Coronaviruses That Infect People

- Four types of coronaviruses cause common cold symptoms.
- Two types (SARS* and MERS**) cause severe lung infection.
- All types spread through coughing, sneezing, droplet or close personal contact.
- Symptoms include fever, cough, fatigue, difficulty breathing, runny nose, aches, malaise, N/V. Diarrhea, loss of taste and smell and more.
- Symptoms start two to 14 days after exposure.
- Some people show little or no symptoms (as with COVID-19) and can still infect others.

A Little History...

- On March 12, 2020, the World Health Organization (WHO) characterized COVID-19 as a pandemic.
- It has caused severe illness and death, it features sustained person to person spread worldwide.
- Poses an especially high risk for the elderly (65 or older), people with preexisting health conditions such as high blood pressure, heart disease, lung disease, diabetes, autoimmune disorders, and certain workers.
- Some models predict 70 to 110 million people in the US could be infected during the pandemic. As of 7/27/2020 case counts are:
  Worldwide: 14,394,954  United States: 4,796,663 US  Ohio: 80,128

Pandemic influenza

Experts have been recommending preparedness, warning about the likelihood of future pandemic influenza outbreaks for decades.

- Flu pandemic fatalities, worldwide, in the last century:
  - 1918 – between 40 and 100 million
  - 1957 – 2 million
  - 1968 – 1 million
How COVID-19 Spreads

"Transmission"

COVID-19 is spread from person to person mainly through coughing, sneezing, and talking, singing and breathing.

- Droplet - respiratory secretions from coughing or sneezing landing on mucosal surfaces (nose, mouth, and eyes)
- Aerosol - a solid particle or liquid droplet suspended in air
- Contact - touching something with SARS-2 virus on it and then touching mouth, nose or eyes
- Other possible routes - through fecal matter

What can individuals do?

- Be informed and prepared
- Wear a cloth mask/faceshield
- Maintain social distancing (6 feet)
- Wash your hands frequently
- Use alcohol-based hand sanitizer
- Avoid touching your eyes, nose, and mouth

Stay home when you are sick (Culture Work through it)

- Cough or sneeze into a tissue or your elbow
- Clean and disinfect frequently touched objects and surfaces such as cell phones
- Be prepared if your child's school, daycare facility, or your workplace is temporarily closed

Five steps to proper handwashing

- Wet your hands with clean, running water (warm or cold), turn off the tap, and apply soap
- Lather your hands by rubbing them together with the soap
  Lather the backs of your hands, between your fingers, and under your nails
- Scrub your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice
- Rinse your hands well under clean, running water
- Dry your hands using a clean towel or air dry them
What is a person under investigation?
A person who has both consistent signs or symptoms and risk factors as follows:

- Suspect: Close
  - A potential exposure within 14 days before the onset of symptoms

- Symptoms, including cough, fever, and fatigue in close contacts

COVID-19 Testing

Confirmed case
- A confirmed case is a suspect case with laboratory-confirmed diagnostic evidence of SARS-CoV-2 virus infection.
How long does SARS-CoV-2 survive outside of the body?

- It is not clear yet how long the coronavirus can live on surfaces, but it seems to behave like other coronaviruses.
- Virus may persist on surfaces for a few hours or up to several days, depending on conditions and the type of surface.
- It is likely that it can be killed with a simple disinfectant on the EPA registered list: below.

https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2
Definitions Continued

- **Isolation** - means the separation of a person or group of people known or reasonably believed to be infected with a communicable disease and potentially infectious, from those who are not infected to prevent spread of the communicable disease.

- Isolation for public health purposes may be voluntary or compelled by federal, state, or local public health order.

Definitions Continued

- **Quarantine** - in general means the separation of a person or group of people reasonably believed to have been exposed to a communicable disease but not yet symptomatic, from others who have not been so exposed, to prevent the possible spread of the communicable disease.

Definitions Continued

- **Public health orders** - are legally enforceable directives issued under the authority of a relevant federal, state, or local entity that:
  - when applied to a person or group, may place restrictions or a requirement for monitoring by a public health authority
  - this is for the purposes of protecting the public's health
Mental health and stress
As the number of cases of COVID-19 increase, so does the associated anxiety and stress. Consider the following steps:

- Use your smartphone to stay connected to family and friends. Shift from texting to voice or video calling to feel more connected.
- Keep comfortable. Do more of the things you enjoy doing at home.
- Practice stress relief whenever you feel anxiety building – do some deep breathing, exercise, read, dig in the garden, whatever works for you.
- Avoid unhealthy behavior such as excess drinking – that will just increase your anxiety afterwards.
- Keep looking forward. Think about plans you’d like to make down the road.

Wear a Mask!
Great Teaching reasons for wearing masks with Bill Nye
Infographic: Why Wear a Mask?

Treatment and vaccines
- There is no vaccine yet to prevent COVID-19. (New vaccine is in final trials. Possibly available December 2020 in minimal quantities.
- FDA approved medication or treatment for COVID-19: *Steroids & *Remdesivir (anti-viral)
- And Supportive Care

*People who are mildly ill with COVID-19 should isolate at home during their illness and call their Primary Care Provider if they are experiencing