Ontario-Based Data and Professor of Obstetrics and Gynaecology Agree: Getting Vaccinated While Pregnant Protects the Parent and the Baby from COVID-19

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Many doctors and researchers agree that getting vaccinated during pregnancy, especially in the later stages, can provide protection for the baby until it is old enough to be vaccinated (<u>source</u>).

The Toronto Star interviewed Dr. Deborah Money on this topic. She is a professor of Obstetrics and Gynaecology at the University of British Columbia (<u>source</u>). In the same article, a Toronto Star reporter summarizes the findings from a new study based on data about pregnant people and their infants in Ontario (<u>source</u>).

This article outlines some of the key concepts from that article. Click <u>here</u> to read the original article and click <u>here</u> to read the new study.

Key Concepts from the Interview with Dr. Money

"We're really wanting pregnant women to be sort of maximally vaccinated against COVID during particularly the second half of their pregnancy, both for their health and for the advantage it can confer to the infant," says Dr. Money (source).

In other words, doctors want pregnant people to get their first two doses and a COVID-19 booster dose, especially during the second half of the pregnancy. When pregnant people get a COVID-19 vaccine or a booster dose, they are protecting both themselves and giving their unborn child protection as well.

Dr. Money explains that this is true for almost all vaccines (<u>source</u>). When a pregnant person is vaccinated, they develop an antibody response to the vaccine that circulates in their bloodstream (<u>source</u>). These antibodies are passed through the placenta to the baby (<u>source</u>). She added that more antibodies pass onto the infant during the second half of the pregnancy (<u>source</u>).

Dr. Money says this process offers a "buffer of protection" during the baby's first few months until they can get a vaccine (<u>source</u>). Currently, infants have to wait until they are six months or older to receive the COVID-19 vaccine (<u>source</u>).

To her, not getting boosted is "a missed opportunity to do something really very simple and safe" (<u>source</u>). She encourages pregnant people "to take that extra booster and just ensure that you have that extra protection" (<u>source</u>).

When COVID-19 vaccines were first available, Dr. Money says there was natural anxiety and worry about getting vaccinated due to the rapid roll out and lack of studies involving pregnant people (source). Naturally, pregnant people were concerned about miscarriages, stillbirths, and other adverse effects on the fetus (source).

Now, she says, there's "a huge amount" of data from around the world that researchers could not find evidence of any adverse outcomes from the COVID-19 vaccine on the baby, including the ones mentioned above (<u>source</u>).

There is also "a huge amount of data" from around the world that vaccination reduces the risk of someone who is pregnant getting sick and reduces risk of pre-term birth (source).

Highlights from the New Study with Ontario-Based Data

In addition to international data, just last week, a study was published that studied pregnant people and their babies in Ontario (<u>source</u>). Click <u>here</u> to read that study.

It was researched on behalf of the Canadian Immunization Research Network (<u>source</u>). The study's authors are Provincial Collaborative Network Investigators, including professors of medical sciences and public health, physicians, data analysts, PhD students, and scientists (<u>source</u>).

The study shows that when a pregnant person received a primary mRNA COVID-19 vaccine series, it was highly effective against the Deltavariant and moderately effective against the Omicron variant (<u>source</u>). COVID-19 vaccines were also moderately effective at preventing newborns from being admitted to the hospital during the first six months of their lives (<u>source</u>).

Put simply, getting a COVID-19 vaccine while pregnant provides significant protection for the baby against both COVID-19 infection and hospitalization, but it is still not a guarantee that these things won't happen for other reasons.

The study also found the effectiveness of two doses decreased over time against Omicron infection (<u>source</u>). The greatest protection occurred during the first eight weeks of the baby's life and when the parent was vaccinated in the third trimester of their pregnancy (<u>source</u>).

Sarah Jorgensen, who is the lead author of this study, says that a COVID-19 booster improved vaccine effectiveness against both infection and hospitalization (<u>source</u>).

It's important to note that the study did not include:

- infants whose parents received one or two doses before the baby was conceived and no vaccines during pregnancy
- infants whose parents received a first or second dose less than 14 days before delivery
- infants whose parents received a first or second dose after they gave birth
- Infants of parents who received a first or second dose at least 14 days before the infant's COVID-19 test (as antibodies are also passed on through breast milk)
- infants who were part of a multiple birth (such as twins or triplets)
- infants who were born at less than 20 weeks gestation, and
- infants who weighed less than 500 g at birth (source, source).

It's also important to know the risks of not getting vaccinated. According to Dr. Money, pregnant people who are unvaccinated have higher rates of hospitalization and Intensive Care Unit (ICU) admission related to COVID-19 than those who are pregnant and vaccinated (source).

Dr. Money says this rate is much higher than nonpregnant women in the same age range, and it worsens if they are older or have other health issues and get COVID-19 in the second or third trimester of their pregnancy (<u>source</u>).

"That can be blunted and reduced substantially by being vaccinated," she advises (source).

Final Thoughts

To sum up, both Ontario-based data and Dr. Money, Professor of Obstetrics and Gynaecology, agree that getting vaccinated while pregnant protects the parent and the baby from COVID-19, and that getting a COVID-19 booster will increase the protection for both.

The most recent data that surveyed the 78,915 Ontarians who were pregnant on Nov. 6, 2022 found that:

- 1% had all five doses
- 12% had at least four doses
- 44% had at least three doses
- 81% had at least two doses, and
- 83% had at least one dose (<u>source</u>).

It's not just pregnant people. Provincial data show that the number of Ontarians getting a COVID-19 booster is low (<u>source</u>).

"People who ordinarily would take vaccines are sort of passing on the COVID booster and some of it is they're sort of done with COVID and they're just fed up with it and they feel it's gone," Dr. Money says (source).

It's important for everyone to get a COVID-19 booster, especially pregnant people (source).

"In particular for an infant — we don't really know what the next many months are going to show," says Dr. Money, referring to how COVID-19 will circulate (<u>source</u>).

If you are pregnant and you have any questions or concerns, here are some options to ask questions to a medical professional:

- 1. You can speak to your family healthcare provider, such as your family doctor.
- 2. If you don't have a family doctor, you can call the Provincial Vaccine Contact Centre at 1-833-943-3900 to speak to a health specialist. (TTY for people who are deaf, hearing-impaired or speech-impaired: 1-866-797-0007). This line is available in more than 300 languages, seven days a week from 8:00 a.m. to 8:00 p.m.
- 3. Another option is to visit COVID-19 Vaccine Consult Service to book a confidential phone appointment with a SickKids Registered Nurse. Click here to do that.

If you think you may be experiencing symptoms of COVID-19, take the self-assessment at www.ontario.ca/coronavirus. Follow all directions from your medical provider or your local health unit at the following phone numbers:

Health Connect Ontario: 811

Telehealth Ontario: 1-866-797-0000

Toronto Public Health: 416-338-7600

Peel Public Health: 905-799-7700

Durham Region Health Department: 905-668-7711

York Region Public Health: 1-877-464-9675