# PROJECT FIRSTLINE IS FOR YOU





**Topic 2: The Basic Science of Viruses**[Date of training]

# Agenda:

- · Introduction
- The Basic Science of Viruses
  - Video
  - Discussion and reflection
- · Session feedback form and next steps



### **Learning Objectives:**

- Differentiate one (1) core difference between SARS-CoV-2 and COVID-19.
- · Identify, and explain to others, the three (3) main parts of a virus.
- Describe three (3) steps showing how viruses use of the cells of living things to make more copies of themselves.
- Explain one (1) reason why infection control actions focus on keeping respiratory droplets out of the air and away from other people.



# As you watch, consider the following questions:

- Did you learn something new from these videos, or were you reminded of something important that especially resonates with you? Can you think of someone you know who would benefit from these concepts?
- Have you ever received questions from patients or coworkers on these topics? Do these videos give you any ideas of how you could explain these concepts to others?



# INSIDE INFECTION CONTROL

# SARS-COV-2? COVID-19? WHAT'S THE DIFFERENCE?

**EPISODE 2** 





## **INSIDE INFECTION CONTROL**

# WHAT'S A VIRUS?

**EPISODE 3** 





## **INSIDE INFECTION CONTROL**

# HOW DO VIRUSES MAKE YOU SICK?

**EPISODE 5** 





#### **Let's Discuss**

- Did you learn something new from these videos, or were you reminded of something important that especially resonates with you? Can you think of someone you know who would benefit from these concepts?
- Have you ever received questions from patients or coworkers on these topics? Do these videos give you any ideas of how you could explain these concepts to others?



#### Reflection

• Can you imagine a realistic, every-day occasion when you could practice using this job aid or explain this concept to others?



#### key iviessages

- SARS-CoV-2 is the official, scientific name of the virus, the germ that causes the disease COVID-19
- COVID-19 is the name of the disease the fever, cough, chills and other symptoms that people have when they are infected with the virus SARS-CoV-2.



#### key iviessages continued

- · All viruses have two parts:
  - Genes that contain all the information needed to make more virus copies
  - Proteins that protect the genes and help the virus spread
- · Some viruses SARS-CoV-2 is one of them also have a third part: <u>an</u> <u>envelope</u> made of special fats that protects the genes and proteins



#### key iviessages cont.

- Viruses are able to use cells in living things, including people, to make copies of themselves. It's how viruses spread within a body, and from person to person.
- When enough viruses have been able to get into our cells and make copies of themselves, the body recognizes that there's an infection, and our immune system revs up to fight off the virus.
- It is the activity of our immune system fighting the virus that makes us feel sick.



#### Resources and Future Training sessions

#### **Project Firstline on CDC:**

https://www.cdc.gov/infectioncontrol/projectfirstline/index.html

#### **Project Firstline on Facebook:**

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

#### **Twitter:**

https://twitter.com/CDC\_Firstline







