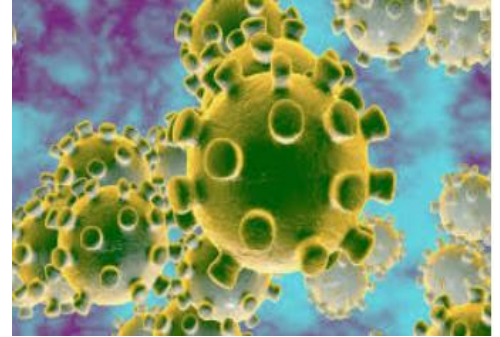


Name _____ Date _____
Scarborough PRU Science Work
Mr Togwell
Coronavirus / COVID-19
Origin, Symptoms and Prevention

Read This Page and Answer the questions at the end. This work will gain you an AQA Award Certificate if completed.

What are Coronaviruses?

Coronaviruses are types of viruses that typically affect the respiratory tracts of birds and mammals, including humans. Researchers first isolated a coronavirus in 1937. They found a coronavirus responsible for an infectious bronchitis virus in birds that had the ability to devastate poultry stocks. Doctors associate them with the common cold, bronchitis, pneumonia, and severe acute respiratory syndrome (SARS), and they can also affect the gut. These viruses are typically responsible for common colds more than serious diseases. However, coronaviruses are also behind some more severe outbreaks. Over the last 70 years, scientists have found that coronaviruses can infect mice, rats, dogs, cats, turkeys, horses, pigs, and cattle. Sometimes, these animals can transmit coronaviruses to humans.



What is a novel coronavirus?

A novel coronavirus is a new coronavirus that has not been previously identified. On 8 December 2019, authorities identified a new coronavirus outbreak in China that quickly reached other countries. It was a novel virus that was given the name COVID-19. The virus causing coronavirus disease 2019 (COVID-19), is not the same as the coronaviruses that commonly circulate among humans and cause mild illness, like the common cold.

What is COVID-19 – the illness that started in Wuhan?

It is caused by a member of the coronavirus family that has never been encountered before. Like other coronaviruses, it has come from animals. Many of those initially infected either worked or frequently shopped in the Huanan seafood wholesale market in the centre of the Chinese city.

Among humans, coronavirus infections most often occur during the winter months and early spring. People regularly become ill with a cold due to a coronavirus and may catch the same one about 4 months later. This is because coronavirus antibodies do not last for a long time. Also, the antibodies for one strain of coronavirus may be ineffective against another one.

Who is WHO?

The spread of this new coronavirus is being monitored by the Centres for Disease Control (CDC), the World Health Organization and health organizations like Johns Hopkins across the globe. On Jan. 30, the World Health Organization declared the COVID-19 outbreak a public health emergency. The Director-General also noted that the risk of serious complications increases with age. According to the WHO, few children get COVID-19, although they are still investigating the reasons for this.

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Symptoms and Treatment

Symptoms typically start appearing within 14 days of exposure to the virus. Cold- or flu-like symptoms usually set in from 2–4 days after a coronavirus infection and are typically mild. However, symptoms vary from person-to-person, and some forms of the virus can be fatal. Symptoms include: sneezing, runny nose, fatigue, cough, fever in rare cases, sore throat exacerbated asthma. In rare cases, COVID-19 can lead to severe respiratory problems, kidney failure or death.

A doctor can diagnose the virus responsible by taking a sample of respiratory fluids, such as mucus from the nose, or blood. There is no cure for Covid-19, so treatments include self-care and over-the-counter (OTC) medication. People can take several steps, including: resting and avoiding overexertion, drinking enough water, avoiding smoking and smoky areas, taking acetaminophen, ibuprofen, or naproxen for pain and fever, using a clean humidifier or cool mist vaporizer.

Transmission

Coronaviruses can spread in the following ways: Coughing and sneezing without covering the mouth which can disperse droplets into the air. Touching or shaking hands with a person who has the virus can pass the virus between individuals. Making contact with a surface or object that has the virus and then touching the nose, eyes, or mouth

Getting a Diagnosis

If you have a fever or any kind of respiratory difficulty such as coughing or shortness of breath, call your doctor or a health care provider and explain your symptoms over the phone before going to the doctor's office, urgent care facility or emergency room.

Over the phone, be sure to tell them if you have travelled outside the country in the last 14 days, particularly to countries affected by COVID-19. Also, be sure to tell them if you suspect you have been close (within 6 feet) of someone who has COVID-19 for an extended period. Your health care provider or the emergency room team will recommend next steps

Prevention

Coronaviruses can mutate effectively, which makes them very contagious. To prevent transmission, people should stay at home and rest while symptoms are active. They should also avoid close contact with other people. Covering the mouth and nose with a tissue or handkerchief while coughing or sneezing can also help prevent transmission. It is important to dispose of any tissues after use and maintain hygiene around the home.

How can you protect yourself?

The Centres for Disease Control and Prevention (CDC) has given the following suggestions:

- Wash your hands frequently and thoroughly for at least 20 seconds.
- Use alcohol-based hand sanitizer if soap and water aren't available.
- Cover coughs and sneezes with a tissue, then throw the tissue in the trash.
- Avoid touching your eyes, nose or mouth with unwashed hands.
- Stay home when you are sick.
- Clean and disinfect surfaces and objects people frequently touch.

Answer these questions

Exercise 1: Mark the following statements as True or False according to the text:

True

False

1. Researchers first isolated a coronavirus in 1973.		
2. A novel coronavirus is a new coronavirus that has not been previously identified.		
3. COVID-19 by a member of the coronavirus family that has been encountered before.		
4. Many of those initially infected visited the Huanan seafood wholesale market in China.		
5. Among humans, coronavirus infections most often occur during the summer months.		
6. The antibodies for one strain of coronavirus may be ineffective against another one.		
7. The Director-General noted that the risk of serious complications increases with age.		
8. Symptoms typically start appearing within 40 days of exposure to the virus.		
9. In very rare cases COVID-19 can lead to severe respiratory problems, kidney failure or death.		
10. A doctor can diagnose the virus responsible by taking a sample of respiratory fluids.		
11. Coronaviruses can mutate effectively, which makes them very contagious.		
12. There is no way to protect yourself against the virus.		

Exercise 2: Read the text again and answer the questions below:

1. What types of viruses are coronaviruses?

2. When do coronavirus infections occur most often among humans?

3. Which organisations monitor the COVID-19 outbreak?

4. When will symptoms typically appear after someone is exposed to COVID-19?

5. What should you do if you start having symptoms that are associated with COVID-19?

Exercise 3: Choose the right answer

1. Coronaviruses are types of viruses that affect the _____ tracts of birds and mammals, including humans.

a. arteries	b. swallowing	c. respiratory	d. liver
-------------	---------------	----------------	----------

2. In 1937, scientists found a coronavirus responsible for an infectious _____ virus in birds.

a. bronchitis	b. meningitis	c. appendicitis	d. colitis
---------------	---------------	-----------------	------------

3. A _____ coronavirus is a new coronavirus that has not been previously identified.

a. unknown	b. novel	c. unidentified	d. threatening
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4. On 8 December 2019, authorities identified a new coronavirus _____ in China

a. epidemic	b. outbreak	c. pandemic	d. breakout
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5. Many of those initially infected worked or frequently shopped in the Huanan _____ wholesale market.

a. textile	b. groceries	c. fruit	d. seafood
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6. People regularly become ill with a cold due to a _____ and may catch the same one about 4 months later.

- | | | | |
|----------|----------------|---------------|----------------|
| a. virus | b. coronavirus | c. SARS virus | d. Covid virus |
|----------|----------------|---------------|----------------|

7. The spread of this new coronavirus is being monitored by the Centres for _____ Control (CDC).

- | | | | |
|--------------|----------|------------|------------|
| a. Deterrent | b. Death | c. Disease | d. Doctors |
|--------------|----------|------------|------------|

8. The Director-General also noted that the risk of serious _____ increases with age.

- | | | | |
|------------------|-------------|-------------|---------------|
| a. complications | b. symptoms | c. problems | d. fatalities |
|------------------|-------------|-------------|---------------|

9. Symptoms typically start appearing within 14 days of _____ to the virus.

- | | | | |
|--------------|-------------|------------------|--------------|
| a. infection | b. exposure | c. contamination | d. contagion |
|--------------|-------------|------------------|--------------|

10. Flu-like symptoms usually set in from 2–4 days after a coronavirus infection and are typically _____.

- | | | | |
|-----------|---------------------|---------|-----------|
| a. strong | b. life-threatening | c. mild | d. severe |
|-----------|---------------------|---------|-----------|

11. Coughing and sneezing without covering the mouth can disperse _____ into the air.

- | | | | |
|-------------|------------|-------------|-----------|
| a. microbes | b. viruses | c. droplets | d. saliva |
|-------------|------------|-------------|-----------|

12. If you have a fever or any kind of _____ difficulty you should call your doctor.

- | | | | |
|-------------|----------------|------------|-----------|
| a. sleeping | b. respiratory | c. walking | d. seeing |
|-------------|----------------|------------|-----------|

13. Coronaviruses can mutate effectively, which makes them very _____.

- | | | | |
|--------------|-----------|--------------|---------------|
| a. poisonous | b. lethal | c. dangerous | d. contagious |
|--------------|-----------|--------------|---------------|

14. Covering the mouth can help prevent _____.

- | | | | |
|----------|-----------------|-------------|-------------|
| a. death | b. transmission | c. mutation | d. pandemic |
|----------|-----------------|-------------|-------------|

15. It is important to dispose of any _____ after use and maintain hygiene around the home.

- | | | | |
|------------|------------------|-----------|-----------|
| a. tissues | b. handkerchiefs | c. towels | d. sheets |
|------------|------------------|-----------|-----------|

Exercise 4-

1) Explain what corona virus is

Where is the origin of Covid-19?

Describe 3 symptoms of Covid-19

List 3 ways Corona virus can be transmitted

Explain 4 ways to prevent transition of Covid-19.
