

Background

As populations age, protecting older adults from vaccine-preventable diseases (VPDs) becomes increasingly important. The immune system weakens with age, a process known as immunosenescence, making older individuals more vulnerable to infectious diseases ⁽¹⁾. Additionally, older adults are more likely to have chronic comorbidities that increase their risk of VPDs. Vaccination helps prevent disease and reduces the risk of serious complications, improving health outcomes and quality of life. Strengthening vaccine access and uptake among older adults is a key strategy for supporting healthier ageing and easing pressure on already overburdened health and social systems. Prioritizing vaccination, such as for pneumococcal disease, is essential to protecting Canada's ageing population from serious, yet preventable diseases, including invasive pneumococcal disease (IPD), which disproportionately affects older Canadians ⁽¹⁾.

Burden of Pneumococcal Disease Amidst Canada's Ageing Population

Pneumococcal disease is an underprioritized VPD that greatly affects older Canadians, encompassing a range of conditions caused by *Streptococcus pneumoniae*, including both pneumonia and IPD ⁽²⁾. IPD is a severe and potentially life-threatening infection that can manifest as pneumonia, meningitis, and bacteremia. While pneumococcal pneumonia refers specifically to pneumonia caused by *Streptococcus pneumoniae*, IPD is the broader category of disease that may involve more severe manifestations such as bacteremia and meningitis. IPD primarily affects older adults, young children, and individuals with certain medical conditions, such as chronic lung disease, heart disease, diabetes, or immunocompromising conditions.

In 2022, together with influenza, pneumonia was the 8th leading cause of death in Canada, accounting for 5,985 fatalities, with individuals over 80 years of age accounting for 67.2% of these deaths ⁽³⁾⁽⁴⁾. This burden is likely underestimated as many cases remain undiagnosed due to the lack of emphasis on testing and surveillance. According to Statistics Canada, the number of adults aged 45 to 64 who visited the emergency department due to pneumonia was 13,491, and those aged 65 and older was 27,300 ⁽⁵⁾. The effects of pneumonia extend beyond acute hospitalization and can have long-term impacts on function. Research shows that individuals, especially older adults, face a fourfold increase in the risk of heart attack, stroke, or death from heart disease in the month following a pneumonia hospitalization ⁽⁶⁾.

Addressing the Gap in Pneumococcal Vaccination Among Older Adults in Canada

The Canadian Chronic Disease Surveillance System estimates that in 2021, 6.3 million adults aged 65 years and older were living with chronic conditions ⁽⁷⁾. Studies also show that approximately one-third of adults aged 65 years and older have one or more chronic conditions, which predispose them to IPD, including diabetes, chronic kidney disease, lung disease, heart disease, smoking, and/or alcohol use disorder ⁽⁸⁾.

Canada's pneumococcal vaccination goal includes achieving an 80% coverage rate among adults aged 65 years and older by 2025 ⁽²⁾. Alarming, according to the 2023 Adult National Immunization Coverage

Survey, only 54.7% of the population aged 65 years and older had received a pneumococcal vaccination, falling short of these goals ⁽⁹⁾.

Burden of Healthcare Costs Associated with Canada's Ageing Population

The lack of attention to pneumococcal vaccination is particularly concerning given that with an average life expectancy of 83.02 years and 18.9% of the population aged 65 or older as of 2024, Canada is witnessing an ageing population, projected to comprise nearly one-quarter of the total population by 2040 ^{(10) (11) (7)}. The healthcare costs associated with an ageing population are significant, averaging \$12,000 CAD per older person annually, compared to \$2,700 CAD per person for the rest of the population ⁽¹²⁾. Key drivers of rising health service demand over the next decade include population growth, ageing, improvements in care quality, and inflation in healthcare costs.

Provinces and territories are struggling to meet the care needs of our ageing population, and over the next 10 years, an estimated additional \$93 billion in healthcare costs is anticipated ⁽¹²⁾. Adult vaccination can significantly support reducing this burden by preventing VPDs and their serious consequences, such as hospitalization, loss of functional ability, and promoting health, well-being, and independence. A study conducted by the Adult Vaccine Alliance shows that adult vaccines, such as those for pneumococcal disease, COVID-19, influenza, shingles, respiratory syncytial virus (RSV), and human papillomavirus (HPV), can bring \$2.5 billion in healthcare and economic benefits to Canada ⁽¹³⁾.

Responding to the Needs of Older Adults on Pneumococcal Vaccination

On November 15, 2024, the National Advisory Committee on Immunization (NACI) released recommendations regarding pneumococcal vaccines for adults. A strong recommendation was made for adult pneumococcal immunization programs, indicating that all adults aged 65 years and older receive a single dose of a pneumococcal vaccine regardless of their prior pneumococcal vaccination history ⁽⁸⁾. Additionally, adults under 65 who are at increased risk of IPD should also receive pneumococcal vaccination ⁽⁸⁾.

Following the release of NACI's most recent recommendations on pneumococcal vaccination, the International Federation on Ageing (IFA) calls for tailored immunization strategies to drive pneumococcal vaccination uptake in older adults and at-risk populations across Canada. The IFA hopes to see provinces and territories implement these recommendations within their programs, including access to the latest vaccine options most appropriate for protecting older adults.

These calls for action are echoed by older Canadians and advocates, as exemplified by a recent survey by the Canadian Association of Retired Persons (CARP), which indicated strong public support for enhanced vaccination programs. With over 90% of respondents advocating for increased funding of provincial and territorial vaccination efforts, and 94% believing the government should fund all NACI recommended vaccines for older adults, including the latest available options ⁽¹⁴⁾.

Additionally, accessibility and awareness must be central to these efforts, with targeted educational campaigns that inform at-risk populations about the importance of pneumococcal vaccination, availability, and eligibility.

Conclusion

Canada is facing a significant challenge in meeting its pneumococcal vaccination goal of 80% coverage among adults aged 65 and older by 2025 ⁽²⁾. Given the projected increase in the older adult population to nearly 1/4 (25%) by 2040 and the rising healthcare costs associated with ageing, the need for tailored vaccination strategies is urgent ⁽⁷⁾.

The high mortality rate from pneumococcal pneumonia underscores the urgency of NACI's recommendations. Public support for increased government action is clear, with strong backing for enhanced funding and awareness to support pneumococcal vaccination at the provincial and territorial level.

A targeted approach that prioritizes immunization for older adults and high-risk individuals, alongside improved accessibility and educational outreach, is vital. Immediate action is necessary to reduce the burden of pneumococcal disease and improve health outcomes for Canada's ageing population. Enhancing access to pneumococcal immunization is also part of a rights-based approach to ensuring older adults have access to adequate, appropriate, and equitable health services.

About the International Federation on Ageing

The [International Federation on Ageing \(IFA\)](#) is an international, non-governmental organization (NGO) with a unique membership base comprising government, NGOs, academics, industry, and individuals in over 80 countries. Over the last 45 years, the IFA has become known as a leading and innovative organization that works across disciplines and sectors toward common goals that improve the lives of older people. Through its [Vaccines4Life](#) program, IFA has worked alongside committed organizations to address barriers to improve adult vaccination rates in the context of healthy ageing.

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