

Demystifying vaccine information: Understanding the language of influenza

Module 1 : Exploring vaccination and
influenza



Lesson 2: Immunization as part of personal health and well-being plans

Learning Objective 1: Understand the purpose of vaccination and how it can help health and well-being

What is a **vaccine**?

A **vaccine** is a tool that works alongside our body's natural defense system, which is our **immune system**, to develop protection against diseases without acquiring the risks that come from getting the diseases.



How does a vaccine **work**?

Vaccination works by exposing our bodies to parts of bacteria or viruses called **antigens**.

Our bodies are exposed to these antigens in a safe way so that our immune system can develop an immune response.

If we are exposed to that same bacterium or virus later on, our immune system will have the ability to respond more quickly to prevent us from:

- Getting the disease
- Getting very sick if we do get the disease



How does a vaccine **work**?

Vaccines are normally given by an injection (with a needle) into the upper arm.

There are some vaccines that can be given orally (by the mouth) and there is even an influenza (flu) vaccine that can be sprayed into the nose.

Certain vaccines will provide life-long protection and others may require a **booster dose** or an annual dose (such as for the flu) to ensure continued protection.

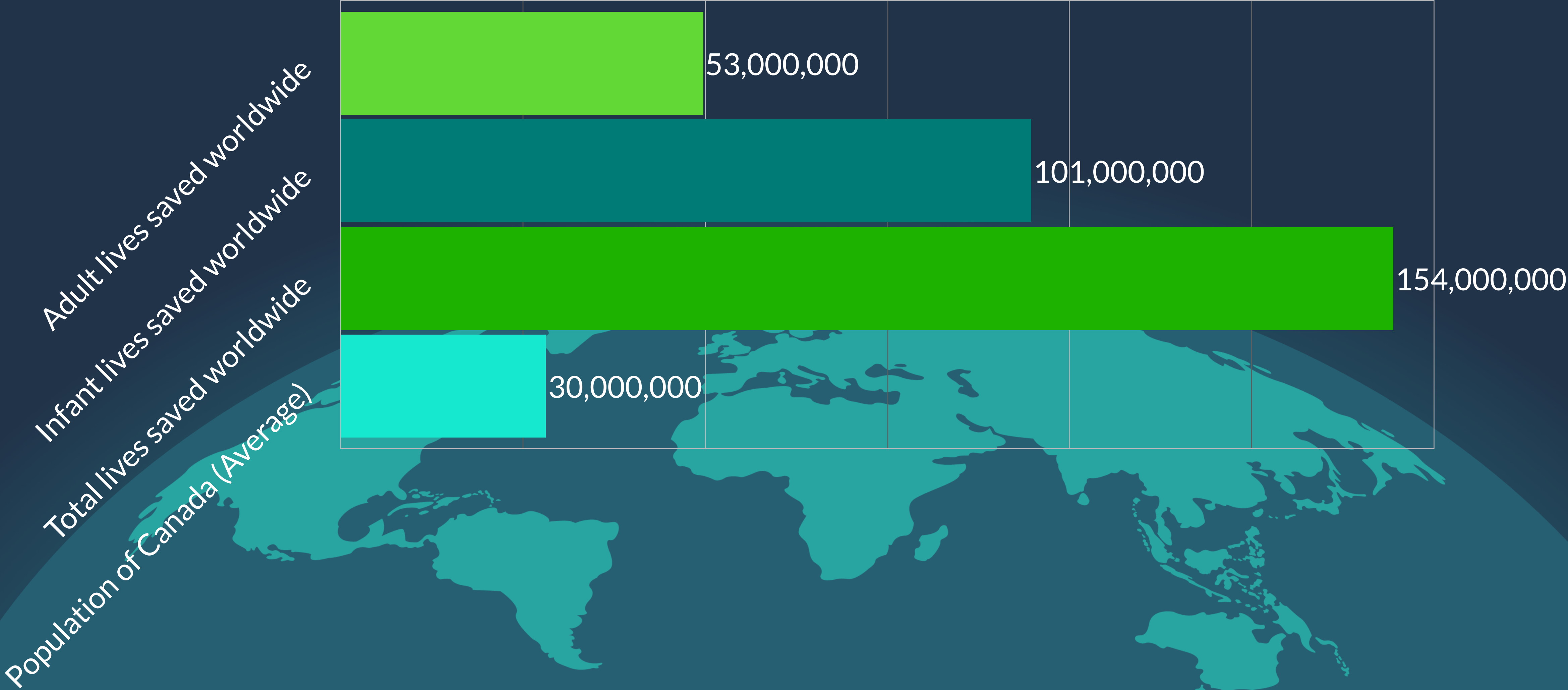
There are some vaccines that provide protection against only one virus or bacterium and there are combination vaccines that protect against several at the same time.



Vaccination is considered one of the most important public health tools available.

Over the past 50 years, vaccination has saved an estimated 154 million lives globally, including within Canada. Vaccines help keep us healthy by preventing potentially deadly diseases.

Lives saved by vaccination (1974-2024)



Vaccines help keep us healthy by preventing potentially deadly diseases. Staying up to date and getting our vaccines helps protect those who are **immunocompromised** or are unable to receive vaccination due to barriers such as access to vaccines.



For the individual

Vaccination prevents:

- Hospitalization and death
- Loss of overall function
- Vulnerability to vaccine preventable diseases (VPDs) and other chronic diseases. Research shows that vaccination reduces the risk of heart and stroke problems and negative impacts on cognition

For example, the Journal of the American Heart Association in 2021 published an analysis where flu vaccination was linked to an 18% lower chance of death from cardiovascular problems and a 25% lower chance of death from any cause.





Older adults

Are at a greater risk of experiencing more severe symptoms and outcomes from diseases and this is because of a concept known as:

Immunosenescence:

The decreased immune function that comes with the process of ageing

With decreased immune function, the body is more susceptible to infection, and it becomes more difficult for the immune system to fight off any infectious diseases.

At-risk adults may have other underlying medical conditions or are in certain environments that increase their chances of acquiring diseases.

As older and at-risk adults experience these vulnerabilities and increase their risk of negative impacts from diseases, it is important for them to be vaccinated.

Older adults

For all of these reasons, it is therefore important to include vaccination as a part of our health plans.

In addition to exercise, a nutritious diet, and practising good hygiene, vaccination is an important part of keeping ourselves healthy.

