

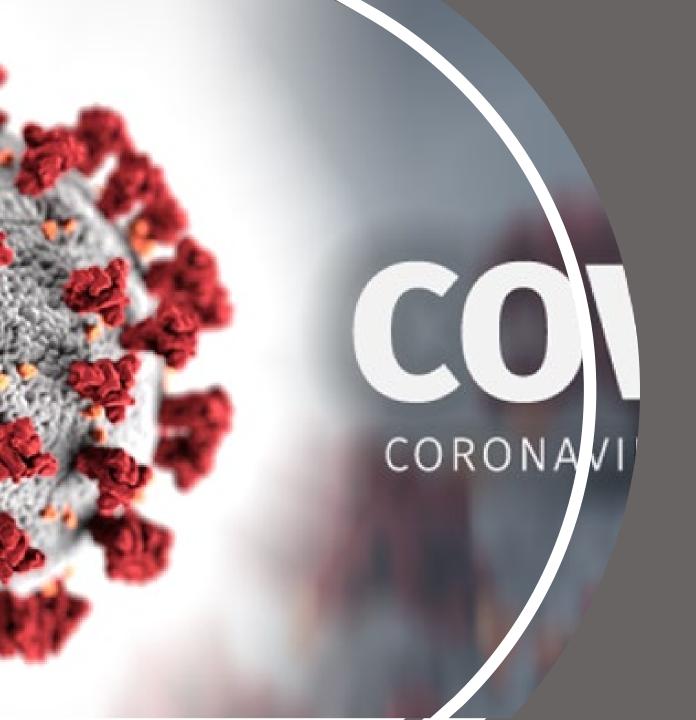
INTRODUCTION

- The information that follows is from the World Health Organization (WHO) and CDC websites.
- •In December 2019 there was a cluster of pneumonia cases in China. Investigations found that it was caused by a previously unknown virus. However, now it is known as the 2019 novel coronavirus. "Novel" refers to the idea that virus had not been seen before or identified. This is a new virus and what is known about the virus now might change in the future.

INTRODUCTION

• At the date of this writing (03.10.20) there 113,851 confirmed cases and 4,015 deaths in 110 different countries. Most of the cases are in China (80,924), Republic of Korea (7,513); Italy (9,172); Iran 7,161); Diamond Princess cruise ship (696); Japan (514); France (1,402); Germany (1,139), Spain (1024); United States (472); Singapore (160); and United Kingdom (373).





Coronaviruses are a large group of viruses. They consist of a core of genetic material surrounded by an envelope with protein spikes. This give it the appearance of a crown. "Crown" in Latin is called "Corona." This is how these viruses get their name. There are different types of corona viruses that cause respiratory and sometimes gastrointestinal symptoms.

• Respiratory disease can range from the common cold to pneumonia and in most people the symptoms tend to be mild. However, there are some types coronavirus that can cause severe disease. These include the severe acute respiratory syndrome coronavirus (SARS-CoV), which was first identified in China in February 2003. Also, the Middle East respiratory syndrome coronavirus (MERS-CoV), which was first identified in Saudi Arabia in September 2012.



- The 2019 novel coronavirus was first identified in China. It initially occurred in a group of people with pneumonia who had been associated with a seafood and live animal market in the city of Wuhan. The disease has since spread from those who were sick to others—including family members and health care staff.
- [Presently, there is a global pandemic and the disease has spread to over 200 countries and has killed more than 42,000 people-tdm (4.2.20)].

WHERE DID THE CORONAVIRUS COME FROM?

• It is known that corona viruses circulate in a range of animals. Sometimes these viruses can make the jump from animals to humans. This is called a spillover and could be due to a range of factors – such as mutations in the virus or increase contact between humans and animals. For example, MERS – CoV is known to be transmitted from camels and SARS – CoV from civet cats. The animal reservoir of the 2019 novel coronavirus is not known yet.



HOW IS IT TRANSMITTED?

• The exact dynamics of how the virus is transmitted yet to be determined. In general, respiratory viruses are usually transmitted through droplets created when an infected person, speaks, coughs or sneezes (or through something that has been contaminated with the virus. Person to person spread is mainly through close contact. Those most a risk are those in close contact with animals-such as live animal market workers and those who are caring for people infected by the virus-such as family members or healthcare workers. The exact time that the virus can survive on surfaces is not yet known. You should avoid touching your eyes, nose, mouth, since contaminated hands can transfer the virus from the surface to yourself.

WHAT ARE THE SYMPTOMS?

• There are a number of symptoms ranging from mild to severe. There can be fever and respiratory symptoms—such as coughing and shortness of breath. In more severe cases—there have been pneumonia and kidney failure and death. The mortality rate is not known yet.



HOW IS IT DIAGNOSED?

• How can you tell whether someone is infected? The infection can be diagnosed by a test called Polymerase Chain Reaction (PCR). This test identifies the virus based on its genetic fingerprint. There currently no specific medication for the virus and treatment is supportive care. Also, there is not vaccine to protect against the virus. Treatment and vaccines are in development.



• How do we prevent the transmission of the virus? There are a number of standard hygiene practices that have been recommended to protect against infection and further spread of the virus. These include: 1 covering your mouth and nose when coughing or sneezing with a medical mask, tissue, or bend of your elbow; ²avoiding close contact with those who are unwell; 3the appropriate use of masks and personal protective equipment (PPE) - especially in a healthcare setting; and ⁴washing hand regularly with soap and water or alcohol-based hand rub.

 Because of these concerns, there is a shortage of personal protection equipment e.g., masks, gowns, googles, gloves, and hand sanitizer. This shortage is endangering health workers worldwide.



• Action that can be taken to prevent infection from an animal source include: ¹avoiding unnecessary unprotected contact with animals; ²washing hands after contact with animals or animal products; ³and ensuring that animal products are cooked thoroughly before they are consumed. Also, it is important to stay home if you are feeling unwell. But if you have a fever, cough, and difficulty breathing—seek medical care early; and share your previous travel history with your healthcare provider.



This is a quick look at this emerging, infectious disease.
Given that this outbreak is evolving rapidly – what is known about this virus can change.



STUDY

• Has there been anything comparable to the coronavirus in human history?



PRACTICE

•How can you practice good hygiene or what precautions can you take to lessen your chances of contracting this or a similar disease?



TEACH

•Tell someone how sin is a global pandemic that has spread from the Garden of Eden to now and has claimed billons of lives. Express how many walks around infected without seeking the only cure—Jesus Christ.

