

Vaccines received during pregnancy, 2019

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Around the world, prenatal vaccination has been widely recommended to protect both mothers and babies. Vaccination of mothers against pertussis (or whooping cough) protects the infant during their first few months of life when they are unable to be vaccinated themselves and are most vulnerable to this disease. Vaccination against the flu protects mothers from infection and helps prevent flu-related complications during their pregnancy.

The COVID-19 pandemic has led to changes in the health behaviours of Canadians. Many people, including pregnant women, may have cancelled or postponed appointments with health professionals in order to limit exposure to and prevent infection with the COVID-19 virus. New 2019 data on vaccines received during pregnancy provide important baseline information that can be used to measure the impact of the pandemic on mothers' behaviours and beliefs around prenatal vaccination when compared with results from future cycles of the survey.

For the first time, the Childhood National Immunization Coverage Survey included a component on prenatal vaccination also known as the Survey of Vaccination during Pregnancy. This component asked mothers across Canada who gave birth between September 2, 2018 and March 1, 2019 about vaccines they received during their pregnancy. The survey also included questions on their knowledge and beliefs about prenatal vaccination.

Fewer than half of Canadian women are receiving the recommended prenatal vaccines

Canada's National Advisory Committee on Immunization has recommended that during each of their pregnancies, women should receive the influenza vaccine (since 2011) and the Tdap vaccine (since 2018) which protects the baby from contracting pertussis (whooping cough). The majority of provinces and territories now offer public funding for these vaccines for pregnant women.

The results show that 44% of women were vaccinated against pertussis while pregnant. Additionally, flu vaccination coverage was 45% among women who were pregnant when the flu vaccine was being offered.

Table 1
Vaccination coverage during pregnancy, Canada, 2019

| | Estimates | Lower limit of confidence interval (95%) | Upper limit of confidence interval (95%) |
|--|-------------------|--|--|
| | % | | |
| Vaccination against pertussis (whooping cough) | 43.5 ¹ | 41.4 | 45.6 |
| Vaccination against influenza (flu) | 45.0 ² | 42.1 | 47.9 |

1. Vaccination coverage among mothers who gave birth between September 2, 2018, and March 1, 2019, inclusively.

2. Vaccination coverage among mothers who gave birth between December 1, 2018, and March 1, 2019, inclusively.

Source(s): Childhood National Immunization Coverage Survey (5185).

Advice from primary maternity care providers increases vaccine uptake

Half of women who had received maternity care reported they were advised by their primary maternity care provider to get vaccinated against pertussis (49%). Among those who were pregnant when the flu vaccine was being offered, 61% reported they were advised to get vaccinated against the flu.

Women who reported they were advised by their primary maternity care provider to get vaccinated against pertussis or the flu were more likely to have been vaccinated than those who were not. Specifically, among women who reported they were advised, vaccination coverage was 78% for pertussis and 64% for the flu. In contrast, vaccine uptake for these vaccines was significantly lower among women who reported they were not advised to get them (5% received the pertussis vaccine and 12% received the flu vaccine).

Research shows that provider recommendation and information sharing are drivers of vaccination. This is further illustrated in the reasons why mothers did not receive the recommended prenatal vaccines. The primary reasons reported by mothers for not receiving these vaccines were: lack of awareness that the vaccines were recommended during pregnancy (60% for pertussis; 23% for flu); and not wanting to receive the vaccines while pregnant (16% for pertussis; 46% for flu).

The majority of mothers believe that the recommended prenatal vaccines are safe

In addition to collecting data on vaccines received during pregnancy, mothers were also asked about their knowledge and beliefs on vaccination. Nearly three-quarters (73%) of mothers agreed that pertussis is a severe disease for babies. Also, 6 out of 10 (60%) women reported that vaccination against pertussis during pregnancy was safe for the mother, while 10% believed the vaccine could be harmful for the fetus.

A majority of women (84%) believed that flu vaccination during pregnancy helps to protect the mother from getting the flu. Furthermore, most women believed that receiving the flu vaccine during pregnancy was safe for the mother (83%) and for the fetus (77%).

Note to readers

The Childhood National Immunization Coverage Survey (CNICS) is sponsored by the Public Health Agency of Canada and has been conducted by Statistics Canada every two years since 2011. The data on vaccination during pregnancy come from a newly added component of the CNICS also known as the Survey of Vaccination during Pregnancy.

The CNICS 2019 comprises two components. The first component consists of information collected on childhood vaccines given to children aged 2, 7, 14 and 17 years old at the national level, for which results will be released in spring 2021. The second component on vaccines received during pregnancy was introduced for the first time in 2019. The purpose of this component is to collect information at the national, provincial, and territorial levels on vaccines administered to pregnant women, specifically vaccination against pertussis and the flu.

The target population for this second component of the survey was women who gave birth between September 2, 2018 and March 1, 2019, living in the 10 provinces and 3 territories, not residing on First Nations reserves and not institutionalized.

Data collection and methodology

The 2019 CNICS component on vaccines received during pregnancy asked biological mothers questions about vaccines they were offered and received during their recent pregnancy, in addition to questions about their knowledge and beliefs regarding immunization. This component of the survey was conducted via a self-response electronic questionnaire or a telephone interview.

Due to differences in methodology, estimates of vaccine coverage from CNICS results may not fully align with coverage estimates produced from other sources of immunization information, such as provincial and territorial vaccine registry data.

CNICS provincial and territorial estimates are produced using a consistent methodology. This allows for cross-comparison of provincial and territorial estimates and permits Statistics Canada to produce national-level estimates.

Definitions, data sources and methods: survey number 5185.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; STATCAN.infostats-infostats.STATCAN@canada.ca) or Media Relations (613-951-4636; STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca).

For more information about the survey, you can contact the Public Health Agency of Canada's General Enquiries at 1-844-280-5020.