



YOUR VACCINE QUESTIONS ANSWERED

Dr. Matthew Muller
Medical Director of Infection Prevention and Control at St. Michael's Hospital

We've all got so many questions about the COVID-19 vaccine. Dr. Bob Howard, former president and CEO at St. Michael's Hospital, recorded our most recent podcast with Dr. Matthew Muller, St. Michael's Medical Director of Infection Prevention and Control, to provide our community with the answers they're looking for.

Click [here to listen to the podcast](#) or read on for answers.

How many COVID-19 vaccines are there?

There are several in the works. As of now, only the Pfizer vaccine has been approved by Health Canada, but the Moderna is expected soon, and the AstraZeneca is coming up too.

How different are they?

All vaccines work on the same principle: they create an antigen in your body that resembles the virus, and your immune system builds a response to it. But they differ in practical aspects. The Pfizer vaccine requires extreme cold storage and can't be moved around easily. Moderna's vaccine is more portable. Most require two doses for full immunity, but some may only need one. The most important thing is how well they work and if they are safe.

Are they safe?

I'm confident that all vaccines approved by Health Canada are safe. Still, there can be rare side effects. We won't really know about them until millions of people have been vaccinated. But given the risks of COVID infection, and the long-term complications, I have no doubt that it's better to be vaccinated than not. I would certainly take whichever vaccine Health Canada approves.

What is happening with the vaccine rollout in Ontario?

The Pfizer pilot vaccine has rolled out in two sites, one in Toronto and one in Ottawa, with long-term care workers. Up next are acute care hospitals. While people have to come to the Pfizer vaccine, the Moderna is more portable, so it might be sent to long-term care communities or family physicians and clinics where people can receive it.

Will consumers be able to choose which vaccine they receive?

At some point in the future, when we have several vaccines, patients might be able to discuss options with their physician. But right now, I would say take whichever one you can get.

Who makes the decision about who gets the vaccine first?

The National Advisory Committee on Immunization has released a framework that explores how to prioritize vaccine delivery, but I think the ultimate decision will be made at the provincial level. With the initial rollout there are slight differences among the provinces. But the priorities are health-care workers in long-term care, health-care workers in acute care, patients in long-term care, and then elderly patients in a variety of contexts. There's still some fine-tuning to do, because there are other high risk groups, and those details haven't been worked out yet. We'll need to look at who is at the highest risk of a bad outcome if they get COVID. And we need health-care workers to be up and running to make sure patients receive good care.

What is the plan at St. Michael's Hospital?

St. Michael's will follow the province's directions.

Can pregnant or breastfeeding women receive the vaccine?

That's a tough question. Pregnant and breastfeeding women were not included in the phase 3 trials of the Pfizer and other vaccines, which means we don't have data to suggest whether it's safe or not. Out of caution, the initial recommendation is to not vaccinate this group. But there is a discussion about speaking to your physician and weighing the risks and benefits. Once we have more data, we will be able to make a better decision.

What about children?

Children are the least likely to have serious repercussions from COVID-19. They're more likely to be asymptomatic, and they may be less infectious. Children will be at the end of the queue for the vaccine.

And the immunocompromised?

This might be the toughest question, because this group wasn't vaccinated in the phase 3 studies. There's no reason to suspect that side effects would be different, but there's concern that the vaccine may not be effective for this group. If we have limited supply, we want to make sure it goes to individuals who can mount an immune response. On the other hand, the immunocompromised might be at high risk of complications, and so could benefit from the vaccine. In some cases it might be better to vaccinate people who surround immunocompromised individuals. It's a difficult question and it will take time to see where we land. But I think once we have a lot of vaccines, that group will be prioritized.

What about those who have already had COVID? Should they get the vaccine?

Initially, the recommendation is yes, because infection can reoccur, even if it's not common. We don't know whether COVID itself creates a lasting immune response to protect you forever or for a year or six months. The suspicion is that it's not permanent immunity, so vaccination may be a good idea.

If I get the vaccine, can I still get COVID-19?

Yes. The efficacy of the frontrunner candidates ranges from 75 to 95 per cent. Nothing is 100 per cent.

If I get vaccinated, will I still need to maintain physical distancing and wear a mask?

You absolutely will. First, it takes a few weeks for the vaccine to kick in. Second, it's not 100 per cent effective. And third, we don't know how long the vaccine remains effective. So keep up with the safety measures! The silver lining is that once we have enough people vaccinated, we should see COVID beaten down and defeated. Then we can relax the measures.

Do you have a sense of when that will be?

There's a sense of when it's not going to be, and that's January and February. Beyond that, it depends how quickly we get the vaccine rolled out, and how many people are willing to get it. That's why good communication about the benefits of the vaccine and any potential risks is important. I think we're looking at another nine to 12 months to get there, but there will be big benefits from the vaccine well before then. We're on the brink of health-care system collapse because of rising numbers from our second wave. If we can vaccinate vulnerable individuals, we'll be able to keep people out of the hospital, and that has major benefits for everyone. So the vaccine can make a big difference even early on.

So there's a light at the end of the tunnel, but we need to stay the course.

That's right. We're going to get there, and we'll learn a lot in the next three months. I don't want to project beyond that. The vaccine might arrive faster or slower than expected, people may be more or less willing to get it. There are a number of variables, but I think for the next three months we'll be in the situation we're in now. So stay well and stay safe.



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