



Winter is Coming! What you need to know about seasonal respiratory infections if you are 65 and over.



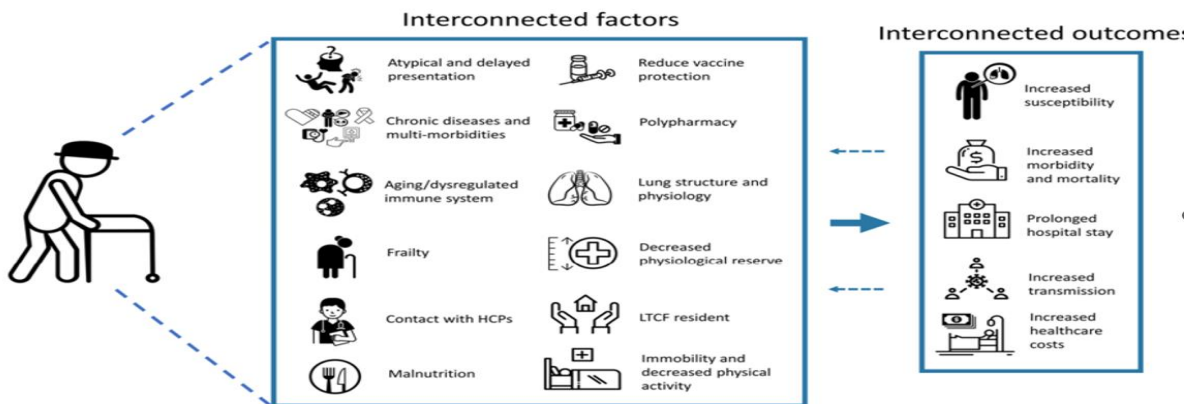
Winter is coming and the seasonal cycle of respiratory viral diseases such as influenza, which caused seasonal epidemic will be upon us soon.

The burden of respiratory viral infections in seniors has been highlighted by the severe acute respiratory syndrome (COVID-19). The SARS-CoV-2 has infected millions of people worldwide and had unprecedented impact on healthcare systems and society. Age has been found to be the biggest risk factor for the development of severe COVID-19 infection.

Problems arise not only in dealing with an aging immune system and their complex chronic medical conditions but also in knowing how to identify, distinguish, prevent, and timely treatment of these respiratory infections that often cause severe disease and exacerbate their chronic medical conditions. Canadians 65 and older are vulnerable, they carry a high disease burden and account for most hospitalizations and deaths from respiratory illness.

In 2016 there were 1 million deaths due to lower respiratory tract infections and 13-31% of these lower tract respiratory infections were caused by viruses. Increased age is the biggest factor for morbidity and mortality for respiratory infection.

Interconnected factors that drive an increased susceptibility and impact of Respiratory viral infection in seniors



Which viruses can cause severe infections?

There are numerous viruses which circulate during the winter months. During the 2022-2023 season, the 3 viruses which had the greatest impact on seniors were Influenza, SARS-CoV-2, and RSV (Respiratory Syncytial Virus).

Influenza

Globally during the annual flu epidemic, there are **1 billion cases** with 3-5 million severe flu-related illness and 290,000-600,000 flu related deaths. In Canada we have 2.5 million cases with 12,200 flu related hospitalization and 3500 flu related deaths. These numbers are likely underestimated.

Due to their aging immune system and co-morbidities, seniors are particularly vulnerable, with disproportionately influenza-related morbidity and mortality. **Seniors** accounted for 70% of flu related hospitalizations and 90% of influenza-related deaths annually.



While there is anti-viral (Tamiflu) available for treatment of influenza, it is **NOT** a replacement for Influenza vaccination and Albertans are strongly encouraged to get fully vaccinated against Influenza.

NACI recommendation for Flu vaccine 2023-2024

Recipient by age group	Vaccine types authorized for use	Recommendations
65 years and older	<ul style="list-style-type: none"> • IIV3-Adj • IIV4-SD • IIV4-HD • IIV4-cc • RIV4 	If available, IIV-HD should be preferentially offered to adults 65 years and older as it provides better protection than IIV-SD in this age group.

SARS-CoV-2, aka COVID 19

While the pandemic has been declared over, there has been continued mutation of the SARS-CoV-2 virus causing outbreak infection. It is predicted that COVID-19 infection will surge again this winter and cause outbreak infection. With the mutation, current COVID-19 vaccine effectiveness has waned.

Anti-viral treatment for COVID 19

Paxlovid is a combination of two antiviral drugs, nirmatrelvir and ritonavir, taken orally to treat adults with mild to moderate COVID-19 who are at high risk of progressing to serious disease, including hospitalization or death. It is **NOT** a replacement for COVID-19 vaccination. Albertans are strongly encouraged to get fully vaccinated against COVID-19. Immunization is particularly beneficial and

important for those at increased risk of COVID such as the seniors and those who are immunocompromised.

NACI Recommendation on COVID-19 vaccine

“Beginning in the fall of 2023 for those previously vaccinated against COVID-19, NACI recommends a dose of the **new formulation of COVID-19 vaccine** for individuals in the authorized age group if it has been at least 6 months from the previous COVID-19 vaccine dose or known SARS-CoV-2 infection (whichever is later).”

Health Canada has recently approved the Moderna mRNA vaccine, and this will be available this fall.

RSV (Respiratory Syncytial Virus)

Is RSV an important cause of disease for adults 60 and over?

RSV is a common cause of respiratory illness in infants and young children, as well as older adults. Each season, RSV causes substantial morbidity and mortality in older adults, including lower respiratory tract disease, hospitalization, and death. There are an estimated 60,000–160,000 hospitalizations and 6,000–10,000 deaths annually due to RSV among adults ages 65 years and older in the US.

Although RSV infection generally causes mild upper respiratory disease in healthy adults, RSV can cause serious illness in adults with certain underlying medical conditions or other risk factors. Adults who are at higher risk for severe RSV disease include:

- Those with chronic medical conditions
- Those who are frail
- Those who are 65 and over
- Nursing homes or other long-term care facilities residents
- Those who are severely immunocompromised either by diagnosis or treatment.

There are currently no anti-viral treatment and prophylaxis for adults, but a new adult RSV vaccine was recently approved by health Canada.

Which adult RSV vaccine has been approved for the prevention of RSV in Canada?

In Canada only Arexvy, GSK had been approved as a single dose which will offer protection over 2 seasons. The vaccine has been shown in clinical trial to protect against symptomatic lower respiratory tract disease caused by RSV in adults ages 60 and older, with more than 80% percent efficacy in the first RSV season after vaccination.

What are the current recommendations for the vaccine?

CDC Recommendation

CDC recommends that adults 60 years of age and older may receive a single dose of RSV vaccine using shared clinical decision-making (SCDM). This means your doctor and you should have a conversation to determine if RSV vaccination will be beneficial.

NACI Recommendation

Arexvy, an RSV vaccine, has been authorized for use in Canada for the prevention of lower respiratory tract disease caused by RSV in adults 60 years of age and older. NACI is currently reviewing the use of Arexvy. Recommendations and a chapter update will follow.

Is the vaccine for me?

RSV vaccination in older adults should be directed to those who are at highest risk for severe RSV disease and therefore most likely to benefit from vaccination. Have a conversation with your APC care team to determine if the RSV vaccine will be beneficial for you.

What are the side Effects of RSV vaccine?

The most common side effects after RSV vaccination reported from clinical trials included pain, redness, and swelling where the shot is given, fatigue, fever, headache, nausea, diarrhea, and muscle or joint pain. These side effects were usually mild.

In summary:

- Get you flu vaccine this season.
- Get your COVID -19 vaccine booster.
- Talk to your doctor about the new adult RSV vaccine.
- Practice your personal protective measure during the winter season

Stay healthy this winter season!

Dr. Mary Szabo MD FCFP(EM)

AND Your APC care team

