East Toronto Health Partners

FREQENTLY ASKED QUESTIONS

ABOUT COVID-19 VACCINES

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Infection Prevention and Control physicians at MGH pose after getting their COVID-19 vaccines.

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1. Should you get the vaccine if you have multiple conditions such as diabetes, high blood pressure or frequent migraines?

Yes, the vaccine is safe for people with health conditions such as diabetes, high blood pressure or frequent migraines. The clinical trials were done with a diverse group of people of various ages and with varying health conditions. As many medical conditions increase the risk for severe COVID these individuals are likely to benefit the most from being vaccinated. Those who have severe allergic reactions (anaphylactic) are recommended to review the list of ingredients to ensure the vaccine doesn't contain something they are allergic to. Please talk to your primary care provider if you have more questions about your underlying health condition and the risks and benefits of the vaccine.

2. If the Pfizer vaccine is 95 per cent effective, what happened to the other 5%?

A 95 per cent efficacy rate is very good for a vaccine. It is rare to see a vaccine for any disease that is a 100 per cent effective at preventing infection. Five per cent of people in the clinical trials had a documentation of infection after receiving the vaccine. There is some evidence to suggest that those who had the vaccine and still got COVID had less severe symptoms of COVID.

3. I've heard about new strains of COVID. Do the vaccines still work on them?

Yes, most experts believe that the existing vaccines will work on new strains of the virus.

4. Is it safe to take the vaccine if you have allergies but have never had an anaphylactic event? For example, eggs, nuts, fish, antibiotics, steroids?

Yes. None of these allergies would be of concern based on the list of non-medicinal ingredients. If you have concerns check the list of non-medical ingredients for the Pfizer vaccine which are listed on this Ontario Health reference document (see page 4).

5. Are the vaccines safe for children under 16 years of age?

The Pfizer vaccine has not yet been approved for people under the age of 16. There are vaccine studies happening right now in younger age groups. It will likely be some time before vaccines are available for people under the age of 16. Many children who have COVID-19 are often sick for a shorter length of time and have a lower risk of serious problems after being infected. Focusing the vaccination in persons more vulnerable to a poor outcome from COVID will reduce deaths and need for hospital care.

6. A coworker who obtained the COVID-19 vaccine tested positive for COVID a few days afterwards. What will happen to the effectiveness of the vaccine in this case?

In this case they likely already had COVID-19 in their system when they received the vaccine. This will not impact the effectiveness of the vaccine. It takes time for your body to build immunity to the vaccine. For the Pfizer vaccine the 95% effectiveness is achieved 7 days after your second shot.

7. If you take the vaccine, do you still need to wear a face mask?

Yes, you do. There is still more to learn about whether people can asymptomatically carry COVID-19 in their nose and respiratory system, even after being vaccinated. Wearing a mask is still necessary at this time.

8. If you have a strong immune system, do you really need to take the vaccine?

Even if you are young and have a strong immune system you can still get very sick from COVID-19 infections. It is also important to remember that by taking the vaccine, you are lowering the risk of infection for those around you including the patients/clients you serve and your family members. As healthcare workers, we want to help other people and getting the vaccine is a great way to do that.

9. Are there blood products in the vaccine? I can't have them because of my religion.

No, the vaccine does not contain any blood products.

10. What happens if I miss my second dose?

If you miss your second dose, you will not have the same amount of protection from the COVID-19 virus. The first dose of the Pfizer vaccines may only give 50 per cent protection. Therefore it is important to get the second dose of the vaccine on time. For the Pfizer vaccine, that is 21-42 days from the first dose.

11. How do vaccines work?

Traditional vaccines introduce a piece of an organism or inactive/weakened form of an organism to the body so that the immune system can learn to recognize it and develop antibodies against it. These antibodies help to protect the person if exposed to the organism in the future.

The Pfizer and Moderna COVID-19 vaccines use a relatively new vaccine technology known as messenger RNA, or mRNA. The body uses mRNA to determine what proteins to make. The mRNA vaccines teach your body to produce a protein that looks like one on the outside of COVID. Our body then makes antibodies to that protein to protect us. It does not introduce any form of the virus to your body.

12. What is an mRNA vaccine?

The COVID-19 vaccines currently approved for use in Canada are mRNA vaccines. They use a tiny strand of genetic code from SARS-CoV-2 to teach the body to make the proteins needed to fight the virus. mRNA vaccines do not contain live virus and cannot cause infection.

13. How long does it take to be protected from COVID-19 after getting the vaccine?

Two doses of the COVID-19 vaccine are required to achieve full vaccine efficacy (effectiveness). Doses should be 21-42 days apart for the Pfizer vaccine. Doses should be 21-28 days apart for the Moderna vaccine. Immunity for both vaccines kicks in 7-14 days after the second dose is taken. If the second dose is not taken, there will not be the same amount of protection from the COVID-19 virus.

14. Can an individual get the vaccine if they are:

a. *trying to conceive;*
b. *planning on becoming pregnant within a year; or*
c. *undergoing IVF treatments?*

Yes. There is no evidence that the vaccine has any impact on fertility. It can be safely provided to women of child bearing age or those planning pregnancy in the near future.

15. Can pregnant or breastfeeding individuals take the vaccine?

Pregnant and breastfeeding individuals were not included in the original vaccine clinical trials. Therefore, there is limited information on the use of the Pfizer and Moderna COVID-19 vaccines for these individuals. The vaccine is thought to be as safe as the flu vaccine, which can be taken by people who are pregnant or breastfeeding.

The risks and benefits of getting the vaccine are different for everyone. Pregnant or breastfeeding individuals are eligible to receive the vaccine at MGH if they determine that the benefits outweigh the risk. This is a personal decision made in consultation with an obstetrical or primary care provider.

16. Does the vaccine have any effects on the male reproductive system?

No. There is no evidence that the vaccine has any impact on the male reproductive system.

17. How was the vaccine developed so fast?

The COVID-19 vaccine was developed quickly for several reasons.

- ***mRNA technology was already developed:*** Researchers did not start from scratch when developing the COVID-19 vaccine; the mRNA technology was already developed. Once a sequence of the virus was available, teams working with this mRNA technology used the code of the virus to build the formula for the vaccine.

- ***Clinical trial steps were done simultaneously:*** Vaccine clinical trial phases are usually done one at a time over a long period of time. However, in developing the COVID-19 vaccine, many steps were done in parallel. For example, data sets were sent to health regulatory bodies (e.g. Health Canada) for review in real-time rather than all at once at the end of each phase. Participants for

each phase were also recruited simultaneously to ensure there were no delays.

- ***The high levels of COVID-19 in the community:*** Assessing the efficacy of the vaccine requires that the test participants be exposed to COVID-19. Higher levels of COVID-19 in the community produced a more precise estimate of the vaccine's efficacy.
- **A "one health" approach:** Never before have the world's scientists had a singular vaccine focus.

18. Is the vaccine safe for halal, kosher or vegan diets?

Yes. Materials used in the vaccine, such as lipids and cholesterol, are plant-based or synthetic.

19. Will the vaccine be mandatory?

Vaccines will not likely be mandatory in Ontario, but everyone eligible is strongly encouraged to get vaccinated in order to maximize your safety.