## What do you know about MICRO-ORGANISMS??

#### THINK, PAIR, SHARE:





#### How can micro-organisms spread?





# The coronavirus ' crown like spikes give the virus family its name

SARS –CoV-2 is the name of the virus that causes COVID-19 Causes mild respiratory illnesses, such as the common cold

Coronovirus COVID - 19

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV).

Coronaviruses are zoonotic, meaning they are transmitted between animals and people.

Emerged from Hubei Province, China in December 2019

#### What are the symptoms?

Fever
Cough
Shortness of breath

#### **Risk Factors and Severity**

- People with COVID-19 can have no symptoms or develop mild, severe, or fatal illness
- Kids may have less severe disease
- Current case fatality rate ~2% among those with laboratory-confirmed COVID-19
- $\circ~$  Risk factors for severe illness may include:
  - o Older age
  - o Underlying chronic medical conditions

#### How does the virus spread?

Primarily spreads person-to-person via respiratory droplets from coughs or sneezes (like the flu)

Possibly spread by touching an object or surface with the virus on it, then touching mouth, nose, or eyes

Possibly spread through stool with the virus in it

It takes approximately 2 to 14 days (median ~5 days) for an infected person to show symptoms

People likely most infectious while they are most symptomatic (e.g., coughing and sneezing)

Spread from people without symptoms appears possible

#### **Treatment and Vaccine**

Treatment

□No specific treatment currently available

□ Supportive management of complications, including advanced organ support if indicated

Anti-viral medications under investigation

□Vaccines are under development

Phase I trials in people may occur within 2 months

### Strategy now is to slow the spread of the virus (i.e., contain the virus) so that we have time to:

- Prepare the healthcare system and the general public
- Better characterize the infection to guide public health recommendations and development of medical countermeasures including diagnostics, therapeutics, and vaccines
- "Current global circumstances suggest it is likely that this virus will cause a pandemic"

Source:

https://www.cdc.gov/coronavirus/2019-nCoV/summary.html#risk-assessment

When a new virus is discovered, what information does the WHO and global health community need to learn about it?

#### **Examples**:

How is it transmitted? What is the incubation period? Can it be passed on person to person? Can the virus be passed on when the person is asymptomatic? Is this a new virus or a mutated virus? How does it affect people's bodies? What are the best medical responses to this new virus?