

Human coronaviruses are a large family of viruses[i] which were first characterized in the 1960s[ii]. They are responsible for a substantial proportion of upper respiratory tract infections in children[iii]. The novel coronavirus has been named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and the disease it causes has been named “coronavirus disease 2019” (COVID-19). This is a new virus in the coronavirus family. The virus that causes COVID-19 and the one that causes Severe Acute Respiratory Syndrome (SARS) are different from one another.

Symptoms

There are many similarities between COVID-19 and the flu[iv]. Both cause fever, cough, body aches and fatigue. Gastrointestinal symptoms (vomiting and diarrhea) has been [reported](#) in at least one child with COVID-19. The symptoms can be mild or severe. These viruses can result in pneumonia. Fatalities have occurred with both viruses.

Transmission

COVID-19 can be spread through **person-to-person** contact with large droplets from an infected person when they cough, sneeze, talk, and exhale. Studies suggest that COVID-19 may persist on surfaces for a few hours or up to several days. It can be spread through droplets that land on objects and surfaces. Generally, this is within a distance of 3 feet/ 1 meter. The flu and COVID-19 can be spread by an infected person **before symptoms appear**.

Studies are underway to determine if COVID-19 can be transmitted through smaller particle droplets that spread over distances greater than 3 feet/1 meter from an infected person coughing, sneezing or talking. This is known as airborne transmission.

Prevention and Treatment

Both the flu and COVID-19 may be prevented by frequent, thorough hand washing, coughing into the crook of your elbow, staying home when sick and limiting contact with others who are or may be infected.

A vaccine is available and effective in preventing or reducing the severity of most dangerous flu types. There is no vaccine available at this time for COVID-19, though it is in the process of being developed

Neither the flu nor COVID-19 are treatable with antibiotics, which only work on bacterial infections. Antiviral medications can address symptoms of the flu and can sometime shorten the

duration of the illness. Antiviral medications are currently being tested to see if they can address COVID-19.

People with cardiovascular conditions such as Barth syndrome are at high risk of disease severity with any respiratory illness. The American College of Cardiology has released [COVID-19 Clinical Guidance For the Cardiovascular Care Team](#).

Individuals with Barth syndrome are at risk of experiencing [cardiac arrhythmia](#). Therefore, it is important not to take over-the-counter decongestants and multi-system cold remedies that contain decongestants before first consulting with the doctor. If the doctor thinks respiratory symptoms could be helped by antibiotics, **avoid taking fluoroquinolones**. Use of these drugs should be avoided in people with conditions that are associated with mitochondrial dysfunction and cardiac arrhythmias. They have been associated with causing [mitochondrial toxicity](#) and serious [arrhythmias](#). The antibiotics in this class are: Avelox, Cipro, Factive, Levaquin, and Ofloxacin.

Barth Syndrome Specific Concerns

There are precautions for your loved one who has Barth syndrome during the [COVID-19](#) outbreak or anytime. Start by familiarizing yourself with standard Neutropenia precautions which exceed WHO and CDC precautions.

Neutropenia Precautions

- When traveling have an [N-95 mask](#) available to use when exposed to someone who is visibly sick (coughing or sneezing)
- Have gloves on hand to use when needed
- Avoid crowded places
- Avoid interaction with people who are sick or have been recently sick
- Avoid person-to-person contact with others (6 feet/2 meters)
- Don't share food, drink cups, utensils or other personal items, such as toothbrushes
- Wash raw fruits and vegetables
- Avoid touching surfaces that may have or would have been touched by someone in community or classroom or
 - [disinfect](#) surfaces before touching (e.g., tables, desktops, doorknobs, light switches, handles, toilets, faucets, etc.)
- Avoid touching mouth and nose
- [Wash your hands frequently](#)
- Keep personal [hand sanitizer](#) available that is at least 65% alcohol
 - If you plan to make your own see WHO-recommended Handrub Formulations under additional resources below
- Wrap infants in two blankets, carry several clean blankets to change outer blanket when needed
 - inner blanket/clean blanket

- outer blanket/barrier blanket
- Bathe when you get home
- Call the doctor with a fever of 100.4°F/38° or higher
- Call the doctor for advice with symptoms of illness
- Stay home when sick

Seek emergency medical attention if someone experiences respiratory distress!

Precautions for Heart Transplant Recipients

Power2Save provides a list of [Frequently Asked Questions about COVID-19](#). The website does state that it is not necessary for the transplanted individual to wear an N-95 mask. However, neutropenia is an additional risk for the person individual with Barth syndrome who has received a transplant. The [SCNIR](#) recommends that someone with neutropenia have an N-95 face mask available for use when the person with neutropenia is traveling and may be exposed to someone who is coughing or sneezing.

Other COVID-19 Precautions

- Seek medical advice if you have been in contact with someone who has COVID-19
- Seek medical advice if you develop COVID-19 [symptoms](#)
- Call doctor if you or someone in your home has traveled from an area with [widespread](#) or ongoing community spread of COVID-19
- Contact the school to inquire about available resources for a child who would be at high risk if exposed to COVID-19 (e.g. Hospital/medical homebound program)

Additional Resources

- [Situation Reports WHO](#)
- [Situation Summary CDC](#)
- [COVID-19 Situation Map WHO](#)
- [COVID-19 Travel Guidance CDC](#)
- [Get your Household Ready for COVID-19 CDC](#)
- [Monitor your health CDC](#)
- [Rolling updates on COVID-19 WHO](#)
- [WHO-recommended Handrub Formulation](#)
- [American Society for Microbiology Coronavirus Updates](#)

Videos

- [When and how to use a Facemask WHO](#)
- [COVID 19 WHO](#)
- [What is Coronavirus \(COVID-19\) WHO](#)
- [How to Protect Yourself Against COVID-19 WHO](#)

References

- [i] Novel coronavirus (2019-nCoV) Video World Health Organization
- [ii] Tyrrell DA, Bynoe ML. Cultivation of viruses from a high proportion of patients with colds. *Lancet*. 1966;1:76-77
- [iii] Kahn JS, McIntosh K. [History and Recent Advances in Coronavirus Discovery](#). *Pediatr Infect Dis J*. 2005 Nov;24(11 Suppl):S223-7, discussion S226.
- [iv] Maragakis LL. [Coronavirus Disease 2019 vs. the Flu](#). Johns Hopkins Medicine Health, Infectious Diseases