
Coronavirus disease 2019 (COVID-19)

Frequently Asked Questions

1. What is COVID-19?

Human coronaviruses are common throughout the world. The name corona refers to a crown because these viruses have crown-like spikes on their surface when viewed under an electron microscope. There are many different coronaviruses identified in animals but only a small number of these can cause disease in humans. Some coronaviruses such as 229E, NL63, OC43 and HKU1 are common causes of illness, including respiratory illness, in humans throughout the world. Sometimes coronaviruses infecting animals can evolve to cause disease in humans and become a new (novel) coronavirus for humans. Examples of this are the Middle East Respiratory Syndrome Coronavirus (MERS-CoV), first reported from Saudi Arabia in 2012, and the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV), first recognized in China in 2002. On 7 January 2020, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was confirmed as the causative agent of coronavirus disease 2019 (COVID-19). The majority of the case-patients initially identified were dealers and vendors at a seafood, poultry and live wildlife market (Huanan Seafood Wholesale Market) in Jiangnan District of Hubei Province. This suggests that the novel coronavirus has a possible zoonotic origin. The specific source of the virus is not yet known.

2. Who is at most risk for COVID-19?

Currently travellers to areas where there is local transmission of COVID-19 are at greatest risk of infection with COVID-19. In addition, healthcare workers have an increased risk of acquiring infection in the workplace. The elderly and individuals with co-morbidities have been found to be at a higher risk of severe illness and mortality associated with COVID-19. Please consult the latest guidance for information on which countries are experiencing outbreaks of COVID-19. Information can be accessed at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>.

3. What is the risk of COVID-19 infection in humans in South Africa?

To date we have only identified imported cases of COVID-19 in South Africa. There is no evidence of community transmission of the virus. There is currently no risk to general population. People who develop symptoms of respiratory illness including cough, fever and shortness of breath within 14 days of travel to countries where coronavirus is known to be circulating should seek medical care early and share information about travel history with their doctors. Additional groups who are at risk include contacts of a confirmed case as well as healthcare workers in facilities where COVID-19 patients are being treated and people admitted to hospital with pneumonia of unknown cause. The guidelines for who is at risk and should be tested for SARS-CoV-2 are frequently updated as the global and local situation changes. The latest guidelines for who should be tested can be found at this link: http://www.nicd.ac.za/wp-content/uploads/2020/03/NICD_DoH-COVID-19-Guidelines-10March2020_final.pdf.

4. How is COVID-19 transmitted?

While the first cases probably involved exposure to an animal source, the virus now seems to be spreading from person-to-person. It is thought to happen mainly via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread. Thus far the majority of cases have occurred in people with close physical contact to cases and healthcare workers caring for patients with COVID-19.

5. What are the signs and symptoms of COVID-19 infection in humans?

Current symptoms reported for patients with COVID-19 have included mild to severe respiratory illness with cough, sore throat, shortness of breath or fever. The severity of illness can range from people who are infected without any illness (asymptomatic infection) to mild respiratory illness, to severe illness requiring admission to hospital or death. The majority of patients (approximately 80% will have mild respiratory illness).

6. How is COVID-19 diagnosed?

COVID-19 is diagnosed by a laboratory test, polymerase chain reaction (PCR) molecular test, on a respiratory tract sample (e.g. sample from nose, throat or chest). For specific guidance on who should be tested as well as sample collection and transport please visit the NICD's website: <http://www.nicd.ac.za/wp-content/uploads/2020/03/COVID-19-Quick-reference-v7-10.03.2020-Final-clean.pdf>

7. How is COVID-19 infection treated?

Treatment is supportive (e.g. provide oxygen for patients with shortness of breath or treatment for fever). There is no specific antiviral treatment available. Antibiotics do not treat viral infections. However, antibiotics may be required if bacterial secondary infection develops.

8. How can COVID-19 infection in humans be prevented?

Currently there is no vaccine for COVID-19. There are no specific measures currently recommended to prevent COVID-19 but the following can provide protection against infection with coronaviruses and many other viruses that are more common in South Africa:

- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitiser.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick
- Stay at home when you are sick and try and keep distance from others at home
- Cover your cough or sneeze with a flexed elbow or a tissue, then throw the tissue in the bin.
- Clean and disinfect frequently touched objects and surfaces.
- Avoid contact with farm or wild animals (alive or dead), animal markets, and products that come from animals (such as uncooked meat).

9. What measures have been put in place in South Africa to minimise the risk of transmission should cases be imported

Fever screening is in place at international airports. If there is a suspected case, procedures are in place for case isolation and management as well as rapid specimen collection and transport so that the diagnosis can quickly be made. Screening at ports of entry will not pick up people who are incubating the infection and not showing signs and symptoms. For this reason, healthcare workers throughout the country are on the alert for patients meeting the case definitions for COVID-19. There are guidelines available for who to test, what samples to take and how the patient should be isolated while awaiting test results. This can be found on:

http://www.nicd.ac.za/wp-content/uploads/2020/03/NICD_DoH-COVID-19-Guidelines-10March2020_final.pdf.

Suspected cases will be managed at designated hospitals with isolation facilities. Protocols are in place for follow up of case contacts to ensure that the virus does not spread.

10. Should I travel now?

There are no travel restrictions in place. It has been recommended that travellers should avoid all nonessential travel to areas with ongoing transmission of COVID-19. At this time, travel may also be associated with substantial potential disruption including restrictions on onward travel in other countries. The situation with regard to travel risks in different parts of the world is evolving rapidly. People who travel to areas where COVID-19 is known to be circulating should avoid visiting close contact with ill people, practice frequent handwashing and avoid large gatherings as well as avoid visiting animal live markets.

11. Who can I contact for more information?

Visit the NICD website at www.nicd.ac.za for further information. For medical/clinical related queries by health care professionals only, contact the NICD hotline at +27 (0) 82 883 9920 (for use by healthcare professionals only). The NICD General Public Hotline number is +27 (0) 800 029 999 and operates on weekdays, Monday to Friday during 08:00 to 16h00. For laboratory related queries call the Centre for Respiratory Diseases and Meningitis (011-555-0315/7/8 or 011-555-0488).

Guidelines and case definitions are available on the NICD website <http://www.nicd.ac.za/wp-content/uploads/2020/01/COVID-19-Quick-reference-27-01-2020-Final.pdf>