

Version 1.0
March 3, 2020

Recommendations for Novel Coronavirus (COVID-19) for Transplant Recipients and Other Patients Receiving Immunosuppressive Therapies

The Novel Coronavirus, also called COVID-19, is a virus spreading across the world. It was first identified in China, with subsequent spread to multiple countries including the United States. Based on the changing epidemiology of COVID-19, we anticipate seeing patients with COVID-19 in our community in the coming weeks, although the extent to which our community will be impacted by COVID-19 remains unknown. Further, little is known about the impact of immunosuppression, cancer chemotherapy or transplant on the transmission or severity of COVID-19. However, we are assuming that patients receiving such treatments would be at risk for developing severe disease. We have thus developed this document to answer some of the common questions you may have regarding COVID-19. It also contains some things you can do to protect yourself from acquiring COVID-19 infection.

1. What is COVID-19?

- COVID-19 is an acute respiratory illness caused by a novel variant of coronavirus
- Coronaviruses are common viruses that can infect humans and animals
- In humans, coronaviruses typically cause upper respiratory tract infections like the common cold
- Novel coronaviruses are animal coronaviruses that develop the ability to infect humans
- SARS and MERS are other examples of diseases caused by novel coronaviruses

2. What are symptoms of COVID-19?

Over 80% of clinical illnesses appear mild, with a relatively small proportion of the general public becoming severely unwell requiring hospitalization. Patients who develop severe disease may have a slowly progressive course, with symptoms lasting for 7 or more days before progressing to the point of requiring hospitalization.

- Clinical presentations are varied and range from asymptomatic to severe and may include:
 - Fever – 83-98%
 - Cough – 46-82%
 - Fatigue or muscle aches – 11-44%
 - Shortness of breath – 31%
 - Others: headache, sore throat, abdominal pain, diarrhea

3. How often does COVID-19 cause severe disease?

The data are evolving as we learn more about this infection. Based on an analysis of over 40,000 Chinese patients with confirmed COVID-19, the infection caused mild symptoms in 81% of cases and caused severe disease including respiratory or multiorgan failure in 5% of cases. Approximately 2% of patients died, and the risk of dying was more likely for patients greater than 70 years old and with pre-existing health conditions. As noted in the introduction, little is known about the impact of immunosuppression, cancer chemotherapy or transplant on the transmission or severity of COVID-19. However, we assume that transplant recipients and those receiving immunosuppressive therapy including cancer treatment would be at risk for developing severe disease.

4. How does COVID-19 compare to other respiratory infections or pandemics?

Based on currently available data, the rate of people dying from COVID-19 is much lower than reported rates for SARS but higher than reported rates related to seasonal influenza. COVID-19 is more widespread than SARS.

5. Is testing for COVID-19 routinely available?

At this time, testing for COVID-19 is not routinely available. It is only available through the North Carolina State Laboratory of Public Health and the Centers for Disease Control and Prevention (CDC), guided by public health authorities.

6. What changes could we see at Duke Health if COVID-19 transmission becomes widespread in our community?

Additional control strategies may include visitor screening and restrictions, cohorting of patients (separating sick from well patients), and establishing dedicated facilities for evaluation of potential COVID-19 infected patients. At this time, it is impossible to predict if these additional measures will be required.

7. What can I do to protect myself?

Coronavirus is spread from both direct exposure to respiratory droplets of a sick patient (e.g., coughing, sneezing), and through contact with objects or surfaces that have the virus on them. Coronavirus may linger on objects or surfaces for many hours.

- **Wash your hands often** with soap and water for at least 20 seconds, particularly after contact with frequently touched objects and surfaces. Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available. Always wash hands with soap and water if hands are visibly dirty.

Five steps for effective hand-washing:

1. Wet hands with clean, running water (warm or cold), turn off tap, and apply soap.
 2. Lather hands by rubbing them together with the soap. Lather backs of your hands, between fingers, and under nails.
 3. Scrub hands for at least 20 seconds (hum the “Happy Birthday” song from beginning to end twice)
 4. Rinse hands well under clean, running water.
 5. Dry hands using a clean towel or air dry them.
- **Avoid touching your eyes, nose, and mouth with unwashed hands**, particularly when in public. If you need to touch your face for any reason, apply hand sanitizer or wash your hands first.
 - **Avoid contact with people who may be sick**; this may include avoiding contact with friends or family with upper respiratory infection symptoms and, as COVID-19 becomes more common in the community, avoiding places with large crowds.
 - **“Stay 6 Feet Back”** – If you find yourself in contact with someone who is coughing or sneezing, stay as far away from that person as possible – “6 feet back” is a good rule as this is as far as respiratory droplets that contain virus can typically travel.
 - **Wipe high-touch surfaces** in your workplace and home frequently with disinfectant (regular household cleaning spray or wipe)
 - **Strongly consider avoiding non-essential travel**, particularly to areas with high level of COVID-19 in the community. Certainly, travel to countries with ongoing spread of COVID-19 and designated as CDC Level 2 or Level 3 risk (e.g., China, South Korea, Japan, Italy or Iran) is discouraged. Spread to additional countries as well as within the United States and North Carolina is likely. Review the CDC website for international; travel updates www.cdc.gov/coronavirus/2019-ncov/travelers/index.html and for information regarding spread

of the virus within the United States <https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html>

- **Don't assume a surgical facemask will protect you** - CDC does not recommend that people who are well wear a facemask to protect themselves from respiratory diseases, including COVID-19. Facemasks are most effective when worn by individuals with a viral infection as they help keep respiratory droplets infected with the virus from traveling through the air and landing on other people, objects and surfaces. Thus, facemasks should be used by people who show symptoms of COVID-19 to help prevent the spread of the disease to others. The use of facemasks is also crucial for [health workers](#) and [people who are taking care of someone in close settings](#) (at home or in a health care facility).

8. How should I prepare for clinic visits?

Discuss your clinic visit schedule with your transplant coordinator or health care provider. Some non-essential visits may be avoided or deferred, depending on your clinical need, and particularly if COVID-19 activity increases in the community and at Duke. Check with your healthcare provider when deciding whether or not to present for an appointment. Should you have new respiratory symptoms (e.g., cough, shortness of breath) or fever on the day of a clinic visit, please alert your transplant coordinator or healthcare provider BEFORE presenting to clinic, so adequate preparations can be made.

9. What should I do if you get sick?

There are no currently approved treatments for COVID-19, and therefore care is supportive, focusing on symptom control, and preventing further spread to others. Patients with progressive symptoms such as shortness of breath or breathlessness with minimal activity may require admission to the hospital for additional support.

- Call your transplant coordinator or health care provider for more guidance on when to come to clinic or the hospital. For many people, the best advice will be:
 - Stay home (avoid contact with others)
 - Remain well hydrated
 - Use acetaminophen as directed on the label for pain or fever relief
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces.