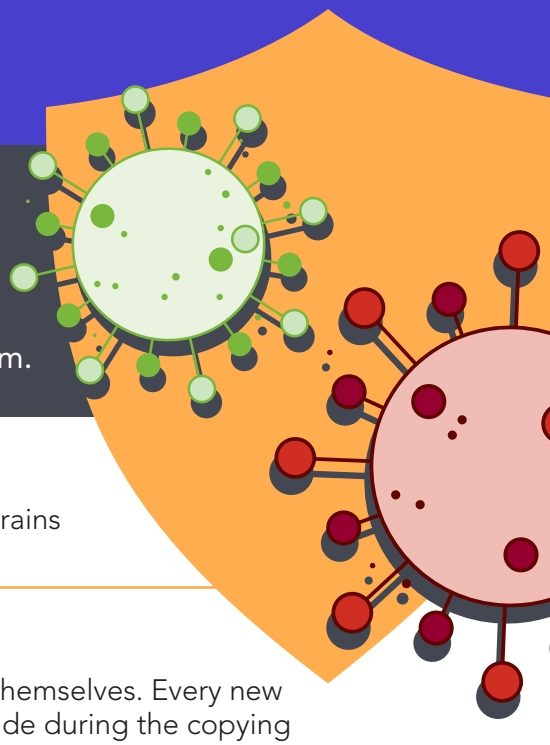
VIRUS STRAINS



Viruses constantly change through mutation, and new variants, or strains, of a virus are expected to occur over time. The following frequently asked questions and answers can help you understand more about virus strains, including what they mean for infection control and whether you should be doing things differently for them.

Q **Are strains common with viruses?**

A Viruses have new strains all the time. That's why there are different strains of influenza every year, and why you can get a cold more than once.

Q **How are strains created?**

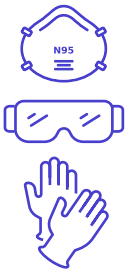
A Viruses have genes that carry instructions for making new copies of themselves. Every new copy contains those instructions as well. Sometimes mistakes are made during the copying process. When the instructions are copied wrong, the new viruses come out slightly different, with the mistake included in the instruction genes. Some mistakes make the virus not work anymore, so it's a dead end. When the new virus is still able to function even with the mistake, that's how a new strain is created, since all of the copies from that virus will carry that mistake.

Q **What about the new strains of SARS-CoV-2? Do they spread more easily?**

A Researchers are working hard to understand how these new strains of SARS-CoV-2 are different. Some of the new strains of SARS-CoV-2 allow the virus to spread more easily or make it resistant to treatments or vaccines, so it is even more important to continue using the recommended infection control actions.

Q **What can we do to protect ourselves and our patients from the new strains?**

A Even though new strains of SARS-CoV-2 are around, the basic pieces of the virus are still the same. This means that the recommended infection control actions for healthcare still work and are still needed to help stop the spread of COVID-19. This includes the following:



Using PPE. An N95 respirator will prevent you from breathing in virus that's in respiratory droplets, and eye protection keeps respiratory droplets from landing on your eyes. Using gloves and gowns protects you and also keeps you from spreading germs into your work environment.

Source control. Masking keeps respiratory droplets out of the air, so the germs in them can't spread to other people or the environment.

Physical distance. Maintaining physical distance helps people avoid breathing in each other's respiratory droplets.

Cleaning your hands. Soap and water and alcohol-based hand sanitizer break apart the envelope that holds the virus together, so it can't spread.

Ventilation. Good indoor ventilation is important for clearing air that might have respiratory droplets in it.

Cleaning and disinfection. Disinfecting products on the EPA's list N are known to kill SARS-CoV-2, including the new strains.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

PROJECT FIRSTLINE