



## ***2019 Novel Coronavirus (2019-nCoV)***

### ***Wuhan Coronavirus***

#### **General Information**

A novel coronavirus, (novel meaning a new strain of a virus that has not been previously identified in humans), currently designated 2019 Novel coronavirus (2019-nCoV) by the US-CDC, has appeared in China, causing a severe illness and death in people from several countries.

2019-nCoV was identified in December 2019 in Wuhan City, Hubei Province, China. Most people who are infected with 2019-nCoV developed severe acute respiratory illness (pneumonia) with symptoms of fever, cough, and shortness of breath. There have been a few reported deaths, and some person-to-person transmission including transmission to healthcare workers treating sick patients. Investigators are trying to determine the source of 2019-nCoV, and there is a link to a large wholesale fish and live animal market in Wuhan City. The virus has moved to other countries via travelers in the past few weeks. There has been one reported case in the United States, in a traveler arriving in Seattle and none so far in Canada.

Coronaviruses are named for the crown-like spikes on their surface. There have been two major outbreaks of coronaviruses. The Severe Acute Respiratory Syndrome (SARS) coronavirus infected people and animals, including monkeys, Himalayan palm civets, raccoon dogs, cats, dogs, and rodents. Since 2004, there have not been any known cases of SARS-CoV infection reported anywhere in the world. SARS killed approximately 9% of people who were infected and became ill. The Middle Eastern Respiratory Syndrome Coronavirus (MERS -CoV) was first reported in Saudi Arabia in 2012 and has since spread to several other countries, including the United States. Most people infected with this with virus also develop severe respiratory illness, including fever, cough, and shortness of breath. The mortality (death) rate with this virus is around 35%.



## **Transmission**

The 2019-nCoV appears to spread from close, person to person contact, and probably contact with contaminated surfaces.

Human coronaviruses spread has been studied and it has been determined that human coronaviruses spread from an infected person to others through:

- Air by coughing and sneezing (on droplets)
- Close personal contact
- High Risk respiratory procedures such as bronchoscopies, intubation, etc.

These viruses may also spread by touching contaminated objects or surfaces and then touching your mouth, nose, or eyes.

## **Symptoms**

People infected with 2019-nCoV present with fever and symptoms of lower respiratory illness (e.g. cough, difficulty breathing, shortness of breath). Fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain fever-lowering medications. All cases have been linked to Wuhan City, and screening will include a history of travel from Wuhan City, China in the last 14 days, or close contact with a person who has a 14-day travel history to or from Wuhan City.

## **Prevention**

There are currently no vaccines available to protect you against human coronavirus infection.

The best methods of prevention include hand hygiene (washing with soap and water, or use of alcohol-based hand rubs), not touching eyes, nose, or mouth, avoiding close contact with people who are sick, and cleaning and disinfection of surfaces contaminated with respiratory secretions from sick people.

## **Prevention in Healthcare**





















The following are general recommendations for preventing the transmission of infectious agents in healthcare settings (<https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>):

- a. Providing masks and hand hygiene products at all ports of entry to health systems (hospitals, physician offices, clinics)
- b. Place surgical masks on symptomatic patients immediately (clinically tolerable)



- c. Rapid triage symptomatic patients in designated areas (negative pressure if available)
- d. Immediate placement in isolation precautions (standard, contact, airborne, and use eye protection, e.g. goggles or a face shield (i.e. droplet precautions))
- e. Strict adherence to hand hygiene guidelines by healthcare workers
- f. Proper environmental hygiene with use of EPA-registered disinfectants that have microbiocidal (i.e., killing) activity against the pathogens most likely to contaminate the patient-care environment (in this case enveloped viruses). Use in accordance with manufacturer’s instructions

Since no disinfectant efficacy test is currently available for 2019-nCoV, Diversey recommends disinfectants susceptible to the human coronavirus such as:

Product	Oxivir®1 RTU / Wipes	Oxivir® Tb RTU / Wipes	Oxivir® Five 16	Alpha® HP Multisurface Disinfectant Cleaner	Avert™ Sporicidal Disinfectant Cleaner/Wipes	Virex® II 256	Virex® Tb	Virex® Plus	Expose® II 256	MoonBeam®3 UV Disinfection
Contact Time (Min)	1	1	5	5	1	5	3	3	10	3
										
Product	Oxivir® Tb RTU / Wipes	Oxivir® Plus (Concentrate)	Virox® 5 Concentrate	Virox® 5 (RTU & Wipes)	Percept™(TMMC) (Concentrate, RTU & Wipes)	Virex® II 256	Avert™ Disinfectant Cleaner	MoonBeam®3 UV Disinfection		
Contact Time (Min)	1	5	5	5	5	5	1	3		
										

## References

<https://www.cdc.gov/coronavirus/2019-nCoV/infection-control.html>

<https://www.cdc.gov/coronavirus/mers/hcp.html>

<https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>