

A Guide to Vaccines for Older Canadians

Supporting Ageing with Confidence,
Independence and Good Health

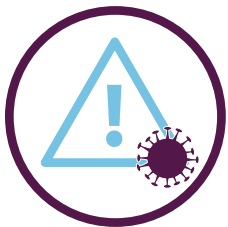
Read This Pamphlet to Learn About:

- Why Vaccines Are Important to Enable Healthy Ageing
- COVID-19 Vaccine
- Influenza Vaccine (Flu Shot)
- Pneumococcal (Pneumonia) Vaccine
- Shingles Vaccine
- Tetanus and Diphtheria Vaccine



WHY ARE VACCINES IMPORTANT TO ENABLE HEALTHY AGEING?

Vaccines are important throughout your life, and especially as you get older, to maintain your health and independence.



YOUR IMMUNITY NATURALLY WEAKENS AS YOU AGE

As you grow older, your immune system naturally weakens, putting you at an increased risk of severe outcomes from infectious diseases.



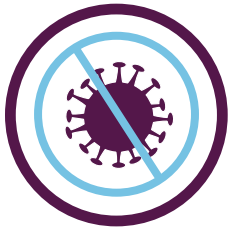
VACCINATION HELPS PREPARE YOUR BODY TO FIGHT VACCINE-PREVENTABLE INFECTIONS

When a new virus or bacteria enters your body for the first time, it takes a while for your immune system to be able to fight it. Vaccines tell your immune system how to prepare for viruses or bacteria, allowing your body to respond more quickly before an infection causes more serious problems.



VACCINATION HELPS YOU PROTECT OTHERS

When more people are vaccinated, it makes it difficult for viruses or bacteria to spread and infect others. This helps protect those who are not able to get vaccinated and those whose bodies can't develop a strong immune response to a vaccine.



VACCINES HAVE ELIMINATED CERTAIN DEADLY DISEASES

Vaccines have worked so well that we have been able to eliminate certain conditions in Canada. For example, Canadians no longer need to be vaccinated against smallpox.



YOUR ACQUIRED PROTECTION CAN WEAKEN OVER TIME

Over time, the protection vaccines provide may decrease for certain infectious diseases. Receiving booster doses can help strengthen your immunity against them.



VACCINES ARE A SAFE OPTION

Vaccines go through a lot of testing and are consistently monitored, which means they are very safe! Side effects are usually mild and only last a few days.



WHICH VACCINES ARE IMPORTANT FOR OLDER CANADIANS?

In order to allow you to maintain your independence and promote healthy ageing, it is recommended that you get the following vaccines:

- COVID-19
- Influenza (flu)
- Pneumococcal disease (pneumonia)
- Shingles
- Tetanus and diphtheria

If you are planning on travelling, you may benefit from getting vaccinated against additional diseases (e.g., hepatitis A & B, yellow fever or rabies).

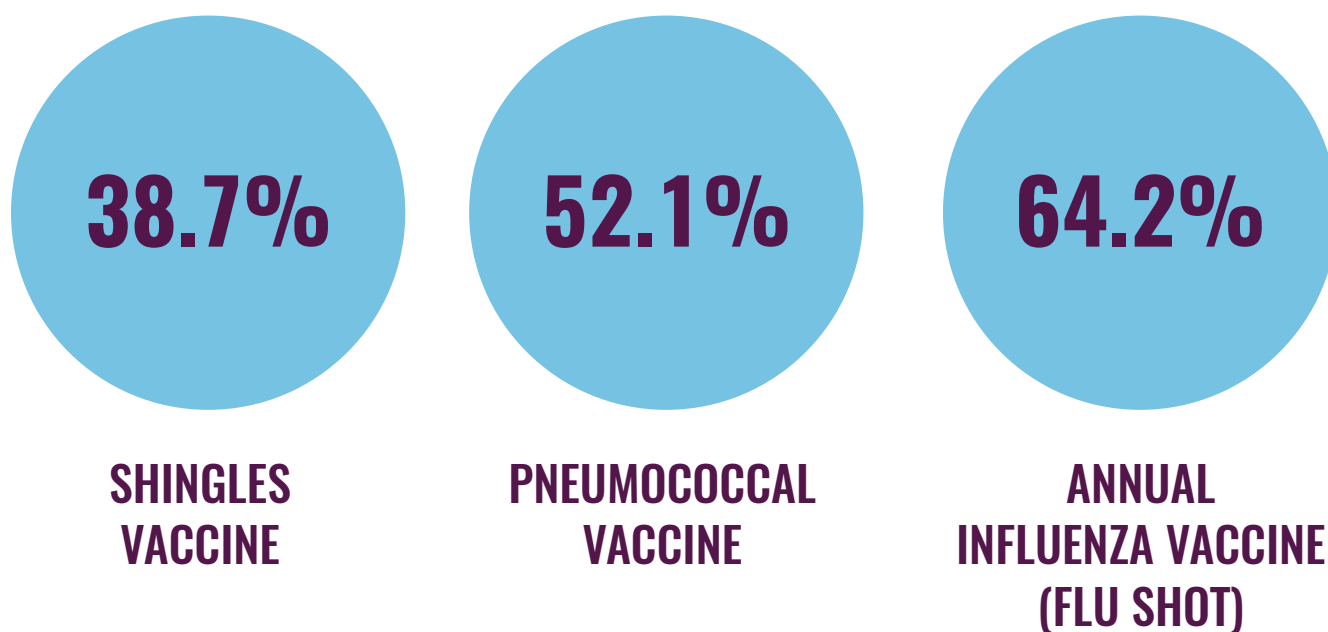
You should discuss your need for different vaccine options with your health care provider as they will be able to determine which vaccines are needed and the best time to administer them.



TIP: It might be a good idea to use your birthday as a reminder to check in with your primary health care provider about what vaccines and other preventable health measures you might be eligible for!

HOW MANY OLDER CANADIANS HAVE RECEIVED THEIR RECOMMENDED VACCINES?

One of Canada's national vaccination coverage goals is to ensure that at least 80% of older Canadians have received both the pneumococcal vaccine and the annual flu shot. According to the latest Canadian Health Survey on Seniors, current vaccination rates **remain far too low** among older Canadians:



COVID-19 VACCINE

ALL
AGES

2+
DOSES

FREE

WHAT IS COVID-19?

COVID-19 is an infectious disease that is caused by the SARS-CoV-2 virus. Some of the common symptoms include runny nose, sneezing, sore throat and headaches.

Older adults may present with symptoms differently (e.g., fever with lower temperatures) or have less common symptoms (e.g., nausea, diarrhea, falls and confusion).

COVID-19 infection can lead to severe symptoms, including difficulty breathing or shortness of breath. If you experience these symptoms, seek immediate medical attention.

WHY SHOULD I GET THE VACCINE?

The risk of hospitalization for severe illness and death from COVID-19 is significantly higher among older adults, with those aged 60 years and older accounting for 93% of Canada's COVID-19 deaths to date.

Compared to cases in fully vaccinated individuals with at least one booster dose, unvaccinated individuals were six times more likely to be hospitalized and eight times more likely to die as a result of the illness.

WHICH VACCINES ARE RECOMMENDED?

There are nine approved COVID-19 vaccines, across three categories, available in Canada for older adults.

Canada's National Advisory Committee on Immunization (NACI) recommends that older Canadians receive a primary series of vaccination along with recommended booster doses at appropriate time intervals.

The primary series is usually two doses, given at least eight weeks apart. Booster doses are given as one dose, at least three to six months apart. The diagram below lists the preferred vaccines in order from top to bottom. Please note, different types of vaccines may be provided as either primary or booster doses.

Preferred Vaccines for Primary Series	Preferred Vaccines for Booster Doses
Moderna Spikevax OR Pfizer-BioNTech Comirnaty	Moderna Spikevax Bivalent (Omicron BA.1) OR Moderna Spikevax Bivalent (Omicron BA.4/5) OR Pfizer-BioNTech Comirnaty Bivalent (Omicron BA.1) OR Pfizer-BioNTech Comirnaty Bivalent (Omicron BA.4/5)
Novavax Nuvaxovid	
AstraZeneca Vaxzevria OR Janssen Jcovden	Moderna Spikevax OR Pfizer-BioNTech Comirnaty
	Novavax Nuvaxovid
	Janssen Jcovden

Recently, NACI recommended bivalent vaccines as the preferred option for booster doses. Bivalent vaccines contain two different mRNA components: one that protects against the original strain of the COVID-19 virus and one that protects against the Omicron strain. These bivalent vaccines will help further protect you by producing more antibodies to both strains.

HOW MUCH DO VACCINES COST?

COVID-19 vaccines are available free of charge to all Canadians.

WHERE DO I GET THE VACCINE?

Depending on your province or territory, vaccines are widely available through public health clinics, primary care and some speciality care clinics, pharmacies and hospitals. **COVID-19 vaccines can be safely given at the same time with all of the other vaccines discussed in this pamphlet.**

Please talk to your health care provider to learn more.

INFLUENZA (FLU) VACCINE

ALL
AGES

1 DOSE
EVERY
YEAR

FREE

WHAT IS INFLUENZA?

Influenza infections can occur throughout the year, but are more common during “flu season,” which typically occurs over the fall and winter from November to April.

Symptoms can include fever, headache, general aches and pains, fatigue and weakness, sore throat, chills, coughing and chest discomfort. Most people recover within seven to 10 days, but some may experience more serious outcomes such as hospitalization or death

WHY SHOULD I GET THE VACCINE?

Older Canadians are more likely to experience serious outcomes (e.g., pneumonia, heart attacks and death). Other high-risk populations include those living with chronic health conditions, pregnant people, people living in long-term care homes or other chronic care settings, and Indigenous peoples.

Together with pneumonia, influenza ranked as the eighth-leading cause of death in Canada, killing an estimated 5,312 older Canadians in 2020.

WHICH VACCINES ARE RECOMMENDED?

There are five influenza vaccines commonly available for adult Canadians across two categories: inactivated influenza vaccines (IIV) and a recombinant influenza vaccine (RIV). Most of these vaccines protect against four strains of influenza, with the IIV having different vaccine options, standard dose influenza vaccines, or enhanced dose influenza vaccines e.g., Fluzone High-Dose Quadrivalent (high-dose) or Flud (adjuvant-dose).

NACI recommends Canadians get the influenza vaccine each year as the specific strains in the vaccines often change each year to better match the current influenza viruses and our body's immune response may not persist beyond a year. **NACI recommends that older adults be provided with any of the available vaccines for older Canadians.**

The **United States Centers for Disease Control and Prevention Advisory Committee on Immunization Practices** recently recommended that if older adults have a choice between a standard dose or an enhanced dose vaccine, an **enhanced dose vaccine should be the preferred option as these vaccines provide better overall protection for older adults.**

HOW MUCH DO VACCINES COST?

Not all vaccines may be available in your region; however, the ones that are available are provided free of charge to all older adults. Alberta, Manitoba, New Brunswick, Ontario, Prince Edward Island, Saskatchewan and Yukon provide Fluzone High-Dose Quadrivalent free of charge for community-dwelling older adults. British Columbia and Ontario provide Fluad free of charge for community-dwelling older adults. Across the rest of Canada, the Fluzone High-Dose Quadrivalent and Fluad enhanced vaccines are mostly available as an out-of-pocket expense, although some specific groups may have coverage.

WHERE AND WHEN DO I GET THE VACCINE?

Depending on your province or territory, flu shots are available at primary care and some speciality care clinics, pharmacies or public health clinics. Even though you can get the influenza vaccine any time during the fall/winter season, **every Canadian should try to receive their annual dose between October and mid-November. Most influenza vaccines can be safely given at the same time with all of the other vaccines discussed in this pamphlet.** Please talk to your health care provider to learn more.

PNEUMOCOCCAL VACCINE

65+
YEARS

1
DOSE

FREE/
SOME
COST

WHAT ARE PNEUMOCOCCAL DISEASES?

Pneumococcal diseases are a group of diseases caused by the *Streptococcus pneumoniae* (*S. pneumoniae*) bacteria. They may cause infections of the lungs, ear, sinuses and more rarely the bloodstream or central nervous system.

Pneumonia, a lung infection, is the most common form of pneumococcal disease. Symptoms include difficulty breathing, coughing up mucus, fever, fatigue, nausea and vomiting, chest pain, confusion or delirium, and diarrhea. Thousands of mostly older Canadians experience more serious outcomes.

WHY SHOULD I GET THE VACCINE?

Older Canadians are at a higher risk of severe outcomes, making up the majority of pneumonia-related hospitalizations and deaths each year in Canada. Other groups that are at higher risk include those living with certain chronic conditions (e.g., heart disease, lung disease, liver disease or diabetes) and those who are immunocompromised (e.g., HIV infection, transplant recipients).

Together with influenza, pneumonia ranks as the eighth-leading cause of death in Canada in 2020.

WHICH VACCINES ARE RECOMMENDED?

There are two types of pneumococcal vaccines administered in Canada:

- Pneumococcal polysaccharide vaccine (PPV23)
- Pneumococcal conjugate vaccine (PCV10, PCV13, PCV15, PCV20)

The number within each vaccine's name indicates how many types of *S. pneumoniae* bacteria it protects against.

NACI recommends all adults aged 65 years and older get the Prevnar 20 (PCV20) vaccine, regardless of whether or not they have previously received a pneumococcal vaccination. As an alternative, those who have never received a pneumococcal vaccination may get Vaxneuvance (PCV15) followed by Pneumovax 23 (PPV23) a year later. NACI still supports the continued use of Prevnar13 (PCV13) and Pneumovax 23 in adults only when Vaxneuvance and/or Prevnar 20 are unavailable or inaccessible.

For older adults who have received or are planning to receive Pneumovax 23 alone or together with Prevnar 13, NACI recommends Prevnar 20 should be given after five years. For older adults who have received or are planning to receive Prevnar 13 alone, NACI recommends Prevnar 20 may be given after one year.

HOW MUCH DO VACCINES COST?

The Pneumovax 23 vaccine is provided free of charge to all adults aged 65 years and older across Canada, with the Prevnar 13 vaccine varying in coverage. The Vaxneuvance and Prevnar 20 vaccines are currently only available as an out-of-pocket expense in Canada.

WHERE DO I GET THE VACCINE?

Depending on your province or territory, vaccines are available at primary care and some speciality care clinics, pharmacies or public health clinics.

Pneumococcal vaccines can be safely given at the same time with some of the other vaccines discussed in this pamphlet. Please talk to your health care provider to learn more.

SHINGLES VACCINE

50+
YEARS

1-2
DOSES

FREE/
SOME
COST

WHAT IS SHINGLES?

Shingles (herpes zoster) is an infection caused when the chickenpox virus is reactivated. Shingles infection often presents as a painful, blistering rash, accompanied by headache and fever.

Beyond these symptoms, people can also experience serious outcomes, including prolonged, severe pain that can last for more than 90 days and sometimes for years. Other complications can include nerve paralysis, vision loss and problems with hearing or balance.

WHY SHOULD I GET THE VACCINE?

Anyone who has had chickenpox can develop shingles. However, most cases occur in those older than 50 years of age and often present more severely in this age group. Other high-risk groups include those who have weakened immune systems or are living with chronic conditions.

WHICH VACCINES ARE RECOMMENDED?

In Canada there are two vaccines available: Zostavax II (live attenuated vaccine) and Shingrix (recombinant subunit vaccine). The Zostavax II vaccine requires one dose. The Shingrix vaccine requires two doses, which are recommended to be given across a two- to six-month period.

Trials have shown that the main difference between the two available vaccines is that **the Shingrix vaccine is more effective at preventing shingles than the Zostavax II vaccine** (97.9 per cent vs. 37.6 per cent, respectively) among adults aged 70 years and older, years after receiving the vaccine.

NACI recommends that Canadians aged 50 years and older get the Shingrix vaccine, but the Zostavax II vaccine may be offered for certain groups when the Shingrix vaccine cannot be used.

HOW MUCH DO VACCINES COST?

Only Alberta, Ontario, Prince Edward Island and Yukon currently provide the Shingrix vaccine free of charge for certain older and other high-risk populations.

WHERE DO I GET THE VACCINE?

Depending on your province or territory, shingles vaccines are available at primary care and some speciality care clinics, pharmacies or public health clinics. **Shingles vaccines can be safely given at the same time with most of the other vaccines discussed in this pamphlet.** Please talk to your health care provider to learn more.



TETANUS AND DIPHTHERIA VACCINE

18+
YEARS

1 DOSE
EVERY
10 YEARS

FREE/
SOME
COST

WHAT ARE TETANUS AND DIPHTHERIA?

Both tetanus (lockjaw) and diphtheria are rare but severe diseases that can be fatal.

Tetanus causes painful muscle spasms and difficulty swallowing, which can later lead to serious outcomes (e.g., fractures, death).

Diphtheria can cause numerous symptoms including mild fever, trouble swallowing, skin infections, sore throat, uneasiness and loss of appetite. At times these can lead to serious outcomes impacting the entire body, including central nervous system effects and heart failure.

WHY SHOULD I GET THE VACCINE?

Infants and older adults are more likely to have severe outcomes from these diseases, with those aged 60 years and older having the highest risk of death from tetanus.

It has also been found that the level of protection against these diseases decreases over time after vaccination, highlighting the need to receive additional doses as we age.

WHICH VACCINES ARE RECOMMENDED?

In Canada, vaccines for tetanus and diphtheria are not given separately, but together in one dose.

NACI recommends that fully immunized adults receive a booster dose of the tetanus and diphtheria (Td) vaccines every 10 years.

For those who have not been immunized in adulthood, one dose of the Tdap vaccine (which also protects against pertussis [whooping cough]) is recommended first. For adults who have never received these vaccines at all, one dose of the Tdap-IPV vaccine (Tdap plus polio prevention), followed by two doses of the tetanus and diphtheria (Td) vaccine is recommended first. Your health care provider can help you determine the right sequence of vaccinations for you.

HOW MUCH DO VACCINES COST?

Only some provinces and territories publicly fund the Td vaccines every 10 years. However, most of the jurisdictions provide coverage for the Tdap vaccines.

WHERE DO I GET THE VACCINE?

Depending on your province or territory, vaccines are available at primary care and some speciality care clinics, pharmacies or public health clinics.

These vaccines can be safely given at the same time with all of the other vaccines discussed in this pamphlet. Please talk to your health care provider to learn more.



HOW CAN I CHECK WHICH VACCINES I HAVE ALREADY RECEIVED?

- 1) Contact your primary health care provider as they should have a record of your vaccinations
- 2) Contact your local public health office where you received vaccinations as a child, as most maintain a registry
- 3) If you are not able to confirm your vaccination history, talk to your health care provider, as there are other ways to try to determine this

MAINTAINING A RECORD OF YOUR IMMUNIZATIONS

You can keep track of your vaccines through one of the following ways:

- 1) Download and print the next page. Ask your health care provider to log each vaccine you receive in this chart. Keep this record in a safe place with your other important health documents.
- 2) Ask your health care provider or public health office for a card or booklet to keep track of your immunizations
- 3) Use the **FREE CANImmunize Website and App** to track your vaccines through your computer, phone or tablet.
 - Securely store and access your immunization record
 - Receive reminders when to vaccinate
 - Get facts about vaccination specific to your region

To use this platform, click on any of the following icons:

Visit the Website



Vaccine & Lot Number	Dose	Date Administered DD/MM/YYYY	Health Provider Signature	Date of Next Dose

WHERE CAN I FIND MORE INFORMATION?

The Public Health Agency of Canada has created various public resources:



Not Just for Kids: An Adult Guide to Vaccination

<https://www.canada.ca/en/public-health/services/publications/healthy-living/just-kids-adult-guide-vaccination.html>



Vaccines For Covid-19

<https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19/vaccines.html>



Flu (Influenza)

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



Vaccine Safety and Possible Side Effects

<https://www.canada.ca/en/public-health/services/vaccination-children/safety-concerns-side-effects.html>



Vaccine Preventable Diseases (Causes, Symptoms, Risks, Treatment, etc.)

<https://www.canada.ca/en/public-health/services/diseases.html?vaccine-preventable>



Provincial and Territorial Routine Vaccination Programs for Healthy, Previously Immunized Adults

<https://www.canada.ca/en/public-health/services/provincial-territorial-immunization-information/routine-vaccination-healthy-previously-immunized-adult.html>



Immunization Information (Websites and Schedules) by Province and Territory

<https://www.canada.ca/en/public-health/services/provincial-territorial-immunization-information.html>

AUTHORS

Dr. Samir K. Sinha, MD, DPhil, FRCPC, AGSF

Director of Geriatrics Sinai Health and University Health Network;
Director of Health Policy Research, National Institute on Ageing;
Professor, Departments of Medicine, Family and Community Medicine, Health Policy, Management and Evaluation, University of Toronto

Arushan Arulnamby, MPH

Policy Analyst, National Institute on Ageing, Toronto Metropolitan University

Julie Dunning, MPH

Senior Policy Advisor, National Institute on Ageing, Toronto Metropolitan University

EXPERT REVIEWERS

We gratefully acknowledge our contributors who provided expert guidance on the content in this pamphlet.

Dr. Vivien Brown, MDCM, CCFP, FCFP, NCMP

Family Physician;
Assistant Professor, Department of Family and Community Medicine, University of Toronto

Dr. Jennie Johnstone, MD, PhD, FRCPC

Medical Director, Infection Prevention and Control, Sinai Health;
Associate Professor, Department of Laboratory Medicine and Pathobiology, University of Toronto

Ms. Sabina Vohra-Miller, MSc

Founder of Unambiguous Science

This pamphlet was supported by unrestricted educational grants from Sanofi, Pfizer and GlaxoSmithKline Inc.



All of the research, writing and recommendations herein have been independently produced by the NIA on the basis of sound evidence. Any opinions or errors reflected in this report are of the NIA alone.

Author: National Institute on Ageing

Created: December 2022



NIA NATIONAL
INSTITUTE
ON AGEING*



**Sinai
Health** | Healthy Ageing
and Geriatrics