Tracking COVID-19 for Safer Schools¹

Study Results and Key Findings from 2020-2021 School Year



¹This study is funded by the Government of Canada via its COVID-19 Immunity Task Force



PURPOSE

- A key public health priority throughout the pandemic is to keep schools open while remaining safe for both employees and students.
- The main purpose of this study was to estimate the proportion of school staff that have been infected with the COVID-19 virus using sensitive antibody testing.
- The study also examined vaccine acceptance and mental health outcomes.



More detailed results on

the next page!



PARTICIPANTS

- 2,446 district employees completed a study component: 2,444 filled out the study questionnaire and 2,201 completed the blood serology test
- Blood samples were collected between February and June 2021



MAIN CONCLUSIONS

- The seroprevalence of COVID-19 among school staff in this study was comparable to the community.
- The majority, but not all, of school staff intend to get a COVID-19 vaccine.
- School staff perceive themselves at risk of contracting COVID-19.
- Mental health of school staff is a pressing concern and the lasting impacts need to be followed over time.



WHAT'S NEXT?

- The study team will reach out to participants in January 2022 to continue this important research that will monitor new COVID-19 exposures, the body's antibody response to vaccination, and the mental health of school staff.
- Results will be shared in scientific journals after a peer-review process.



SEROLOGY (ANTIBODY) TESTING

- Uses a sample of blood to check for antibodies produced by the body after exposure to the COVID-19 virus.
- Can detect infections that occur well before collection (including before the 2020/2021 school year).
- Measures antibodies against the spike (S) protein and N protein of the virus.
- Distinguishes between a natural infection and vaccination. Antibodies against the S protein last more than 12 months and are a main component of vaccines; antibodies against the N protein last for 9-12 months and are only present after natural infection.



*The comparison group was blood donors from the same age, sex, period of collection and residential postal code

Self-reported close contact with a COVID-19 case (by type of relationship)

Household family member Other family member Friend Co-worker Student Someone else





Self-reported masking behaviour

(response of usually or always)

Wore a mask in public places

Avoided crowded places and gatherings

Reported that co-workers wore masks in their presence

Elementary staff reported that students wore masks in their presence*

Secondary staff reported that students wore masks in their presence

*Masking was only required for grades 6-12 students at the time of the survey





VACCINE ACCEPTANCE AND PERCEIVED RISK

74% 92%

79%

84%

28%

68%

0

- OF SCHOOL STAFF WERE VACCINATED AT THE TIME THEY WERE SURVEYED (1,796 out of 2,444, between Feb 3 and June 21, 2021)
- **REPORTED THAT THEY INTENDED TO GET A COVID-19 VACCINE**
- HAD OBTAINED THE FLU SHOT IN THE PAST YEAR
- FELT THEY WERE AT RISK OF CONTRACTING COVID-19
- FELT THEY WERE AT RISK OF DEVELOPING SEVERE COMPLICATIONS FROM **COVID-19**

REPORTED HAVING A FAMILY MEMBER AT RISK FROM DEVELOPING SEVERE **COMPLICATIONS FROM COVID-19**

FIGURE 1 Participant beliefs and attitudes related to vaccine acceptance: dimension scores on a scale from 1 to 5 (low to high).

I DON'T TRUST COVID-19 INFORMATION I BELIEVE IN COVID-19 CONSPIRACY THEORIES **COVID-19 HAS SEVERE CONSEQUENCES** I AM AT RISK OF CONTRACTING COVID-19 THERE ARE MANY BENEFITS OF GETTING A COVID-19 VACCINE I BELIEVE IN GETTING ROUTINE VACCINES **COVID-19 IS A SERIOUS DISEASE** I TRUST THE ADVICE OF MY DOCTOR AND PUBLIC HEALTH OFFICIALS



MENTAL HEALTH 2,305 school staff completed questions related to their mental health

18.7% of school staff

reported moderate to severe levels of anxiety which was higher than a Statistics Canada survey with a representative sample of Canadians in Feb-May 2021 (13%)

15.7% reported poor or fair mental health which was higher than the national reported in the 2012 Canadian **Community Health Survey (7.8%)**



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For more information please visit: https://www.bcchr.ca/COVIDatschools or contact Drs. Pascal Lavoie or Louise Mâsse at: abcovid@bcchr.ca



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Tracking COVID-19

For Safer Schools

