

## COVID-19

Important information for students. Adapted from the Centers for Diseases Control & Prevention

#### What is a virus?

- Viruses are non-living small particles that are capable of causing infection and disease
- Viruses cannot be treated with antibiotics
  - Antibiotics are only effective against bacteria
  - Vaccines are available for certain types of viral diseases
- Viruses that are transmitted from animals to humans are called zoonoses
  - Animals can sometimes be the reservoir
- Some viruses have the ability to combine and create new viruses
  - Antigenic shift and antigenic shift
  - Explains why "new" viruses appear sometimes





#### What is a Coronavirus?

- Coronaviruses are a large family (grouping) of viruses that are common in people and many different species of animals
  - camels, cattle, cats, and bats
- Rarely, animal coronaviruses can infect people and then spread between people
  - However SARS, MERS, and the newest strain can and did



#### **Coronavirus Disease 2019**

- Caused by a novel virus
  - Novel means newly discovered
  - This version of coronavirus has never been seen previously
- Disease it causes is called "coronavirus disease 2019"
  - Aka COVID-19
- Virus that causes COVID-19 has been named SARS CoV-2
- Most likely came from bats at a wet market in Wuhan, China but unknown
  - Once it jumped into a person, it then spread person-to-person





## How does it spread?

- Person-to-person
  - Between people who are in close contact with one another (within about 6 feet)
  - Through respiratory droplets produced when an infected person coughs or sneezes
    - An uncovered cough or sneeze can travel up to eight feet!
  - Communicable and contagious
- Infected objects
  - May be possible but **unknown;** is the case for most other viruses
  - Newest research from the Journal of Hospital Infections states that coronaviruses can **remain infectious on an inanimate object for 9 days**
- Community spread
  - people have been infected with the virus who are not sure how or where they became infected
  - No direct link to the virus
- SARS CoV-2 classified as spreading easily and sustained throughout the community



# Can SARS CoV-2 spread to animals?

- At this time there is a confirmed case of a dog contracting the virus from its infected owner
- It is **unknown** if it can spread to other animals or back to humans from dogs



## Symptoms

- Flu-like symptoms:
  - Shortness of breath
  - Cough
  - Fever



## **Illness Severity**

- The complete clinical picture of COVID-19 is unknown
- Reported illnesses have ranged from very mild (including some with no reported symptoms) to severe, including illness resulting in death
  - serious illness occurs in 16% of cases that have tested positive
- At higher risk of developing serious COVID-19 illness:
  - Older people
  - People of all ages with severe underlying health conditions
  - Immunocompromised individuals
  - Still **unknown** if it will impact pregnant women (however with SARS and MERS pregnant women were more at risk to miscarry or have stillbirths)

#### Prevention

- Currently no vaccine to prevent coronavirus disease 2019 (COVID-19)
- The best way to prevent illness is to avoid being exposed to this virus
- Avoid touching your eyes, nose, and mouth
- Stay home when you are sick
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash
- Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe
- Follow CDC's recommendations for using a facemask:
  - CDC does not recommend that people who are well wear a facemask to protect themselves from respiratory diseases, including COVID-19
  - Facemasks should be used by people who show symptoms of COVID-19 to help prevent the spread of the disease to others. The use of facemasks is also crucial for health workers and people who are taking care of someone in close settings (at home or in a health care facility)
- Wash your hands often!!!!
  - soap and water for at least 20 seconds
  - especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing
  - If soap and water are **NOT** readily available, use an alcohol-based hand sanitizer with at least 60% alcohol (LAST RESORT!)





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#### Treatment

- There is no specific antiviral treatment recommended for COVID-19..**unknown** at this time
- People with COVID-19 should receive supportive care to help relieve symptoms
- People who think they may have been exposed to COVID-19 should contact their healthcare provider immediately



## SLOW the spread

- Proper quarantine and disinfecting will help delay the spread
  - Spread is inevitable
- Slow down the spread until proper testing and vaccination are available
- Every potential exposure should be treated seriously



## Why the mass panic?

- There is so much still **unknown** about the virus!
  - Go back through this PowerPoint and see how many times the word "unknown" is present
  - Most outbreaks of known diseases have protocols to decrease spread
  - Since this is a brand-new virus protocols have not been developed
- But....please do not exhibit social stigma
  - Some groups of people who may be experiencing stigma because of COVID-19 include:
    - Persons of Asian descent
    - People who have traveled
    - Emergency responders or healthcare professionals
  - Stigma hurts everyone by creating fear or anger towards other people



#### Where do you find **factual** information?

- Only search for additional information using reputable websites
  - Misinformation regarding the outbreak is common
- Centers for Disease Control
  - Our nations' health protection agency
  - Source of monitoring for outbreaks, disease control, epidemiological mentoring
- World Health Organization
  - Specialized agency in the United Nations
  - Role is to direct international health
  - Leads partners in global health responses
- Reputable websites
  - Colleges, universities, state department of health



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Please visit the CDC's website on the outbreak for more information

https://www.cdc.gov/coronavirus/2019-nCoV/index.html