

Project Firstline

Project Firstline gives frontline staff the infection control and prevention tools and information they need to protect themselves, their facility, their family and their community from infectious diseases.

Encourage your staff to join today

hanys.org/project_firstline



CDC's Project Firstline infection control and prevention program is being made available to healthcare workers by HANYS, in collaboration with Health Research, Inc. and the Department of Health.

Polling Question

Who is in the room with us today?

1. Infection Control
2. Quality Professional
3. EVS Staff
4. Security
5. Nurses aid, technician
6. Pharmacy
7. Administration
8. Volunteer
9. Other-nursing, physician

TOPIC 10: VIRUS VARIANTS



AGENDA

- Introductions
- Virus Variants
 - Understanding and protecting yourself from variants
 - Communicating about variants
- Reflection & Next Steps

LEARNING OBJECTIVES

- Describe one (1) **way that new virus variants develop.**
- Discuss **why the infection control actions recommended for COVID-19 work** for new variants of SARS-CoV-2, and why they are even more important.

CLARIFYING TERMS

You may hear different words used to describe new variants of SARS-CoV-2:

- Mutations
 - Variants
 - Strains
- **Mutation** describes the process through which the SARS-Cov-2 virus *changes*.
 - **Variants** describes the version of the virus that has changed, through mutation, from the original virus.
 - **Strains** is used in the same way as the word variants.

Understanding and Protecting Yourself from Virus Strains

As you watch the video,
write down three
interesting or important
takeaways that stand
out to you.



INSIDE INFECTION CONTROL

WHAT DO NEW COVID-19 STRAINS MEAN FOR INFECTION CONTROL?

EPISODE 19



[https://www.cdc.gov/infectioncontrol/projectfirstline/videos/EP19- Strains-LowRes.mp4](https://www.cdc.gov/infectioncontrol/projectfirstline/videos/EP19-Strains-LowRes.mp4)

Discussion

What are the interesting or important takeaways you noted?



VIRUSES REGULARLY CREATE NEW STRAINS

- Viruses **regularly create new strains**.
- New strains are created when viruses make copies of themselves. When replicating, sometimes mistakes are made. Those **mistakes create a slightly different version of the virus – the variant**.

INFECTION CONTROL ACTIONS WORK

Infection control actions work, and they work against the new strains of SARS-CoV-2. These include the following recommendations for use of

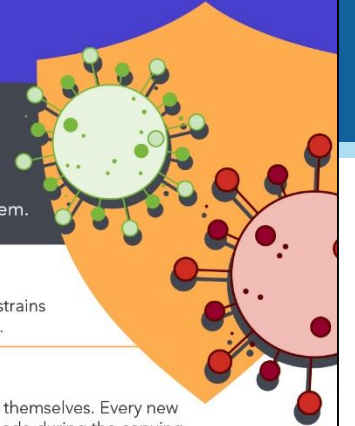
- PPE
- Source control
- Physical distance
- Ventilation
- Hand hygiene
- Cleaning and disinfection

FREQUENTLY ASKED QUESTIONS

Reference the FAQs to prepare to communicate about virus strains.

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.

**REFLECTION: WHAT DID YOU LEARN
TODAY?**

Questions?

Do you have any
remaining questions
about virus strains?



Project Firstline Training

Upcoming webinars (all sessions 9 – 9:30 a.m.)

- April 13, 2023: Virus Variants
- June 15, 2023: Gowns and Gloves
- July 13, 2023: Body Reservoirs
- September 14, 2023: Healthcare Reservoirs

Recordings (hanys.org/project_firstline)

- The concept of infection control training
- The basic science of viruses
- How respiratory droplets spread COVID-19
- How viruses spread from surfaces to people
- How COVID-19 spreads: A review
- Environmental cleaning and disinfection
- Source control in healthcare to prevent infections
- Hand hygiene
- What does it mean to recognize risk
- How germs make people sick
- Recognize and limit infection control risks

RESOURCES AND FUTURE TRAINING SESSIONS

Project Firstline on CDC:

<https://www.cdc.gov/infection control/projectfirstline/index.html>

Project Firstline on Facebook:

<https://www.facebook.com/CDCProjectFirstline/> 

Twitter:

https://twitter.com/CDC_Firstline 

YouTube:

<https://www.youtube.com/playlist?list=PLvrp9iOILTQZQGtDnSDGViKDdRtlc13VX> 

To sign up for Project Firstline e-mails, click here:

https://tools.cdc.gov/campaignproxyservice/subscriptions.aspx?topic_id=USCDC_2104

FEEDBACK FORM

