within a year or two. But, sometimes parts of the virus can remain for many years and cause abnormal cell growth that could lead to cancer.

Do I have HPV?

A blood test is not available to check for HPV infection. For oropharyngeal cancer, cells from head and neck tumors that are removed during surgery or biopsy are tested for HPV. Testing positive for HPV in your tumor does not mean that the virus is active.

What does being HPV positive mean for me?

If you have HPV-positive oropharyngeal cancer, you most likely got your infection many years before your diagnosis. Patients with HPV-positive oropharyngeal cancer tend to:

- have better treatment results,
- have less chance of the cancer coming back,
- have greater chance of going a longer time before the cancer returns, and
- survive their cancer longer.

How do I prevent HPV?

Three vaccines are available to protect young people from the types of HPV that can cause cancer: Gardasil[®], Gardasil[®]9, and Cervarix[®]. These are recommended for girls and women 9 to 26 years of age and boys and men 9 to 21 years of age, before they become sexually active. The vaccines have been shown to be very safe and effective.

The vaccine prevents new HPV infections, but does not clear those that are already there or have any effect on invasive cancer.

How do I learn more?

If you have any questions about HPV and oropharyngeal cancer, please talk with your doctor or nurse.

References

Centers for Disease Control and Prevention. HPV Vaccine – Questions and Answers. <http://www.cdc.gov/cancer/hpv/>. Accessed 9/11/2014

Gillison ML, Broutian T, Pickard RL, et al. Prevalence of Oral HPV Infection in the United States, 2009-2010. *JAMA*. 2012;307(7):693-703. doi:10.1001/jama.2012.101.

Chaturvedi AK, Engels EA, Pfeiffer RM, et al. Human Papillomavirus and Rising Oropharyngeal Cancer Incidence in the United States. *JCO*; 2011:4294-4301

Ang KK, Harris J, Wheeler R, et al. Human Papillomavirus and Survival of Patients with Oropharyngeal Cancer. *N Engl J Med* 2010;363:24-35.