



Novel coronavirus SARS-CoV-2  
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TREATMENT NEWS (/CATEGORY/TREATMENT-NEWS)

# What People With HIV Need to Know About the New Coronavirus

New research is emerging about how the respiratory virus spreads and how people can protect themselves and others.

March 2, 2020 By Liz Highleyman (/author/liz-highleyman)

A month after the new coronavirus respiratory disease known as COVID-19 came to public attention, researchers and public health officials are continuing to learn about its spread, its mortality rate and who is most likely to become seriously ill.

Although much remains unknown, it's clear that older people, those with other health conditions and people with compromised immune systems have a higher likelihood of severe illness. This includes people living with HIV, especially those with low CD4 counts. But taking some basic precautions can lower your risk and improve your well-being.

## COVID-19 Basics

As of March 2, there were 43 confirmed or presumed positive cases of COVID-19 detected in the United States, according to the Centers for Disease Control and Prevention (<https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html>) (CDC). In addition, there have been 48 cases among people brought back to the United States, mostly from the Diamond Princess cruise ship. The virus now appears to be spreading locally within communities. Worldwide, more than 87,000 cases have been reported, according to the World Health Organization (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>). Most of these are in China, but 58 countries have now seen cases.

The mortality rate for COVID-19 is thought to be around 2.5%, based on the numbers reported in the hardest-hit areas of China. This is substantially higher than the typical seasonal flu (around 0.1%), but much lower than the death rates of the SARS (severe acute respiratory syndrome) and MERS (Middle East respiratory syndrome) coronaviruses, at around 10% and 30%, respectively.

However, the true COVID-19 mortality rate is not yet known because it is unclear how many people have contracted the new virus. If a large number of people have no or mild symptoms and never seek medical attention, the pool of infected people could be much larger and the death rate could be much lower. Receiving supportive treatment earlier in the course of the disease also lowers the risk of death.

A majority of people with COVID-19 have mild symptoms including fever, cough and shortness of breath. Around 20% develop more severe illness, including pneumonia and acute respiratory distress syndrome, which may require intensive care and in some cases mechanical ventilation.

But not everyone who contracts the virus is at equal risk. According to a recent study (<http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51>) by the Chinese Center for Disease Control and Prevention of more than 45,000 confirmed cases, people with coexisting conditions had higher death rates (<https://www.cancerhealth.com/article/who-is-most-susceptible-new-coronavirus>): 5.6% for cancer, 6.0% for high blood pressure, 6.3% for chronic respiratory disease, 7.3% for diabetes and 10.5% for cardiovascular disease. The greatest risk was seen among people age 80 or older, at 14.8%.

Experts do not yet know how long someone can transmit the coronavirus, officially known as SARS-CoV-2, before they develop symptoms or after they recover. It is also unclear whether the virus can linger in the body and later relapse; whether it confers immunity and, if so, for how long; or what the likelihood is of becoming infected again.

Researchers are hard at work to develop treatments for COVID-19 and a vaccine for SARS-CoV-2. Certain HIV medications (<https://www.poz.com/article/china-uses-hiv-meds-treat-new-coronavirus>) have shown activity against the coronavirus. Clinical trials of Gilead Sciences' antiviral drug remdesivir (<https://www.poz.com/article/maker-hiv-drugs-gilead-sciences-tests-possible-treatment-remdesivir-new-coronavirus>) are currently underway in China and at the University of Nebraska Medical Center (<https://clinicaltrials.gov/ct2/show/NCT04280705>) in Omaha—home of the CDC's largest biocontainment unit—where some people who contracted the virus overseas are being treated. A vaccine from Moderna Therapeutics (<https://investors.modernatx.com/news-releases/news-release-details/moderna-ships-mrna-vaccine-against-novel-coronavirus-mrna-1273>) has been sent to the National Institute of Allergy and Infectious Diseases for the first Phase I study. However, human trials are expected to last at least a year before a vaccine is ready for widespread use.

### **What About People With HIV?**

Compared with the general population, people with compromised immunity are at higher risk of contracting the new coronavirus and developing more serious COVID-19 illness. The HIV population is aging, and nearly half are over 50. Those with low CD4 T-cell counts, indicating advanced immune suppression, are at greatest risk. People with HIV are more likely to develop cardiovascular disease and may do so at a younger age. Certain HIV medications, especially older drugs, can cause neutropenia, or depletion of immune system white blood cells that fight infection.

“When you look at who’s been most profoundly ill, it tends to be people who are older, in their 60s, 70s and 80s. As you get older, your immune system doesn’t function as well,” says Steve Pergam, MD, MPH, of the Vaccine and Infectious Disease Division at Fred Hutchinson Cancer Research Center.

Among people living with HIV, “it’s all based on level of immune suppression,” Pergam told POZ. “For an HIV patient who is on stable antiretroviral therapy and has a normal CD4 count, their risk may be slightly increased. People often lump HIV patients with other immunosuppressed patients, but HIV is a different disease than it was years ago. For people who have a reconstituted immune system because of treatment, I think the risk is not going to be tremendously different.”

“For cancer patients on chemotherapy, people with solid organ transplants or bone marrow transplants and those who use high-dose steroids for autoimmune diseases, the risk will likely be more severe,” he continues. “They may shed the virus for longer. They may be more likely to develop pneumonia and more likely to die. We don’t know until we have more information, but many of us have concerns about that.”

People with a weakened immune system may be unable to fight off the virus, or they may develop an excessive inflammatory immune response known as a cytokine storm. Paradoxically, immune suppression can sometimes mean fewer or milder early symptoms, such as fever, even as the virus and the body’s response to it ravage the lungs and other organs.

“The symptoms may be more subtle, so we have to have more awareness,” Pergam says. “Oftentimes their initial symptoms may be less prominent, but the level of complex disease may be more severe.”

### **Taking Precautions**

Experts recommend that everyone take common-sense precautions to prevent transmission of the new coronavirus—the same ones recommended to prevent seasonal flu:

- Avoid close contact—meaning within about six feet—with people who have a cough or other respiratory symptoms.
- Wash your hands with soap and water (<https://www.realhealthmag.com/article/wash-hands-how-when>) thoroughly and often for at least 20 seconds.
- Use alcohol-based hand sanitizer when soap and water are unavailable.
- Avoid touching your eyes, nose and mouth.
- Healthy people do not need to routinely wear face masks to prevent infection, but use a mask if you are caring for someone who is ill.
- Get the flu vaccine. Older people should also consider getting vaccinated against pneumonia.

If you are ill:

- Cough or sneeze into a tissue or your bent elbow, and immediately dispose of tissues in the trash.
- Avoid close contact with others.
- Stay home if you are sick.
- If you think you may have been exposed to the coronavirus, contact a health care provider promptly if you develop a fever, cough or difficulty breathing.
- Before you go to a clinic or hospital, call ahead so the staff can take appropriate precautions.
- Wearing a face mask can stop the spread of droplets that can transmit the virus to others.

Older individuals, people living with HIV and those with cardiovascular disease or other conditions may benefit from extra precautions.

“I advise people to have hand sanitizer wherever they go and use it frequently in public places—I have it in my pocket all the time. Wash your hands with soap and water long enough to sing the ‘Happy Birthday’ song,” Pergam advises.

“I always talk with patients about the idea of social distancing. I’m not saying you can’t live your life as a normal person. But you don’t have to go out to dinner when a restaurant is super crowded—you might eat a little earlier or you might order in,” he adds. “If you’re having friends or family over, ask them if they have any symptoms. Have a hand gel dispenser at your front door and make sure everybody uses it. Make sure to tell friends and family that they should be up to date on their vaccines for other things.”

People who need prescription medications should try to have a supply to last at least a couple weeks and preferably a few months. Shortages could happen because the ingredients for many drugs—especially generics—are produced in China. Pergam acknowledges that this can be difficult because of high drug costs and insurance restrictions. You may be able to order medications for three months at a time. Or renew your prescriptions as soon as you are able to—even if they haven’t run out yet—so you have a buffer of several days.

The Food and Drug Administration is keeping track of medication shortages that may result from the coronavirus epidemic. According to a recent statement (<https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-supply-chain-update>), only one unspecified drug is now in short supply. HIV expert Tim Horn of NASTAD (formerly the National Alliance of State & Territorial AIDS Directors) checked on the status of brand name and generic antiretroviral drugs and found no current shortages (<https://www.poz.com/article/coronavirus-news-vital-ingredients-hiv-meds-synthesized-china>).

It's also a good idea to have at least a two-week supply of food, water, cleaning supplies and other household necessities on hand. And don't forget to stock up on pet food. You may be able to have goods delivered to avoid going to stores. Or ask a friend or family member without compromised immunity for help.

As the COVID-19 outbreak becomes more widespread, "disruption to everyday life might be severe," according to Nancy Messonnier, director of CDC's National Center for Immunization and Respiratory Diseases, who advises businesses to explore remote work options and families to consider plans in case schools close.

"Talk to your employer about opportunities to work from home," Pergam advises. "And have them remind everyone you work with not to come to work sick."

Stay in communication with your health care providers, and keep up to date on new developments. Let them know if you have questions or concerns, especially if you have new symptoms or were recently exposed to someone who is ill.

"The biggest thing to get across is, don't panic," Pergam says. "We're all expecting this to be a prolonged and complicated process. The best thing people can do is focus on ways that they can protect themselves because those small things can be enough to provide an extra layer of protection for everyone."

For more details, visit the U.S. and global coronavirus tracker from Johns Hopkins University

(<https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>)

and the CDC COVID-19 website (<https://www.cdc.gov/coronavirus/2019-ncov/index.html>).



And for related articles in POZ, see “Coronavirus Alert: Vital Ingredients in HIV Meds Are Synthesized in China. Should You Worry About Your Supply?” (<https://www.poz.com/article/coronavirus-news-vital-ingredients-hiv-meds-synthesized-china>)” The article also looks at Vice President Mike Pence and AIDS expert Deborah Birx, who are leading the U.S. response to the virus. Additional news items include “HIV Drugmaker Gilead Sciences Tests a Possible Treatment for New Coronavirus” (<https://www.poz.com/article/maker-hiv-drugs-gilead-sciences-tests-possible-treatment-remdesivir-new-coronavirus>)” and “COVID-19 Puts People With HIV in China at Risk of Med Shortages” (<https://www.poz.com/article/covid19-puts-people-hiv-china-risk-med-shortages>).”

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## POZ Poll: How concerned are you about contracting the new coronavirus (COVID-19)?

**Very concerned.**

**Moderately concerned.**

**Slightly concerned.**

**Not concerned at all.**

**SUBMIT**