

Childhood National Immunization Coverage Survey, 2019

Released at 8:30 a.m. Eastern time in *The Daily*, Monday, May 3, 2021

Just prior to the COVID-19 pandemic, the overwhelming majority of parents or guardians of 2-year-olds agreed that vaccines were safe and effective and helped protect their child's health. Parents and guardians were also more favourably inclined to have their child vaccinated in 2019 than they were two years earlier.

At the time of this release, COVID-19 vaccines are not yet approved for children in Canada. However, a variety of other vaccines are recommended to help prevent childhood diseases such as measles, tetanus and polio.

Vaccines against these diseases are provided free of charge to children and funded by provincial and territorial governments. Vaccines administered in childhood help protect those who are vaccinated and, equally importantly, help protect those who are unable to be vaccinated, via herd immunity.

The COVID-19 pandemic has brought considerable attention to the development of new vaccines against a novel coronavirus. The pandemic has also affected our day-to-day lives; medical appointments may have been cancelled or postponed, and in-school vaccination has ceased or been delayed in most regions.

These disruptions in childhood immunization rates are not reflected in the new data released today from the 2019 cycle of the Childhood National Immunization Coverage Survey (CNICS), since the survey was conducted before the pandemic. Nevertheless, results from this cycle of the CNICS will provide an important baseline to measure the impact of the COVID-19 pandemic on vaccine uptake and on the knowledge and beliefs of parents and guardians who make decisions about vaccination.

Data from the *Canadian Perspectives Survey Series 3*, collected in June 2020, indicated that 14% of Canadians were unwilling to receive a COVID-19 vaccine. One of the main reasons for this reluctance was concern about risks and side effects. The methodologies of these two surveys and the vaccinations referred to differ. Nonetheless, parents and guardians of 2- and 14-year-olds who responded to the CNICS and were hesitant about or refused recommended vaccinations for their child also identified the perceived risk of side effects as a main reason for their hesitancy or refusal.

Estimates of vaccine coverage among 2-year-olds comparable with those of 2017

According to the National Advisory Committee on Immunization, it is recommended that children receive at least one dose of the measles, mumps and rubella vaccine and four doses of the diphtheria, pertussis (whooping cough) and tetanus vaccine by their second birthday.

In 2019, 90% of 2-year-olds in Canada had been vaccinated against measles, and 78% had been vaccinated against diphtheria, pertussis and tetanus, relatively unchanged from two years earlier.

The vast majority of 2-year-olds (92%) had received the polio vaccine, while nearly three-quarters (74%) had been vaccinated against *Haemophilus influenzae* type b (Hib).

Approximately 91% of 2-year-olds had received the meningococcal C vaccine, up from 88% in 2017.

Vaccination rates against pneumococcal diseases (84%) and varicella (83%), also known as chicken pox, were relatively unchanged from 2017 to 2019.

Most Canadians believe childhood vaccines are safe and effective

The CNICS also asked parents and guardians about their knowledge and beliefs regarding vaccination. For the 2019 cycle, an overwhelming majority of parents or guardians of 2-year-olds agreed that vaccines are safe (96%) and effective (98%) and help protect their child's health (97%).



Most parents and guardians also agreed that having their child vaccinated helps protect the health of others in their family (96%) and their community (97%).

Public perception regarding vaccines trending in a positive direction

Parents and guardians were more favourably inclined to have their child vaccinated in 2019 than they were two years earlier.

For example, in 2019, 77% of parents or guardians agreed that delaying childhood vaccines caused risks to their health, up from 69% in 2017. Furthermore, 94% agreed that unvaccinated children were at a higher risk of contracting serious diseases, up from 87%.

In 2019, one-fifth (20%) of parents or guardians of 2-year-old children agreed that acquiring immunity through natural infection was better than through vaccination, down from almost one-third (31%) in 2017. In addition, 11% of parents or guardians agreed that leading a healthy lifestyle could replace the need for vaccination, down from 17%.

Table 1
Vaccination coverage¹ by antigen, children aged 2, Canada, 2017 and 2019

	2017			2019		
	Immunization coverage	Confidence interval (95%): Lower limit	Confidence interval (95%): Upper limit	Immunization coverage	Confidence interval (95%): Lower limit	Confidence interval (95%): Upper limit
	%					
Diphtheria	75.8	73.0	78.4	77.5	73.2	81.4
Pertussis (whooping cough)	75.8	73.0	78.4	77.5	73.2	81.4
Tetanus	75.8	73.0	78.4	77.5	73.2	81.4
Polio (IPV)	90.7	89.1	92.1	91.9	88.7	94.2
Haemophilus influenzae type b (Hib)	73.4	70.7	75.9	74.4	69.8	78.5
Measles	90.2	88.2	92.0	90.2	86.8	92.8
Mumps	89.9	87.8	91.7	89.2	85.6	91.9
Rubella	90.0	87.8	91.7	89.4	85.9	92.1
Varicella (chicken pox)	82.9	80.3	85.3	82.7	78.6	86.0
Meningococcal type C	87.6	85.7	89.3	91.1*	87.9	93.5
Pneumococcal ²	81.4	79.1	83.5	84.4	80.4	87.6
Rotavirus ³	78.8	76.6	80.9	84.5*	80.5	87.7

* significantly different from reference category (p < 0.05)

1. Based on combining reports of vaccination from parents and guardians, health care providers, and provincial registries (Manitoba and Prince Edward Island only).

2. Coverage indicates four doses for the Northwest Territories and Nunavut, and three doses for the other provinces and territories.

3. Coverage indicates two doses for 2-year-olds in provinces and territories that, as of March 1, 2017, provided publicly funded rotavirus vaccines: Newfoundland and Labrador, Prince Edward Island, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, the Northwest Territories, and Yukon.

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

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 2019 CNICS consisted of two components. The first component collected information on childhood vaccines given to children younger than 18 at the national level. The target population for this component of the survey was children aged 2, 7, 14 and 17 years old as of March 1, 2019. The second component, also known as the component on vaccination during pregnancy, was conducted for the first time in 2019. The purpose of this component was to collect information at the national, provincial and territorial levels on vaccines administered to pregnant women, specifically vaccination against pertussis and the flu. The results for this component were released in November 2020.

Data collection and methodology

Immunization data collected for the CNICS are from three sources, namely the parent or guardian of the selected child, the child's health care providers, and the provincial immunization registry (for provinces and territories with signed data sharing agreements with Statistics Canada).

Data from the three sources (parents and guardians, health care providers, and provincial or territorial registries) were combined to produce the immunization information for each child. This was then assessed to determine whether the child was considered covered, according to the national recommendations for childhood vaccination provided by the Public Health Agency of Canada. However, given the modes of data collection, missing, incomplete or invalid information may contribute to the undercounting of vaccine doses and, as a result, to underestimates of vaccine coverage.

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

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, contact the Public Health Agency of Canada's General Enquiries (1-844-280-5020).