I've Been Exposed to HPV. Now What?

Don't Panic.

HPV is a virus - the same virus that causes ordinary warts. Viruses live by changing a cell's DNA. Normally, your immune system watches closely for these changes, and wipes those cells out, before the changes can cause trouble, like developing into cancer. Even if you test positive for it one year, you may test negative for it the next.

The warts virus is so small and meek that it has to hide out on the very surface of your skin, where the immune system doesn't watch as closely. There are some areas of skin that are more vulnerable to cancerous changes, if your immune system doesn't keep the virus under control. These areas of skin are the cervix, the throat, and the anus. If these cells have HPV for long periods of time (years to decades), they can start growing out of control and turn into cancer.

Remember, the virus itself is small and meek, and if you catch it, your immune system will almost always wipe it out very easily. With testing and treatment, **less than 1% of infections become cancer**. Without any intervention at all, only about 6.5% do... More than 93% of the time, the immune system does its job perfectly!

More details:

- HPV is so common that at least 50% of sexually active men and women get it at some point in their lives. It doesn't really matter if they're gay or straight. It's just very common.
- It might be possible to transmit HPV during the birth process. The main symptom would be a young child with a very hoarse cry and very noisy breathing, if the throat were affected. We don't think cesarean delivery is necessary to prevent this extremely rare condition.
- Each year, about 12,000 women get cervical cancer in the U.S, usually from HPV. About 4,000 women die from cervical cancer each year. Cervical cancer is not inherited - it's caused by the virus.
- Other cancers associated with HPV:
  - 7,100 cases affecting the throat (5,600 men;1,500 women - much more likely with tobacco and alcohol exposure)
  - 4,200 cases affecting the anus (2,700 women; 1,500 men)
  - 1,500 cases affecting the outer skin of the vagina
  - 500 cases affecting the inner skin of the vagina
  - 400 cases affecting the penis

Women: Testing for the virus, testing for cancer

- If you had a **positive HPV test but you haven't had a Pap test** done (where they look at the cells under a microscope), you'll need a Pap.
- Consider **adding an anal Pap** to the exam, if you've had anal exposure recently or in the past, since HPV can cause anal cancer. An anal Pap is a simple cotton-swab exam.
- If you are **HPV-positive with a normal Pap test**, recheck both of these tests in one year. Give your immune system time to wipe out the virus. In the meantime, reduce your risk factors (see below for suggestions).
- If you repeat the tests and **both are negative** (normal), go back to your normal Well-Woman Exam schedule. In the meantime, reduce your risk factors (see below).
- If you repeat the test, and the **Pap is normal but you still have the virus** (HPV-positive), get a colposcopy ("cole-POSS-co-pee"), which is like a Pap test through a microscope, to examine the cells more closely. (We do not have guidelines at this time, for a normal anal Pap but HPV-positive.)
- If you have an **abnormal Pap, plus HPV**, get a colposcopy (Pap test through a microscope). If your anal Pap is abnormal, you'll need a similar exam of that area, to rule out cancer.

Men: Testing for the virus, testing for cancer

- At this time, there is no routine screening test for HPV in men! Reduce your risk factors, and prevent spread (see below).
- If you have visible warts in the genital area, or any painless lesions, have a doctor visually examine them. Treating the warts will stop them from spreading.
- Consider adding an anal Pap to the exam, if you've had anal exposure recently or in the past, since HPV can cause anal cancer. The risk of anal cancer, among men with anal exposure, is double the rate that first prompted the demand for universal cervical screening of women! Please note: "I'm not gay" does **not** mean "I'm not at risk." If you simply experimented healthfully in the past, or if you were ever sexually forced by a male, you might be at risk for HPV in that area.

Testing for people with immune-system conditions

If your immune system doesn't work normally (example: HIV positive), you'll need more careful testing, because your immune system is less likely to keep HPV under control. You should still follow the prevention measures suggested below.

Preventing spread, preventing cancer

Safe sex

Always follow safe sex practices. People with HIV are more vulnerable to cancers caused by HPV.

Condoms

Evidence on whether condoms protect against HPV infection is mixed. Some studies show condom use provides protection only about 50% of the time.

However, direct exposure of the cervix to semen (normal, healthy semen and a normal, healthy cervix) appears to increase the risk of pre-cancerous changes in the cervix (possibly through prostaglandins). Using condoms protects from this risk, which would be multiplied in the presence of virus. It might protect the same way, during anal penetration.

Vaccination

Vaccines are non-infectious bits of virus that alert the immune system, which makes antibodies against those bits of virus. If the person is exposed to the live virus in the future, the immune system remembers it, and uses the same antibodies to kill the virus.

There are two HPV vaccines, and both have been shown to be safe.

- Gardasil protects against the four most serious forms of HPV, and is for all people 9-26 years old.
- Cervarix protects against the two most serious forms of HPV, and is for females 9-26 years old (testing in males has not been finished at this time). It may be a little cheaper.

The shots can be expensive. People under age 18 who are eligible for free vaccinations can also get HPV shots for free. At this time, even vaccinated people should continue to get the usual cancer screenings.

Smoking

People who smoke have a higher risk of HPV-associated cancer (*double* the risk, in the case of cervical cancer).

Nutrition

- Fruits and vegetables: Higher levels of vegetable consumption have been associated with a more than 50% decreased risk of HPV persistence.
- Vitamin A/carotene: There is weak evidence that a vitamin A *deficiency* can increase the chance of pre-cancerous changes in the cervix, even if you don't have HPV. Be careful: Don't overdose on vitamin A!
- Vitamin C: Persistent HPV infection may be lower among women reporting higher intakes of vitamin C.
- Vitamin E: Women who had more vitamin E in their diet may get rid of the HPV virus faster.
- Folic acid: Women with higher levels have been less likely to repeatedly test positive for HPV.

IUDs and procedures that affect the cervix

Women who use IUDs - currently or in the past, short- or long-term - have about half the risk of developing cervical cancer, according to a recent study of 20,000 women. The IUD does not protect against HPV, but it seems to make the immune system more active against the virus.

The authors note that women who get colposcopies with cervical biopsies also get this long-lasting protection; the healing process wipes out the virus. Women with HPV who don't get *any* testing or treatment may have a much higher rate of cancer, because their immune systems are not watching that area as closely!

For more information

About HPV, from the CDC: http://1.usa.gov/3jaYdM
About men and HPV, from the CDC: http://1.usa.gov/Y1tCN
Common questions and expert answers about the HPV vaccine: http://bit.ly/rDuzUg
What is cervical cancer? http://bit.ly/42zPaG
IUDs and cervical cancer: http://bit.ly/qonxJi
Movie star Farah Fawcett died from HPV. Learn more: http://bit.ly/SYoZk
About anal Pap tests: http://bit.ly/unpAbM
Cancer prevention, from the Mayo Clinic: http://bit.ly/12Zmou
Safe sex information links: http://bit.ly/tFhvWH
Resources for people who have experienced sexual violence: http://rainn.org