



PLANS Promoting Leadership in health for African Nova Scotians

Global Health Office

PROTECTING OUR COMMUNITIES FROM COVID-19



Recent information on vaccines and the impact of COVID-19 in our communities

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ABOUT US

The **Encouraging Vaccine Confidence Project** is a collaboration between Imhotep's Legacy Academy (ILA), Promoting Leadership in Health for African Nova Scotians (PLANS), the Health Association of African Canadians (HAAC) and the Canadian Center for Vaccinology (CCfV).

ILA and PLANS reach out to African Nova Scotian (ANS) youth to give them the information they need to make informed decisions about COVID-19 vaccination and other health-related choices.

This brochure contains information on the types of COVID-19 vaccines available in Nova Scotia: Pfizer and Moderna. It also contains information from the Public Health Agency of Canada on the spread of COVID-19. Please use this booklet and contact your local health authorities if you have any questions or concerns before getting vaccinated.

We also include FAQs with answers to the most commonly asked questions related to the vaccines and COVID-19.

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Global Health Office

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1

WHAT IS COVID-19?

COVID-19 stands for **CO**rona**VI**rus **Di**sease - 2019 which is the shortened name used for the disease caused by SARS-CoV-2, a new coronavirus first detected in 2019. It was declared a worldwide pandemic by WHO in March 2020.

There are many misconceptions about the virus. People may think it's like the flu. This is not the case! In the last year, it was much more deadly than the flu. **More than 4,130,933 people have died from the virus**. In most years, between 290,000 and 650,000 people die from influenza [2,3].

Viruses are very small and can easily spread and use specific mechanisms to enter the hosts (i.e., human) body. COVID-19 is not like any other virus we have seen; it is one of the smallest known at **0.1 microns** in size [4] and like all viruses, it requires a host to survive as it cannot replicate on its own. COVID-19 uses its spike protein heads to latch onto normal cell membranes and this allows the virus to enter and hijack the host cell.

HOW DOES IT SPREAD?

COVID-19 spreads when an infected person talks, breathes out, sneezes or coughs producing droplets containing microscopic particles of the virus. If you inhale these droplets, or get them in your eyes, nose, or mouth, you can become infected with the virus.



To guard against contracting COVID-19, you can follow these four steps:

- 1. Wear a mask to cover your nose and mouth;
- 2. Keep your hands clean with soap and water or hand sanitizer;
- Maintain physical distance from others when possible (about 2m apart);
- 4. Get vaccinated.

CHOOSE YOUR VACCINE

The vaccines produced by Pfizer and Moderna are used in public health programs in Nova Scotia as of August 2021. These two mRNA vaccines work by training your body to make the spike protein of the virus that will trigger your immune system to make antibodies to fight the coronavirus [6]. That way your immune system is ready to fight the coronavirus without the need to experience active infection.

Pfizer BioNTech

mRNA works by telling your body to make the spike protein of the virus that will trigger the immune system to develop antibodies

Two doses of 0.3 ml (30 mcg mRNA), a minimum of three weeks apart

Moderna

mRNA works by telling your body to make the spike protein of the virus that will trigger the immune system to develop antibodies

Two doses of 0.5 ml (100 mcg mRNA), a minimum of four weeks apart

What are the side effects?

The most common side effects are **pain at the injection site, body chills, fatigue, and a mild fever.** In very rare cases, people have experienced serious side effects, including anaphylaxis, temporary facial paralysis, and myocarditis/ pericarditis (inflammation of the heart muscle or lining of the heart). Facial paralysis and myocarditis/pericarditis are usually temporary and resolve in a **few days to a week**.

What is the efficacy of the vaccines?

"Vaccine efficacy is the percentage reduction of disease in a vaccinated group of people compared to an unvaccinated group, using the most favorable conditions." [8]

Pfizer: 95% efficacy, 1 week after the second dose; **Moderna**: 94.1% efficacy, 2 weeks after the second dose;

In comparison, flu vaccines have about 59% efficacy overall [9] — this shows that the vaccines for COVID-19 are remarkably good.

VACCINATION COVERAGE

As of August 26, 2021, at least 14,000 individuals who self-identified as Black or African Nova Scotian (ANS) have been fully vaccinated (two doses). This is approximately **64%** of the ANS population. We still have some way to go as a community to achieve herd immunity [7].

What is meant by herd immunity?

To achieve herd immunity, approximately **85%** of the entire population needs to be vaccinated [10]. But, what is meant by "herd immunity", and why is it so important?

Herd Immunity occurs when a **large enough portion of the population becomes immune** to the virus and thus, the likelihood of it continuing to **spread is diminished** greatly over time. Vaccinated people act as a "shield" for the unvaccinated (see the diagram below). If enough people are vaccinated, then it becomes unlikely that an infected person will come in contact with an unvaccinated person, allowing the sick person to get well before infecting someone else. Based on how COVID-19 spreads, about 85% of the population needs to be vaccinated for this to occur. When herd immunity is achieved, the outbreak will be controlled and the vaccine can be used routinely as a standard immunization procedure to prevent future outbreaks.

How Herd Immunity Works

Not everyone can be vaccinated. Vaccinated people are their shield against disease.[11]



WHAT IS THE IMPACT OF COVID-19?

African Canadians from marginalized communities are more likely to succumb to COVID-19 infection, with nearly twice the death rate as in predominantly Caucasian neighborhoods. This may be due to multiple factors including the burden of underlying health conditions and socioeconomic conditions including the lack of routine access to healthcare.

There is a distrust of health systems within Black communities due to a long history of systemic racism and mistreatment in health care services. Within our communities, there is prevalence for higher high school dropout rates and unemployment. Statistics Canada found that people with less than high school education, higher unemployment rates and financial stressors tend to have lower vaccination rates. [7]

Historical systemic racism and trauma in the healthcare system fuel vaccination mistrust in our communities. Lower vaccination rates mean that our communities will be the hardest hit by this pandemic.

With lower vaccination rates in our communities, we will be less likely to achieve herd immunity. The ones most at risk are those who are immunocompromised, or too young to be vaccinated. We have a responsibility as a community to ensure the safety of everyone including the ones we love who are especially at risk, by making use of our resources during the pandemic.

Lower vaccination rates can affect us all in these ways:

- 1. Herd immunity will not be achieved;
- 2. Death rates will remain high;
- 3. The virus will continue to spread.

HOW WEARING A MASK PROTECTS AGAINST COVID-19

Using the mask helps filter the air you breathe and block the coronavirus particles in the air. It also helps to keep the coronavirus particles expelled by the infected person from dispersing into the air.

What are good mask handling practices?

On the outside of the mask, the viral particles remain trapped and it is crucial to handle your mask correctly to not contaminate yourself during removal. Please follow the steps below:

- 1. When taking off your mask, use the ear tabs to remove it and do not touch the front.
- 2. After every use, wash your reusable mask as the virus particles may be on the outside.
- 3. If the mask is disposable, you must throw it away immediately; it cannot be washed for reuse.

How hand cleansing kills the virus

Soap and alcohol break the cell membrane of the virus and kill the virus. Hand washing with soap and water is a powerful weapon against coronavirus. It is the recommended method for hand cleansing and it also mechanically removes viral particles and other contaminants from the hands. Alcohol based hand sanitizers are also recommended, particularly when soap and water is not readily available.



SOCIAL IMPACTS IN CANADA

Public health measures taken in the wake of the pandemic have disrupted schools, leisure activities, organized activities, and routines. The results of a study conducted in the province of Ontario suggest that the mental health of children and youth has been **negatively affected** by the implementation of emergency public health measures related to COVID-19.

More than two-thirds of children and youth in this study reported a decline in their mental health associated with the stress of social isolation after the onset of the pandemic [13, 14].

SUMMARY: WHAT WE COVERED IN THIS BROCHURE

COVID-19 is caused by the new coronavirus SARS-CoV-2 droplets. It is now a worldwide pandemic affecting millions of people with **significant mortality rates**. It can be transmitted by droplet and airborne spread from infected persons, many of whom have no symptoms. To prevent contracting the virus, **we need to wear masks**, wash our hands, and physically distance ourselves. We also have vaccines, which can make a real difference in ending the pandemic!

Many Black communities are disproportionately affected by this pandemic as underlying health conditions, the lack of access to healthcare, systemic racism, and several other factors increase our likelihood of exposure to COVID-19. The vaccine is one of many resources that has been proven to be **safe and effective** for protecting us from contracting the virus and helps boost our immune system with targeted antigens. We urge everyone in our communities to make use of all the resources at their disposal during this pandemic to protect themselves and keep their families safe.



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Health Association of African Canadians

COVID-19 VACCINE: QUESTIONS & ANSWERS

This Q&A is focused on the Pfizer vaccine used in the clinics for African Nova Scotians. (June 2021)

Q How do vaccines work?

A Basically, vaccines work by training your body's defense (immunity) against a specific infection so that your body is ready to fight that infection even before the infection enters your body. The vaccine produces immunity without the risk and the potential dangers of infection.

Q Why is it so important for me to get the COVID-19 vaccine?

A COVID-19 vaccination is important for protecting your community, your family, your friends, and yourself from infection and spread of COVID-19. It is also important in preventing the development of variants.

Q What are the side effects of the vaccine?

A Serious side effects after getting the vaccine are rare. Some people get injection-site soreness or swelling within a day or two after vaccination. Others may have tiredness, headache, fever, chills, muscle pain, joint pain or swelling of armpit lymph glands. These symptoms usually settle within a few days but may be more noticeable after the second vaccine dose.

Q Should I take the vaccine if I have allergies?

A You should not take the vaccine if you have a severe allergic reaction (e.g. anaphylaxis) to any of the vaccine contents. You can safely receive the vaccine if you have an allergy to certain foods, insects, latex, and other common allergens. However, if you have a history of severe allergic reaction (e.g. anaphylaxis) to injectables or other vaccines please discuss vaccination with your doctor or health care provider who can evaluate and assess the risk. This should also be discussed with staff at the vaccine clinic who may choose to monitor you for a longer time after vaccination.

Q Is this vaccine safe seeing that it was developed so quickly?

A Although the vaccine was developed relatively quickly, the vaccine technology has been in use for a long time. The vaccine has been thoroughly tested and no shortcuts were taken in the clinical trials. The vaccine has proven to be safe, and highly effective in preventing serious disease, hospitalization, and death from COVID-19. The vaccine is no longer in the experimental phase. The vaccine continues to undergo continuous, and intense safety monitoring. Over 5 billion doses of COVID-19 vaccines have been given worldwide.

Q Are clinical studies of the vaccine accurate and reliable?

A yes - the studies are done extensively including a large demographic to test safety and efficacy before distribution of the vaccine. Just like any other pharmaceutical product, the vaccine is held to a high standard with oversight to ensure compliance with health authorities.

Q Is the vaccine safe to give my 12-year-old child?

A yes – the vaccine is approved and recommended for anyone 12 years of age and older as being safe and effective.

Q Will the vaccine change my DNA?

A no – the vaccine will not have any effect on your DNA. The vaccine itself is guickly destroyed by the body.

Q Can I get COVID-19 from the vaccine?

A no – the vaccine does not contain live virus or other infectious material.

Q Were Black people a part of the research on these vaccines?

A yes – about 10% of those included in the vaccine research studies were people of African descent. This compares favourably with about 4% of the Canadian population being people of African descent.

Q If I had COVID-19 should I get the vaccine and is it safe?

A yes – you should get the vaccine even if you had COVID-19 infection. There is good evidence to show that it is safe and will give you a bigger boost in immunity against the virus.

Q Will the vaccine work against the variants?

A yes – getting fully vaccinated with two doses will provide protection against the variants presently in Canada. However, delayed vaccination may result in less protection against future variants.

Q Will we need a yearly vaccine like getting the flu vaccine?

A That is not yet known but may be possible depending on the future development of variants and the duration of vaccine immunity. The other possibility is the need for a booster shot in several years.

Q Is it safe to take the vaccine with other medication or with other vaccines?

A yes – it is safe to take the vaccine with other medication or other vaccines. Please talk with your doctor or health care provider if you have any questions or concerns.

Q Is it safe to take the vaccine if I have an underlying medical condition or my immune system is suppressed?

A yes – it is safe and important because the underlying medical condition or immunosuppression may result in a worse outcome with COVID-19 infection. Please talk with your doctor or health care provider if you have any questions or concerns.

Q Can I stop wearing my mask and taking COVID-19 precautions after vaccination?

- A no you should continue wearing your mask and following Public Health guidelines after vaccination. You will not be fully protected until at least two weeks after your second dose. Public Health will provide guidelines on the COVID-19 precautions as more people get vaccinated.
- Q Does the COVID-19 vaccine contain any questionable substance?
- A no there are no questionable substances in the vaccine such as eggs, latex, fetal tissue, implants, microchips, or tracking devices. The vaccine does not contain preservatives.

Q Will the COVID-19 vaccine affect my fertility?

A no – there is no concern that the vaccine will affect fertility in any gender.

Q Is it safe to take the vaccine if I am pregnant or of childbearing age or breast-feeding?

A yes - it is safe to take the vaccine if you are of childbearing age, or pregnant. COVID-19 infection in pregnancy has greater risks for both the pregnant woman and the fetus including severe infection, miscarriage, or preterm birth. It is also safe to take the vaccine if you are breastfeeding.

Q What if my first dose vaccine was AstraZeneca?

A Here in Nova Scotia, you will have the option of choosing a second dose vaccine with either AstraZeneca or Pfizer or the Moderna vaccines. The risk of the blood clotting disorder after the AstraZeneca vaccine is much lower with the second dose.

Q If I am nervous and afraid to get the vaccine what can I do to prepare myself mentally?

A The best way to prepare yourself is to get accurate information from the right sources. Also speak with others who have already been vaccinated and your doctor or health care provider.

For more information on COVID-19 vaccines in Nova Scotia, or to book a vaccine appointment, please visit: novascotia.ca/coronavirus/vaccine/



