Experiences of Canadians with long-term symptoms following COVID-19

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As of June 2023, the majority of Canadians had been infected by the virus causing COVID-19. Most people recover from their symptoms and are able to carry on with their lives, however, for many others, symptoms persist for months, often impacting their ability to work and their quality of life overall.

A new study released today, "Experiences of Canadians with long-term symptoms following COVID-19," examines COVID-19 infections including reinfections, long-term symptoms and their impact on the Canadian adult population more than three years since the beginning of the pandemic. The study is based on data from the 2023 Canadian COVID-19 Antibody and Health Survey—Follow-up Questionnaire which are also being released today. The survey and the study were both done in partnership with the Public Health Agency of Canada.

The following are five key findings of the study regarding long-term symptoms of COVID-19:

1. Nearly one in five Canadian adults have had more than one known or suspected COVID-19 infection

The percentage of Canadian adults who ever tested positive for or suspected a COVID-19 infection (based on symptoms or recent contact with a COVID-19 infected person) increased from 38.7% in the summer of 2022 to 64.4% by June 2023. Many Canadian adults have had COVID-19 more than once. As of June 2023, 44.6% of Canadians had experienced one infection, 14.4% had experienced two, and 5.4% had experienced three or more. These numbers, however, are likely an underestimate of the true number of infections by June 2023, as individuals may not always be aware that they are or have been infected.

2. About one in nine of all Canadian adults have experienced long-term symptoms from a COVID-19 infection

By June 2023, about one in nine (11.7%) of the total adult population reported experiencing long-term symptoms, defined as the presence of symptoms three or more months after a COVID-19 infection that could not be explained by anything else. This represents 3.5 million Canadians, and nearly 1 in 5 (19.0%) Canadian adults who had been infected at least once.

3. Over half (58.2%) of Canadian adults who ever had long-term symptoms continued to experience these symptoms up to June 2023

Of those who continue to experience long-term symptoms, 79.3% had been experiencing symptoms for six months or more, including 42.2% with symptoms for one year or more. In contrast, among those who reported a resolution of their long-term symptoms, almost three-quarters (73.9%) experienced them for fewer than six months, and 93.0% experienced them for less than a year.

4. About 7 in 10 Canadian adults with long-term symptoms experienced them on a daily or nearly daily basis

The impacts of long-term symptoms on Canadians' daily lives vary depending on the severity and frequency of their symptoms. Among those who continued to experience symptoms in June 2023, about 7 in 10 reported experiencing them every day or almost every day when symptoms were at their worst, and about 1 in 5 (21.7%) reported being often or always limited by them in their daily activities. Overall, half (49.7%) of people with ongoing symptoms reported no improvement in their symptoms over time.





5. Two-thirds of Canadian adults who sought healthcare services for their long-term symptoms reported not receiving adequate care for any of their symptoms

Among Canadians with long-term symptoms who needed healthcare services, two-thirds (66.4%) reported not receiving adequate treatment, service, or support for any of their symptoms, one in five (21.1%) reported receiving adequate care for some of their symptoms and one in eight (12.5%) adults reported receiving treatment, services, or support for all their symptoms.

Note to readers

The Canadian COVID-19 Antibody and Health Survey – Follow-up Questionnaire (CCAHS-FQ) was administered by Statistics Canada in collaboration with the Public Health Agency of Canada.

Populations excluded from the CCAHS-FQ were persons living in the three territories, persons under 18 years of age, persons living on reserves and other Indigenous settlements in the provinces, persons living in institutions, persons living on Canadian armed forces bases and residents of certain remote regions.

Survey weights were used to create a representative sample and to minimize any potential bias that could arise from the follow-up survey non-response. Non-response adjustments and calibration using available auxiliary information were also applied and are reflected in the survey weights.

The reference period for the CCAHS-FQ was from May 23 to June 19, 2023. Respondents of the CCAHS Cycle 2 (completed between April 1 and August 31, 2022) with a valid email address were sent a follow-up questionnaire that asked about changes in vaccination status, infection and reinfection with the virus that causes COVID-19, symptoms of COVID-19 and their impact on daily life, health conditions and the use of healthcare services.

The CCAHS-FQ relied on self-reported information and did not include any blood test to test for antibodies against infection or saliva test to check for an active COVID-19 infection. There are limitations to self-reported information, including that a large percentage of Canadians with antibodies indicative of a previous SARS-CoV-2 infection were not aware of having had the virus, which would not be reflected in self-reported information. Thus, it is possible that the results presented underrepresent the current COVID-19 situation in Canada

Some results presented used collected data and survey weights from the CCAHS – Cycle 2 (2022), and these results may vary slightly from what was previously reported by Statistics Canada. Note that results previously presented were based on provisional data and provisional weights, and not the official data set and weights for the survey, which were finalized at a later date. In this report, the official data set and weights were used to calculate these results.

Although there is an observed association between the number of COVID-19 infections and long-term symptom risk, there is not enough evidence to demonstrate that the relationship reported in this release is causal in either direction. Some related factors are important to note. Those infected earlier in the pandemic, before vaccination and the emergence of the Omicron variant, were more likely to develop long-term symptoms, but also had more time since their first infection to fall ill from COVID-19 again. More sophisticated studies and analyses are required to explain the association between reinfection and the likelihood of developing long-term symptoms.

Definitions, data sources and methods: survey number 5339.

The article entitled "Experiences of Canadians with long-term symptoms following COVID-19" is now available in *Insights on Canadian Society* (**75-006-X**).

Data for the Canadian COVID-19 Antibody and Health Survey – Follow-up Questionnaire are now available.

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; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).