



# HIV and Cancer

What is the Link?

What do you need to know  
to protect yourself?

Is there a link between  
cancer and HIV?

This brochure  
answers three questions:

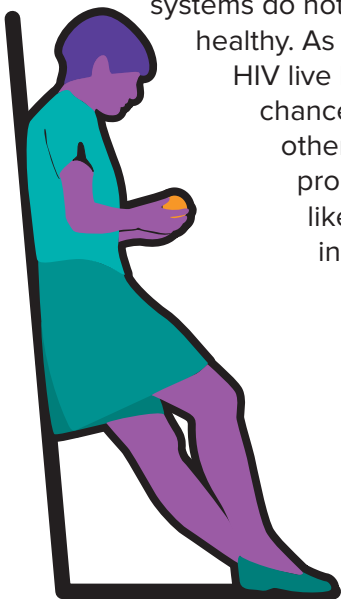
- **Why do people living with HIV seem to get cancer more often than people without HIV?**
- **What kinds of cancer do people living with HIV usually get?**
- **What can you do to lower your chances of getting cancer?**

# Why do people living with HIV seem to get cancer more often than people without HIV?

HIV itself plays a role in how cancer grows in people who are living with HIV. HIV attacks the immune system, which protects the body from infections and disease. A weaker immune system is less able to fight off diseases, like cancer. People with HIV often have weakened immune systems, which means they will have a greater chance of getting cancer.

Here are some reasons why cancer seems to be more common among people living with HIV:

**People living with HIV are living longer.** HIV medications are helping people living with HIV live longer, healthier lives. But their immune systems do not get fully healthy. As people with HIV live longer, their chances of having other health problems, like cancer, increase.



## **HIV and other viruses work together.**

Having HIV and a weakened immune system makes it easier for other viruses to stay alive in your body. HIV and these other viruses work together to help cancer cells start growing. Once cancer starts in people with weakened immune systems, it grows faster than in people with stronger immune systems. Some of these viruses are:

- Hepatitis B and hepatitis C
- Herpes
- Human papillomavirus (HPV)
- Epstein-Barr virus (EBV)

## **Most people living with HIV smoke cigarettes.**

About 60% to 70% of people with HIV smoke. Smoking is a risk factor for many different types of cancer. As people with HIV live longer and continue to smoke, they increase their risk of developing smoking-related cancers.



## Is it true that HIV medications cause cancer?

**No.** There is no proof that HIV medications increase the risk of getting any type of cancer.

## What is a “Risk Factor”?

\risk 'fak-tər\

A “risk factor” means anything that increases your chances of getting cancer. For example, smoking is a major risk factor for lung cancer. You can protect yourself from a lot of that risk by not smoking or by quitting smoking. Other risk factors are out of your control, like having a genetic (family) history of cancer. For example, if a parent or grandparent had cancer, your risk of getting that type of cancer will be greater.

Take action on the risk factors that you have some control over. If you have a family history of cancer, ask your healthcare provider about ways to prevent that type of cancer and test for it.

# What kinds of cancer do people living with HIV usually get?

## HIV-related Cancers

In the past, people living with HIV often got three types of cancer: Kaposi's sarcoma, non-Hodgkin's lymphoma, and cervical cancer (in women). These are called HIV-related cancers because they occur more often in people whose immune systems have been weakened by HIV/AIDS. Here are some facts about these cancers:

### ■ **Kaposi's sarcoma**

This cancer grows into reddish-purple patches on your skin that cannot kill you. It can be deadly if it gets in your throat or lungs. A herpes virus causes Kaposi's sarcoma.

### ■ **Non-Hodgkin's lymphoma**

This cancer usually starts in the lymph glands, which are part of your immune system and help fight off disease. Lymph glands are mainly in the neck, under the arms, in the groin, and inside the belly. Epstein-Barr virus is a risk factor for this cancer.

### ■ **Invasive cervical cancer**

This cancer affects the cervix, the entrance from the vagina to the uterus. Almost all women who get cervical cancer also have HPV. Having HIV and HPV makes cervical cancer grow faster.

## Non-HIV-related Cancers

People living with HIV are getting more non-HIV-related cancers. This happens even if they take HIV medications and have healthier immune systems. These cancers affect many different parts of the body. Smoking is a risk factor for many of these cancers. Here are some facts about non-HIV-related cancers:

### ■ Lung cancer

Smoking is the main risk factor. Lung cancer among people living with HIV has become more common since people began taking HIV medications and living longer. Quitting smoking, staying physically active, and keeping your immune system strong greatly lower your cancer risk.

### ■ Hodgkin's lymphoma

This is another cancer that occurs mainly in the lymph glands. It grows quickly in people who have weak immune systems.

### ■ Anal cancer

Men who have sex with men have a greater risk of anal cancer. Anal sex does not directly cause anal cancer. But it can lead to getting HPV, which makes your risk for anal cancer much higher.

### ■ Liver cancer

Having hepatitis B or hepatitis C and HIV makes your risk of liver cancer very high. Smoking, drinking alcohol, using drugs, and sharing needles or other equipment to use drugs are also risk factors.

### ■ Other skin cancers

Skin cancers other than Kaposi's sarcoma are becoming more common.

# What can you do to lower your chances of getting cancer?

## Two Ways to Beat Cancer: Healthy Living and Early Detection

You can lower your cancer risk a lot, and manage your HIV at the same time, by making healthy choices. Finding cancer in its early stages (early detection) and treating it right away can raise your chances of living longer with HIV. Cancer treatments can also be very hard on the immune systems of people living with HIV. It is important for everyone, including people living with HIV, to find (prevent) cancer in its early stages before it starts to grow.

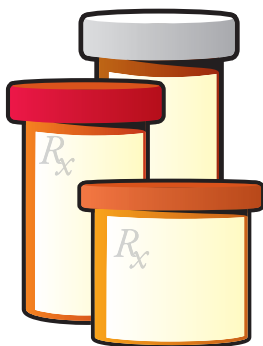
### Healthy Living to Prevent Cancer

**Quitting smoking** is the biggest step to protecting yourself from cancer. If you quit smoking, you can greatly lower your risk of cancer of the mouth, throat, lungs, stomach, kidneys, liver, pancreas, and bladder. As soon as you stop smoking, your body starts to heal and your cancer risk drops. Visit <http://www.hivtobaccofreeeny.org/> for support around quitting smoking and other resources or ask your healthcare provider about treatment and counseling to help you quit.





**Take all your HIV medications on schedule.** A stronger immune system is your best protection against many types of cancer. Take all your medications on schedule and try not to skip doses. HIV medications have helped to greatly reduce Kaposi's sarcoma.

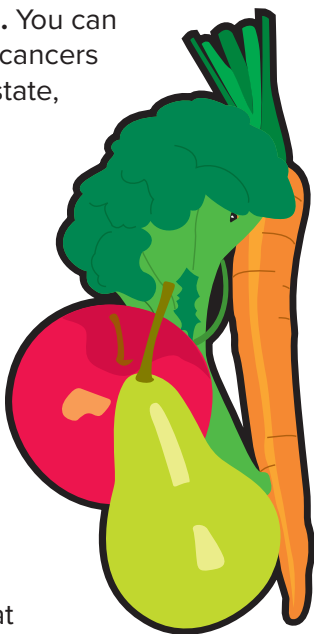


**Take preventative vaccinations as appropriate.** Vaccines are available which can prevent certain viruses from causing cancer. Both the liver disease and the liver cancer caused by the Hepatitis B virus can be prevented with the protective Hepatitis B vaccine. This vaccine is available for all age groups. Another preventative vaccine available for young women and men is the human papillomavirus (HPV) vaccine. It can protect against the HPV types that cause the most common sexually associated cancers, including cervical, vaginal, and anal cancers. This vaccine has been approved for females aged 9 to 26, and males aged 9 to 21. Check with your healthcare provider to see if either of these vaccines are right for you.

**Protect yourself and others from HIV and other viruses.** HIV, HPV, hepatitis, and herpes are passed through sex or sharing needles or other equipment used to inject drugs. Use a condom the right way every time you have sex. Avoid sharing needles or drug works.

**Eat healthy foods.** You can lower your risk of cancers of the breast, prostate, stomach, colon, and rectum with a healthy diet.

- Fruits and vegetables have lots of minerals, vitamins, and fiber. Try to eat them five times a day — as part of every meal and as snacks.
- Eat whole wheat bread, pasta, rice, and beans.
- Eat lean meats (lower fat) like chicken and fish and low-fat dairy products, such as skim milk and cottage cheese.
- Cook with canola oil or olive oil instead of butter.
- Try to get your vitamins and minerals from healthy foods — not from pills, drinks, and powders.
- Talk with your healthcare provider or a nutritionist about what foods are right for you.



**Get plenty of physical activity, stay at a healthy weight.** Regular physical activity can lower your risk of getting some types of cancer.

- Try walking, jogging, or riding a bike four or five days a week. A lot of things can count as physical activity – as long as you move your body on a regular basis.



- Do something that you enjoy. That will make it easier to stick with it.
- People living with HIV sometimes have trouble keeping enough weight on. Ask your healthcare provider about how to get enough physical activity and eat enough to stay at a healthy weight.

**Avoid drugs and alcohol.** Drugs are not a direct cancer risk, but they can hurt your immune system and make it harder to stay healthy with HIV. You can lower your risk of mouth, throat, liver, and breast cancer (in women) by not drinking alcohol. If you have chronic hepatitis C and liver disease, don't drink at all.



**Protect yourself from the sun.** Wear sunscreen that is rated SPF15 or higher. Wear a hat, sunglasses, and clothing to protect yourself from the sun.



## **Finding cancer in its early stages**

(early detection). Have regular medical checkups. Talk with your health care provider about your cancer risk and problems to watch for. Ask about tests you can get even if you have no signs of cancer:

- Pap smear for cervical cancer or anal Pap smear for anal cancer.
- Mammogram for female breast cancer.
- Colorectal exam.
- Prostate exam for men over age 50.
- Oral exam by a dentist every six months.

## **Know the warning signs of cancer and do self-exams.**

If you notice any of these warning signs, tell your healthcare provider or dentist right away:

- A sore that does not heal. Look for new growths on your skin or any changes in the size, color, or shape of moles or warts.
- A lump or hardness in the skin, especially in female breasts and in the male testicles and groin area.
- Oral exam: check the inside of your mouth, lips, gums, and tongue for sores, swelling or bleeding, white patches, scabs, or cracks.
- Bleeding or loss of body fluids that is not normal.
- Changes in your bowel or bladder habits.
- A cough or a sore throat that lasts for a long time.
- Heartburn or trouble swallowing that does not go away.

## Staying Healthy and Preventing Cancer

HIV weakens the immune system and allows the growth of other viruses that can cause cancer. Scientists are working hard to figure out the links between HIV, other viruses, and cancer and to make medications that prevent and treat these diseases. In the meantime, do what you can to stay healthy and prevent cancer.



## Where to go for more information



### **American Cancer Society**

[www.cancer.org](http://www.cancer.org)  
1-800-ACS-2345



### **National Cancer Research Institute**

[www.nci.nih.gov/cancertopics/  
types/AIDS](http://www.nci.nih.gov/cancertopics/types/AIDS)  
1-800-4-CANCER



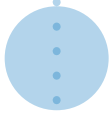
### **The Body: The Complete HIV/ AIDS Resource**

[www.thebody.com/index/treat/  
cancers.html](http://www.thebody.com/index/treat/cancers.html)



### **Centers for Disease Control and Prevention Division of Cancer Prevention and Control**

[www.cdc.gov/cancer/index.htm](http://www.cdc.gov/cancer/index.htm)  
1-800-CDC-INFO



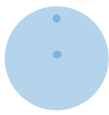
### **New York State Department of Health AIDS Institute**

[www.health.ny.gov/diseases/aids](http://www.health.ny.gov/diseases/aids)  
1-800-541-AIDS (2437) (English)  
1-800-233-SIDA (7432) (Spanish)



### **Tobacco Cessation Resources**

[www.hivtobaccofreeeny.org/](http://www.hivtobaccofreeeny.org/)  
[www.nysmokefree.com](http://www.nysmokefree.com)



### **New York State Smokers' Quitline**

1-866-697-8487



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