

Intro to Seasonal Influenza (Flu) for the 2022/2023 Season

The Northern Hemisphere, including the U.S. & Canada, transitions into the 2022/2023 Flu Season with an early start to the Flu season in the United States (US) and Canada. This comes after an early start and bad 2022/2023 Flu Season in areas of the Southern Hemisphere, notably in Australia and New Zealand, which are often a predictor of our upcoming Flu Season. Their Flu Season occurs during their late Fall, Winter & Spring seasons of April through October, with the Northern Hemisphere following with their Flu Season.

By mid-October, it had become obvious that the lower incidence of seasonal flu in the past couple of seasons, would not repeat this season. The previous decrease in flu cases occurred, most likely, due to the increased flu vaccinations in the population and the infection control mitigations put into place for SARS-CoV-2 (COVID-19) such as frequent handwashing, the use of hand sanitizers, mask wearing, distancing, and avoiding crowded indoor spaces. There was also a significant decrease of other respiratory viruses, other than SARS-CoV-2, largely for the same reason. The majority of people are no longer following most, if not all, of the respiratory virus effective mitigations.

Summaries of Weekly Flu reports, specifically for the US and Canada, but also reporting on Europe/WHO will be published on this site.

It is essential to get your Flu shot ASAP, if you have not already done so. Please consider consulting your health care provider if you have any questions about your need for a Flu Shot. See one of these links for info on getting Flu shots & which Flu shot you need: **CDC** - <https://www.cdc.gov/flu/vaccines-work/index.html> and **Canada** - <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/get-your-flu-shot.html>

Some individuals may have both COVID-19 & Flu infection at the same time, which raises the risk of complications, particularly in those that are older or very young, already immunocompromised, or otherwise at risk for severer illness should they get either one. See the following links for similarities and differences between Flu and COVID-19: **CDC** - <https://www.cdc.gov/flu/symptoms/flu-vs-covid19.htm> & **Canada** - <https://www.canada.ca/en/public-health/services/diseases/flu-influenza.html>

But, even alone, Flu has a greater risk of complications, including life threatening ones, in certain individuals. See the appropriate links below for a list of those at greater risk: **CDC** - <https://www.cdc.gov/flu/highrisk/index.htm> & **Health Canada** - <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/health-professionals.html#a5>

So, in preparation for the upcoming season, this document contains seasonal flu information that can help prevent, identify, control and treat (or be treated) for the flu. The links provide a path to more detail on the topics and to more links for a deeper dive into the subject. There is also a link to the CDC Home page for health care professionals for more flu science, clinical and public health applications.

Flu Basics provide an introduction to seasonal influenza, as well as a review for those that may be dealing with it in patients they are responding to, their own households and families, or their workplaces. **US** - <https://www.cdc.gov/flu/season/index.html>
<https://www.cdc.gov/flu/about/keyfacts.htm> & **Canada** - <https://www.canada.ca/en/public-health/services/diseases/flu-influenza.html>

ILI – Influenza-like-illness: anyone who presents with a fever at or greater than 100° F (37.8° C) and either/both cough or sore throat and, with no known cause other than influenza, as the likely cause. In cases when Flu is known to be in an area, the identification of ILI, in the absence of influenza testing, will usually result in a presumption of “Flu”, however, due to COVID-19, it is usually not clear without a test for both, since it can be or the other, or both. Antivirals may also be given, when appropriately prescribed by a health care provider (MD, DO, ARNP, PA), without a positive flu test and their use is encouraged in those with high risk of complications from flu.

Seasonal Flu – Influenza: a viral respiratory illness made up of Influenza A or B viruses (for humans) which may be diagnosed by a flu test. A list of signs and symptoms is included in this document.

Influenza A viruses have subtypes of hemagglutinin (H1 – H18) and neuraminidase (N1-N11). Influenza A viruses can be further identified by Strain. The current strains that have been seen in the last flu seasons are H1N1 and H3N2. Influenza B viruses don't have subtypes but do have strains and lineages. The current lineages circulating of Influenza B are B/Yamagata and B/Victoria.

Changes in influenza viruses can appear and, if previously not seen, will be called variants. Very different influenza A viruses, typically from reassortment, or remix, of multiple strains within an animal (often a pig since they can get human, avian, and swine flus), from those that have previously circulated will be called Novel viruses and may lead to a pandemic, to which no one or very few, will have any immunity. The 2009 (H1N1) was just such a novel virus and replaced the previously known H1N1. Novel viruses are risky for the entire world since spread may be rapid.

Flu Vital Statistics:

Transmission (Sharing): flu can be spread up to 6 feet in the air in the event of a sneeze, cough or by talking when tiny droplets fall/fly into mouths, noses, and perhaps eyes, although some references suggest that most transmission via the air are within a meter/3 ft. Droplets can also fall on or be introduced by contaminated hands onto

surfaces or objects (fomites) such as tables, toys, light switches, phones, pens and pencils and then be picked up by someone that becomes exposed to the flu when they touch the contamination and then touch their face/eyes, nose, mouth.

People are most able to spread the virus in the first 3-4 days after developing symptoms. Healthy adults may be contagious starting the day before their symptoms begin and able to pass it on for up to a week after getting sick. Kids and those that have compromised immune systems may continue to spread their germs for 7 to 10 days typically, but can be even longer.

Incubation: the time from exposure to the virus until signs and symptoms develop is variable but generally is between 1 to 4 days after the virus enters the body, with an average of 2 days before signs and symptoms appear. This means that you may get the virus before someone even knows they are sick or pass along the virus before you know you're sick. Some people will be exposed and be infectious (have the ability to spread the germs to someone else) but have no symptoms at all for the entire time.

Signs & Symptoms: often have a sudden onset (some people can name the hour they began to feel awful). Most will have a few of these symptoms; some will have more, some less. Children and elderly patients may have less signs and symptoms, perhaps because their immune systems don't mount as vigorous a defense:

<https://www.cdc.gov/flu/symptoms/symptoms.htm> & **Canada:** <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/health-professionals.html#a3>

Prevention:

Flu shots are recommended for anyone greater than 6 months unless medically contraindicated. Those listed in the complication list above may want to check with their physician about flu vaccination but most will be encouraged to be vaccinated; some may need a different type of vaccination. **US** <https://www.cdc.gov/flu/prevent/keyfacts.htm> & **Canada** <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/health-professionals.html#a6>

Also, stay away from those that seem sick or who are coughing or sniffing, wash your hands often, use your own pen for signing, use hand sanitizer, avoid touching your face (including eyes, nose & mouth) and sanitize commonly shared objects such as light switches, styli, keyboards, doorknobs, handles, etc.). Practicing respiratory virus precautions including wearing a mask, at least 6 ft of social distancing, and avoid crowds, particularly in indoor spaces, will also decrease the risk of being exposed to the Flu or other respiratory virus.

Consider isolating those that may be at greater risk for catching or fighting the flu, such as the very young or very old, those that can't take the flu vaccine, or those **who are immunocompromised because of** chemotherapy, cancer, post-transplant therapy, high and/or long dose corticosteroid use. <https://www.cdc.gov/flu/prevent/actions-prevent-flu.htm>

These two YouTube videos provide a humorous but scientific look at how coughs and sneezes can spread certain germs like flu, and how to decrease the risk of spread of the germs. <https://www.youtube.com/watch?v=CtnEwvUWDo0>
<https://www.youtube.com/watch?v=MKAHNoni0Kl>

Diagnosing: it is sometimes difficult to differentiate between the flu and other respiratory or cold viral illnesses. Health care providers may do a Flu test or just assume you have the flu if it is in your area. For those that are high risk with Flu, doing a flu test is more likely. <https://www.cdc.gov/flu/symptoms/testing.htm>

Treating: most care is supportive such as rest, plenty of fluids, Tylenol or ibuprofen for fever or aches, avoid others, soft diet, flu or cold medicines to improve symptoms (check if you are taking more than one medication to make sure that both don't contain Tylenol, aspirin, or ibuprofen). **US** - <https://www.cdc.gov/flu/treatment/index.html> & **Canada** - <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/health-professionals.html#a7>

If you are at risk for flu complications, have a severe case of flu, or cannot avoid others to prevent spread, your health care provider may choose to prescribe an antiviral. **These are particularly helpful if started within 48 hours of the onset of symptoms.** The recommendations state that waiting for the confirmation of flu or flu type is not necessary before prescribing an antiviral. Those in the position of prescribing or providing antiviral medications should consult the sensitivity of antivirals against the circulating flu strain(s), found in the Weekly Influenza Summary. For more about Flu antivirals: <https://www.cdc.gov/flu/treatment/whatyoushould.htm>

Other Links that May Be Helpful:

Public Health Canada:

Seasonal Influenza for Health Care Professionals Index Page:

<https://www.canada.ca/en/public-health/services/diseases/flu-influenza/health-professionals.html>

Seasonal Influenza Surveillance Index Page:

<https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/about-fluwatch.html>

Public Health Canada – Index Page with Links to Provinces/Territories Surveillance Reports: <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/influenza-surveillance-resources.html>

Page to Subscribe to Weekly Influenza Surveillance Reports:

<https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/subscribe.html>

Public Health Canada – Page with Links to Seasonal Flu Infographics:

<https://www.canada.ca/en/public-health/services/diseases/flu-influenza/flu-influenza-awareness-resources.html>

CDC:

Seasonal Flu Information for Health Care Professionals Index Page:

<https://www.cdc.gov/flu/professionals/index.htm>

Seasonal Flu Surveillance Index:

<https://www.cdc.gov/flu/weekly/overview.htm>

Seasonal Flu Activity Index Page:

<https://www.cdc.gov/flu/weekly/fluactivitysurv.htm>

Link to Weekly Seasonal Flu Summary Report:

<https://www.cdc.gov/flu/weekly/index.htm>

Seasonal Flu Resources & Infographics:

<https://www.cdc.gov/flu/resource-center/index.htm>