Cervical Cancer Causes, Risk Factors, and Prevention

Learn about the risk factors for cervical cancer and what you might be able to do to help lower your risk.

Risk Factors

A risk factor is anything that affects your chance of getting a disease such as cancer. Learn more about the risk factors for cervical cancer.

- Risk Factors for Cervical Cancer
- What Causes Cervical Cancer?

Prevention

Risk Factors for Cervical Cancer

A risk factor is anything that increases your chance of gettinga disease such as cancer. Different cancers have different risk factors. For example, exposing skin to strong sunlight is a risk factor for skin cancer. Smoking is a risk factor for many cancers. But having a risk factor, or even several, does not mean that you will get the disease.

Severalrisk factors can increase your chance of developing cervical cancer. People without any of these risk factors rarely develop cervical cancer. Although these risk factors can increase the odds of developing cervical cancer, many with these risks do not develop this disease.

When you think about risk factors, it helps to focus on those you can change or avoid (like smoking or human papillomavirus infection), rather than those you cannot (such as your age and family history). However, it is still important to know about risk factors that cannot be changed, because it's even more important for those who have these factors to get regular screening tests to find cervical cancer early.

Risk factors you can possibly change

Human papillomavirus (HPV) infection

Infection by the human papillomavirus[1] (HPV) is the most important risk factor for cervical cancer. HPV is a group of more than 150 related viruses. Some of them cause a type of growth called **papillomas,** which are more commonly known as warts.

> HPV can infect cells on the surface of the skin, and those lining the genitals, anus, mouth and throat, but not the blood or internal 3i0 g 0 0 ds ev0138u8eTj 0 g 0,lm rg /6 e0 0210etQ

Having a weakened immune system

Human immunodeficiency virus (HIV)[9], the virus that causes AIDS, weakens the immune system and puts people at higher risk for HPV infections.

The immune system is important in destroying cancer cells and slowing their growth and spread. In women with HIV, a cervical pre-cancer might develop into an invasive cancer faster than it normally would.

Another group of women at risk for cervical cancer are those taking drugs to suppress their immune response, such as those being treated for an autoimmune disease (in which the immune system sees the body's own tissues as foreign and attacks them, as it would a germ) or those who have had an organ transplant.

Chlamydia infection

Chlamydia is a relatively common kind of bacteria that can infect the reproductive system. It is spread by sexual contact. Women who are infected with chlamydia often have no symptoms and they may not know that they are infected at all unless they are tested during a pelvic exam. Chlamydia infection can cause pelvic inflammation, leading to infertility.

Some studies have seen a higher risk of cervical cancer in women whose blood tests and cervical mucus showed evidence of past or current chlamydia infection. Certain studies show that the Chlamydia bacteria may help HPV grow and live on in the cervix which may increase the risk of cervical cancer.

Long-term use of oral contraceptives (birth control pills)

There is evidence that taking oral contraceptives (OCs) for a long time increases the risk of cancer of the cervix. Research suggests that the risk of cervical cancer goes up the longer a woman takes OCs, but the risk goes back down again after the OCs are stopped, and returns to normal many years after stopping.

A woman and her doctor should discuss whether the benefits of using OCs outweigh the potential risks.

Having multiple full-term pregnancies

Women who have had 3 or more full-term pregnancies have an increased risk of developing cervical cancer. It is thought this is probably due to the increased exposure

to HPV infection with sexual activity. Also, studies have pointed to hormonal changes during pregnancy as possibly making women more susceptible to HPV infection or

DES-related cancer. Doctors do not know exactly how long these women will remain at risk.

DES daughters may also be at increased risk of developing squamous cell cancers and pre-cancers of the cervix linked to HPV.

You can learn more in DES Exposure: Questions and Answers[10]. Read it on our website, or call (1-800-227-2345) to have a free copy sent to you.

Having a family history of cervical cancer

Cervical cancer may run in some families. If your mother or sister had cervical cancer, your chances of developing the disease are higher than if no one in the family had it. Some researchers suspect that some rare instances of this familial tendency are caused by an inherited condition that makes some women less able to fight off HPV infection than others. In other instances, women in the same family as a patient already diagnosed could be more likely to have one or more of the other non-genetic risk factors previously described in this section.

Factors that may lower your risk

Intrauterine device (IUD) use

Some research suggests that women who had ever used an intrauterine device (IUD) had a lower risk of cervical cancer. The effect on risk was seen even in women who had an IUD for less than a year, and the protective effect remained after the IUDs were removed.

IUDs do have some risks. A woman interested in using an IUD should first discuss the possible risks and benefits with her doctor. Also, a woman with multiple sexual partners should use condoms to lower her risk of sexually transmitted illnesses no matter what other form of contraception she uses.

Know Your Cancer Risk [11]

Take the ACS CancerRisk360™ assessment to learn more about what you can change to improve your health. By taking 5 minutes to answer a few questions, we will give you a personalized roadmap of actions with helpful resources you can use to lower your risk of cancer.

Hyperlinks

1. www.cancer.org/cancer/risk-prevention/hpv.html
2. www.cancer.org/cancer/types/vulvar-cancer.html
3. www.cancer.org/cancer/types/vaginal-cancer.html
4. www.cancer.org/cancer/types/penile-cancer.html
5. www.cancer.org/cancer/types/anal-cancer.html
6. www.cancer.org/cancer/types/oral-cavity-and-oropharyngeal-cancer.html
7. www.cancer.org/cancer/risk-prevention/hpv/hpv-vaccines.html
8. www.cancer.org/cancer/risk-prevention/hpv.html
9. www.cancer.org/cancer/risk-prevention/infections/hiv-infection-aids.html
10. www.cancer.org/cancer/risk-prevention/medical-treatments/des-exposure.html
11. acscancerrisk360.cancer.org/

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What Causes Cervical Cancer?

cervical cancer, and other risk factors, like smoking and HIV infection, influence which women exposed to HPV are more likely to develop cervical cancer.

Hyperlinks

1. www.cancer.org/cancer/risk-prevention/hpv.html

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Last Revised: January 3, 2020

Can Cervical Cancer Be Prevented?

The two most important things you can do to prevent cervical cancer are to get the HPV vaccine if you are eligible, and to be tested regularly according to American Cancer Society (ACS) guidelines. These can be found in The American Cancer Society Guidelines for the Prevention and Early Detection of Cervical Cancer[1].

The most common form of cervical cancer starts with pre-cancerous changes and there are ways to stop this from developing. The first way is to find and treat pre-cancers before they become invasive cancers, and the second is to prevent the pre-cancers.

Finding cervical pre-cancers

A well-proven way to prevent cervical cancer is to have screening tests. Screening is having tests to find conditions that may lead to cancers and can find pre-cancers before they can turn into invasive cancer. The Pap test (or Pap smear) and the human papillomavirus (HPV) test are specific tests used during screening for cervical cancer. These tests are done the same way. A health professional uses a special tool to gently scrape or brush the cervix to remove cells for testing. If a pre-cancer is found it can be treated, keeping it from turning into a cervical cancer.

The HPV test[2] looks for infection by high-risk types of HPV that are more likely to cause pre-cancers and cancers of the cervix. There are certain HPV tests approved to be a primary HPV test and others approved as part of a co-test. The type you get most often depends on which test is available in your area.

The Pap test[3] or smear is a procedure used to collect cells from the cervix so that they can be looked at closely in the lab to find cancer and pre-cancer. It's important to know that most invasive cervical cancers are found in women who have not had regular Pap tests. A Pap test can be done during a pelvic exam, but not all pelvic exams include a Pap test.

The result of the HPV test, along with your past test results, determines your risk of developing cervical cancer. If the test is positive, this could mean more follow-up visits, more tests to look for a pre-cancer or cancer, and sometimes a procedure to treat any pre-cancers that might be found.

It is best to talk to your healthcare provider about your screening test results in more detail to fully understand your risk of developing cervical cancer and next steps.

Things to do to prevent pre-cancers and cancers

Based on your age, overall health, and personal risk for cervical cancer, there are some things that can be done that may prevent pre-cancers and conditions that lead to pre-cancers.

Get an HPV vaccine

Vaccines are available that can help protect children and young adults against certain HPV infections. These vaccines protect against infection with the HPV types most commonly linked to cancer, as well as some types that can cause anal and genital warts.

These vaccines only work to prevent HPV infection they will not treat an infection that is already there. That is why, to be most effective, the HPV vaccines should be given before a person becomes exposed to HPV (such as through sexual activity).

These vaccines help prevent pre-cancers and cancers of the cervix. Some HPV vaccines are also approved to help prevent other types of cancers and anal and genital warts.

The vaccines require a series of injections (shots). Side effects are usually mild. The most common ones are short-term redness, swelling, and soreness at the injection site. Rarely, a young person might faint shortly after the injection.

The ACS recommends:

- HPV vaccination of children between the ages of 9 and 12.
- Children and young adults age 13 through 26 who have not been vaccinated, or who haven’t gotten all their doses, should get the vaccine as soon as possible.Vaccination of young adults will not prevent as many cancers as vaccination of children and teens.
- The ACS does not recommend HPV vaccination for persons older than 26 years.

It’s important to know that no vaccine provides complete protection against all cancer-causing types of HPV, so routine cervical cancer screening is still needed.

then there might be other ways to become infected that aren't yet clear.

Limiting the number of sex partners and avoiding sex with people who have had many other sex partners may lower your risk of exposure to HPV. But again, HPV is very common, so having sexual activity with even one other person can put you at risk. Remember that someone can have HPV for years and still have no symptoms. So it's possible someone can have the virus and pass it on without knowing it.

Use a condom

Condoms ("rubbers") provide some protection against HPV but they don't completely prevent infection. One reason that condoms cannot protect completely is because they don't cover every possible HPV-infected area of the body, such as skin of the genital or anal area. Still, condoms provide some protection against HPV, and they also help protect against HIV and some other sexually transmitted infections.

Don't smoke

Not smoking[5] is another important way to reduce the risk of cervical pre-cancer and cancer.

Hyperlinks

1. www.cancer.org/cancer/types/cervical-cancer/detection-diagnosis-staging/cervical-cancer-screening-guidelines.html
2. www.cancer.org/cancer/types/cervical-cancer/detection-diagnosis-staging/screening-tests/hpv-test.html
3. www.cancer.org/cancer/types/cervical-cancer/detection-diagnosis-staging/screening-tests/pap-test.html
4. www.cancer.org/cancer/risk-prevention/hpv/hpv-vaccines.html
5. www.cancer.org/cancer/risk-prevention/tobacco.html

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Last Revised: July 30, 2020

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