

Pneumococcal Disease and Vaccination

Fact Sheet for Key Stakeholders

DID YOU KNOW



Pneumococcal disease is a group of contagious diseases caused by the bacterium *Streptococcus pneumoniae* (*S. pneumoniae*).¹

- This bacterium commonly causes serious infections and diseases

Pneumococcal disease is a *different* disease from the flu (influenza), COVID-19, and RSV (respiratory syncytial virus), and each require their own vaccines for protection.

WHAT ARE THE SYMPTOMS AND RISKS OF PNEUMOCOCCAL DISEASE?

Symptoms may include²:

- Cough with mucus
- Fever
- Fast breathing and heart rate
- Chest pain that feels worse when you cough or breathe in
- Tiredness or weakness

Risks may include²:

- Infection of the lungs (**pneumonia**)
- Swelling of the brain lining (**meningitis**), which can lead to deafness, brain damage, and death
- Blood infections (**septicemia**)



WHO IS AT RISK?

Older adults have a greater risk for complications and death from pneumococcal disease because they often have **multiple health conditions** and **illnesses** and **less responsive immune systems**.⁵

Those living in **long-term care** are generally more vulnerable to illness from **congregate living** (e.g. eating together, sharing spaces and participating in group activities), which increases the spread of bacterial and viral diseases.⁶

Those with certain **underlying medical conditions** (i.e. diabetes or chronic heart, lung, liver, or renal disease) and **specific lifestyle factors** (i.e. smokers, persons with alcoholism, persons who are homeless, use of illicit drugs) are also at risk.^{7,3}

WHAT ARE THE POTENTIAL COMPLICATIONS OF PNEUMOCOCCAL DISEASE?

Infections caused by the bacterium *S. pneumoniae* are a huge cause of global illness and death.³

Among Canadians 65 years and older, pneumonia on average was^{3,4}:

- 1 of the top 10 leading causes of hospitalizations and
- 9th most common cause of death (in addition with influenza).

HOW IS S. PNEUMONIAE SPREAD?

S. pneumoniae is spread through sneezing, coughing, or other contact with those already infected by the bacterium.³

WHAT ARE THE BENEFITS OF PNEUMOCOCCAL VACCINATION?

Pneumococcal vaccination offers **protection** against any pneumococcal infection that can cause hospitalization or death and makes the **disease milder** for those who become infected.^{8,9}

WHAT ARE THE PNEUMOCOCCAL VACCINATION RECOMMENDATIONS?

According to the Canadian Immunization Guide, pneumococcal vaccination for adults is recommended particularly for ¹⁰:

- All adults that are **65 years of age and older**
- Residents of **long-term care**
- Those at high risk of **Invasive Pneumococcal Disease (IPD)**, which is a group of serious pneumococcal infections, because of:
 - **Underlying medical conditions**, and/or
 - **Certain lifestyle factors**



PNEUMOCOCCAL VACCINES IN CANADA

In Canada, the following vaccines are authorized for use and recommended for older adults (there are regional and risk-factor exceptions):

- 01 Pneumococcal conjugate vaccine (PCV20, PCV21, PCV15, PCV13) ¹¹:**
 - NACI recommends a single dose of either the PCV20 or PCV21 vaccine for adults aged 65 and older, regardless of prior history with PCV13, PCV15 or PPV23.
 - If PCV20 or PCV21 is not available NACI recommends administering PCV15 for adults aged 65 and older.
- 02 Pneumococcal polysaccharide vaccine (PPV23)**

Some older adults may be eligible for **co-administration** (receiving more than one vaccine at the same time) of the pneumococcal vaccine with other recommended vaccines, such as for the flu, RSV, COVID-19, shingles, tetanus, and diphtheria. This will vary between provinces, territories, and municipalities.

Civil society, patient, and professional organizations, and health care professionals are key partners in advocacy to promote pneumococcal vaccination amongst older adults.

HOW CAN WE ADVOCATE TO ENSURE OLDER ADULTS ARE VACCINATED AGAINST PNEUMOCOCCAL DISEASE?

- ✓ **Actions for advocacy:**
 - Assess your organization's mandate and how vaccination fits in.
 - Engage with other key stakeholders interested in the health and well-being of older adults.
 - Collectively strategize with regional public health and governments through meaningful campaigns and joint partnerships.
- ✓ **Share evidence-informed and reliable information on pneumococcal disease and vaccination with partners, colleagues, and older adults.**
- ✓ **Learn about the work and agendas of others to:**
 - Advance advocacy efforts,
 - Provide solutions, and
 - Collaborate on common goals for improving pneumococcal vaccination.





REFERENCES

1. Pneumococcal Disease [Internet]. [cited 2023 Sep 17]. Available from: <https://www.who.int/teams/health-product-policy-and-standards/standards-and-specifications/vaccine-standardization/pneumococcal-disease>
2. Pneumococcal disease - Fraser Health Authority [Internet]. [cited 2023 Oct 15]. Available from: <https://www.fraserhealth.ca/health-topics-a-to-z/immunizations/diseases-and-immunizations/pneumococcal-disease>
3. Hospital stays in Canada | CIHI [Internet]. [cited 2023 Sep 18]. Available from: <https://www.cihi.ca/en/hospital-stays-in-canada>
4. Leading causes of death, total population, by age group [Internet]. [cited 2024 February 13]. Available from: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039401>
5. Vaccination for adults - Canada.ca [Internet]. [cited 2023 Sep 18]. Available from: <https://www.canada.ca/en/public-health/services/vaccination-adults.html#a5>
6. Health Ontario P. New Health Canada Authorized Pneumococcal Conjugate Vaccines for Adults Aged ≥ 18 Years Recommendations: New Health Canada Authorized Pneumococcal Conjugate Vaccines for Adults Aged ≥ 18 Years. 2023;
7. Pneumococcal Disease Risk Factors: Information for Clinicians | CDC [Internet]. [cited 2023 Sep 20]. Available from: <https://www.cdc.gov/pneumococcal/clinicians/risk-factors.html>
8. Pneumococcal vaccines | Immunize BC [Internet]. [cited 2023 Sep 18]. Available from: <https://immunizebc.ca/vaccines-by-disease/pneumococcal>
9. Government of Ontario M of H and LTC. Pneumococcal Vaccine (Polysaccharide - for age 2 years and over) - Immunization - Publications - Public Information - MOHLTC. [cited 2023 Sep 17]; Available from: <https://www.health.gov.on.ca/en/public/publications/immune/pnem.aspx>
10. Pneumococcal vaccines: Canadian Immunization Guide - Canada.ca [Internet]. [cited 2023 Oct 24]. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-16-pneumococcal-vaccine.html#a9>
11. National Advisory Committee on Immunization. Summary of recommendations for the use of pneumococcal vaccines in adults (Pneu-C-21). Public Health Agency of Canada; 2024. Available from: <https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/national-advisory-committee-immunization-summary-recommendations-use-pneumococcal-vaccines-adults-pneu-c-21.html>

This initiative has been supported by Pfizer Canada.
Part of the Mobilizing the advocacy of pneumococcal pneumonia vaccination for older adults in long-term care settings in Canada initiative.

P. 3

