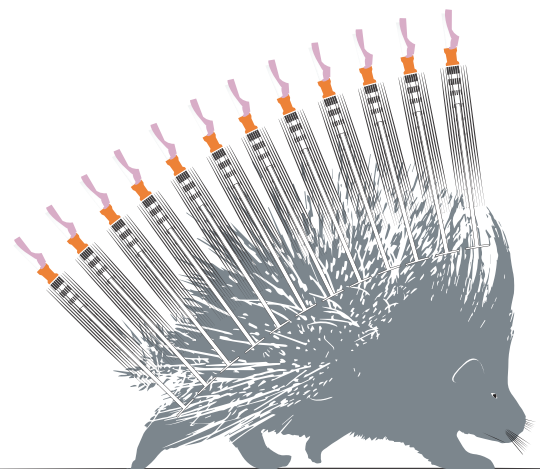


MAAD'OOKIING MSHKIKI SHARING MEDICINE

First Nations, Inuit & Métis Perspectives & Knowledge Sharing on COVID-19 Vaccines

What's in the Messenger RNA (mRNA) vaccines approved by Health Canada: Pfizer-BioNTech & Moderna & how do they work?



AS OF JANUARY 2021, THERE ARE TWO VACCINES APPROVED BY HEALTH CANADA: PFIZER-BIONTECH & MODERNA

Other vaccines (AstraZeneca/Oxford and Johnson & Johnson/Janssen) are being reviewed by Health Canada. *In general, common ingredients that make up a vaccine include:*

VACCINE COMPONENT	SAMPLE INGREDIENTS	WHAT THE COMPONENT DOES
FATS	1,2-distearoyl-sn-glycero-3-phosphocholine; lipid SM-102; cholesterol	A little fat molecule that carries the mRNA into your body so that your body knows to get to work
SALTS	Sodium acetate; potassium chloride; basic sodium phosphate dihydrate	Keeps the pH or acidity of the vaccine stable, protects the fat molecule, and helps the body absorb the solution
SUGAR	Sucrose	Helps keep the vaccine's components stable and safe while the vaccine is being stored.
SALINE SOLUTION	H2O + sodium chloride	Makes sure that the vaccine's salt content roughly matches the salt content of the blood.
A SNIPPET OF GENETIC CODE <i>(not the actual virus)</i>	mRNA mRNA-1273 SARS-CoV-2 (moderna) BNT162b2 (Pfizer)	Tells your body to make the COVID-19 spike protein but, without the rest of the virus, the spike is harmless. Your body's immune system then starts creating antibodies to target the new protein. The mRNA does not stay in your body and does not enter your cells.

COMMON QUESTIONS:

DO THESE VACCINES INCLUDE MERCURY?

There is no mercury or other ingredients such as formaldehyde or aluminum or fetal cells in the Moderna or Pfizer vaccines.

CAN I GET THE COVID-19 VACCINE IF I HAVE ALLERGIES?

It depends on what you are allergic to and the severity of your allergies. If you had a serious, life-threatening allergic reaction to any ingredient of the vaccine, then you should not receive the vaccine. An ingredient in the vaccines that has been associated with a rare but serious allergy (anaphylaxis) is polyethylene glycol (PEG). PEG can be found in some cosmetics, skin care products, laxatives, some processed foods and drinks, and other products.

A history of allergies or a past reaction to a different vaccine does not mean you cannot receive a COVID-19 vaccine. Please tell your vaccination provider if:

- you have had anaphylaxis but no cause was found after seeing an allergy specialist
- you had anaphylaxis before and did not see an allergy specialist
- you have had a serious reaction or anaphylaxis to a vaccine or its ingredients

ALLERGIC REACTIONS TO THE PFIZER AND MODERNA VACCINES ARE RARE

Some people have experienced an allergic reaction after receiving the vaccine. For example, of 1,893,000 doses of the Pfizer vaccine that were delivered in the United States in December 2020, only 21 people had an allergic reaction. However, almost **all** of these people had a previous history of anaphylaxis. Talk with your vaccination provider if you have a history of severe allergic reaction (e.g., anaphylaxis) to any other vaccine or injectable therapy (e.g., intramuscular, intravenous, or subcutaneous).

As with many vaccines, it is common to wait approximately 15-30 minutes after receiving a vaccine just to be sure.

WHAT ABOUT IMMEDIATE REACTIONS?

As your body works to build protection, you may have some side effects, and this is common when your body receives a vaccine.

- At the site where the vaccine enters your body: it is common to experience soreness in the muscle, redness and/or mild swelling
- Overall, you may experience fever, chills, tiredness or a headache
- Immediate reactions may be experienced more after the second dose.
- You may feel relief or another emotion as COVID-19 has taken its toll on our world.
- Some people may not experience any side effects at all.
- These reactions are usually mild or moderate, and clear up within a few days. If they do not, contact your health provider.

UNDERSTANDING SIDE EFFECTS & COVID-19 VACCINATIONS

- There is the potential among all vaccines to cause side effects – the Moderna, and Pfizer vaccines are no different.
- Side effects which are physical reactions observed during clinical trials, and subsequent administration among health care providers, with Moderna, and Pfizer reported to date:
 - Have been mild and do not pose a serious health risk
 - Are similar to side effects experienced with other routine vaccines for diseases such as mumps, polio, and measles
- More adults aged 18 to 64 reported side effects than those aged 65 and older
- With Moderna, side effects more often occur after the second dose, compared to the first one

MODERNA SIDE EFFECTS

MOST COMMON SIDE EFFECTS	
Pain at the injection site	92%
Fatigue	70%
Headache	64.7%
Muscle pain	61.5%
Chills	45.4%

PFIZER SIDE EFFECTS

MOST COMMON SIDE EFFECTS (MAY AFFECT MORE THAN 1 IN 10)	
Pain at the injection site	84.1%
Fatigue	62.9%
Headache	55.1%
Muscle pain	38.3%
Chills	31.9%
Joint pain	23.6%
Fever	14.2%

UNCOMMON SIDE EFFECTS (MAY AFFECT MORE THAN 1 IN 100)	
Enlarges lymph nodes <i>(body's natural reaction to fighting off infections)</i>	0.008%

After you've made your decision about receiving the vaccine, you will be asked to sign a consent form. You will also be provided with product information that includes details about the vaccine including ingredients.

REFERENCES – RESOURCES

[The Centre for Effective Practice - COVID-19 Resource Centre](#)

[Unambiguous Science: Sabina Vohra-Miller](#)

[Government of Canada: Patient Monograph – Pfizer Biotech COVID-19 Vaccine](#)

[Healthy Canadians: Pfizer-BioNTech COVID-19 vaccine: Health Canada recommendations for people with serious allergies](#)

[Health Canada: Moderna COVID-19 vaccine: What you should know](#)

[Health Canada: Pfizer-BioNTech COVID-19 vaccine: What you should know](#)

[National Advisory Committee on Immunization \(NACI\) Recommendations on the use of COVID-19 vaccines](#)

[Indigenous Primary Healthcare Council](#)

