

# COVID-19 Testing and Immunization Readiness

A health indicator report

2021-06-21



#### **KEY FINDINGS**

### **BACKGROUND**

- As of June 20, 2021, the COVID-19 pandemic has infected more than 1 million people and has caused over 25,000 deaths in Canada.<sup>1</sup> While access to COVID-19 testing has become widely available, little is known about the extent to which Canadians intend to get tested for the virus and the reasons why they would or would not request a test.<sup>2</sup>
- The development and implementation of a COVID-19 vaccine is a key factor in helping end the pandemic.
   The success of a COVID-19 vaccine highly depends on the willingness of the population to get vaccinated.<sup>3</sup>
- 3. In fall 2020, Timiskaming Health Unit (THU) partnered with Rapid Risk Factor Surveillance System (RRFSS) to collect local in-depth health information related to COVID-19 behaviours and attitudes. Examples include precautions (physical distancing and face coverings), employment, financial impacts, food security and vaccine readiness. Through a bilingual online survey, responses were collected from Timiskaming residents between September and December 2020.
- 4. The aim of this report is to summarize behaviours, attitudes and intentions among Timiskaming residents regarding:
  - A. COVID-19 symptoms and testing
  - B. COVID-19 vaccine readiness
- 5. See data notes and limitations at the end of this document for more information.

- 82% of Timiskaming residents reported that they would get tested for COVID-19 if they developed symptoms.
- **88%** of females and **76%** of males stated that they would get tested if symptoms appeared.
- A significantly higher proportion of males (15%) stated that they would not get tested compared to females (5%).
- Not wanting to isolate for 14 days was selected as the top reason for not wanting to get tested for COVID-19.
- **59%** of Timiskaming residents stated that they would definitely or probably receive the vaccine.
- 52% of respondents who stated that they would not get tested for COVID-19 also stated that they would definitely not receive the vaccine.
- When the data was broken down by age, a significantly higher percentage of individuals aged 65+ planned to get the vaccine, compared to all other age groups.
- Wanting to protect oneself was selected as the top reason for wanting to get the COVID-19 vaccine.

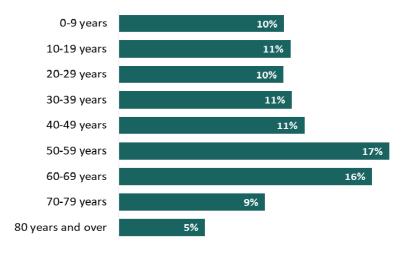
# **Timiskaming**

As of 2016, the population in the Timiskaming Health Unit area was approximately 33,049, of whom 16,370 were males and 16,680 were females.

Figure 1. Age distribution of residents, Timiskaming, ON, 2016

The greatest proportion of residents were 50 to 59 years old (17%), and the second-greatest proportion were 60 to 69 years old (16%) (*Figure 1*). This trend is also evident in Ontario overall, with the greatest proportion of residents aged 50-59 years.

In 2015-2016, 50.8% of Timiskaming residents rated their overall health as very good or excellent, which is statistically lower than Ontario (61.0%).<sup>4</sup> In Ontario, as education



level increases, perceived overall health also increases.<sup>5</sup> Similarly, as income increases, so does perceived overall health. On average, Timiskaming residents reported lower incomes and education levels, as well as higher rates of poverty and unemployment compared to residents across Ontario.<sup>6, 7</sup>

These socioeconomic factors are important to consider when interpreting different health behaviours and beliefs in a given population. However, Timiskaming residents who completed the survey did not provide information on education, income or employment. Therefore, this report looks at the beliefs surrounding the effectiveness of COVID-19 testing and COVID-19 immunization in Timiskaming and how these beliefs can change depending on age, gender and location of resident.

# **Indicators**

The proportion of adults in 2020 who:

- 1) Would get tested for COVID-19 if they were symptomatic (with reasons regarding why or why not)
- 2) Plan to receive the vaccine once it is available (with reasons regarding why or why not)

# Sample

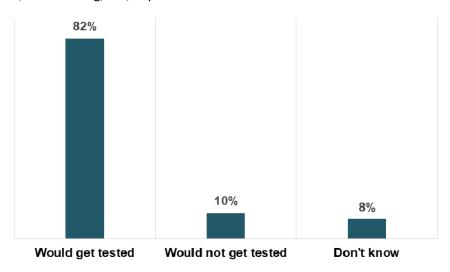
A convenience sample of households in the Timiskaming Health Unit area were invited to participate in an online survey via a THU promotional campaign. 526 residents aged 18 and older responded to the survey. A demographic profile of respondents is provided in *Appendix A*.

# Results

#### 1) If you were to develop symptoms of COVID-19 now, would you get tested?

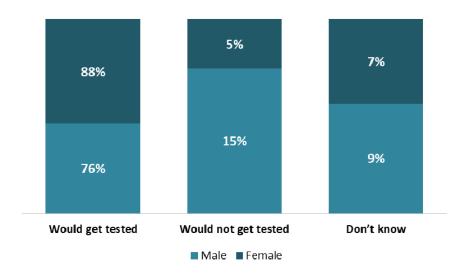
• In 2020, 82% of Timiskaming residents reported that they would get tested for COVID-19 if they developed symptoms (*Figure 1*). This was **significantly** *greater* than the proportion of residents who would not get tested (10%) and those who didn't know if they would get tested (8%).

**Figure 1:** Percentage of adults (18+) who would get tested for COVID-19 if they developed symptoms, Timiskaming, ON, September-December 2020



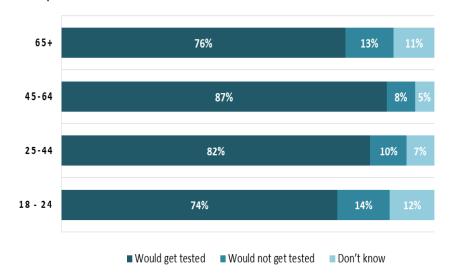
Significant differences by gender were observed (Figure 2). A greater proportion of females stated that they
would get tested if symptoms appeared (88%), whereas a higher proportion of males (15%) stated they would
not get tested. No statistical differences were found between males and females who reported "don't know."

**Figure 2:** Percentage of adults (18+) who would get tested for COVID-19 if they developed symptoms by gender, Timiskaming, ON, September-December 2020



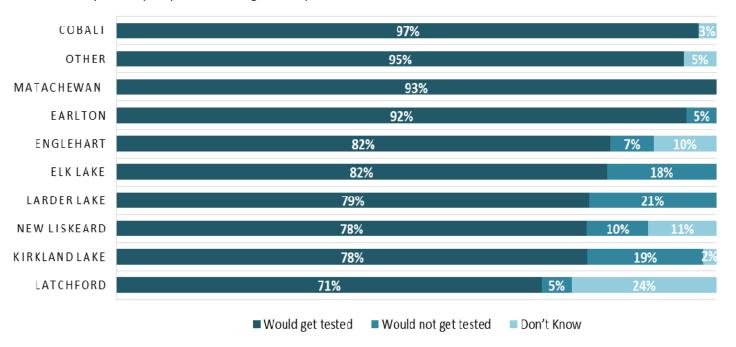
- Within each age group, a **significantly greater** proportion of respondents reported that they would get tested for COVID-19, compared to respondents who would not get tested if they developed symptoms (*Figure 3*).
- There were no significant differences in responses between age groups. (Figure 3).
- The municipality with the highest percentage of respondents who would get tested for COVID-19 was Cobalt (97%) (Figure 4). This percentage was significantly greater compared to the rates in Englehart (82%) and New Liskeard (78%). Latchford had the greatest percentage of respondents who reported that they would not get tested (24%); this was significantly higher than all other municipalities.
- In each municipality, except for Elk Lake and Larder Lake, a significantly greater proportion of respondents reported that

**Figure 3:** Percentage of adults (18+) who would get tested for COVID-19 if they developed symptoms by age group, Timiskaming, ON, September-December 2020



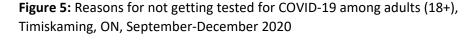
they would get tested, compared to respondents who would not get tested if they developed symptoms.

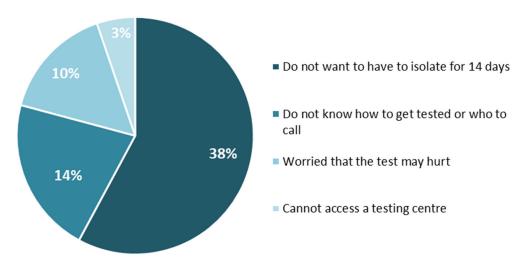
**Figure 4:** Percentage of adults (18+) who would get tested for COVID-19 if they developed symptoms, by municipality, Timiskaming, ON, September-December 2020



#### What are your reasons for not being tested if you developed symptoms?

• Timiskaming residents who reported that they would not get tested for COVID-19 if they developed symptoms selected reasons for their choice (*Figure 5*). Respondents could select more than one option. "*Not wanting to isolate for 14 days*" was selected as the top reason (38% of respondents), followed by "*not knowing how to get tested or who to call*" (14% of respondents), "*being worried that the test may hurt*" (10% of respondents) and being "*unable to access a testing center*" (3% of respondents).





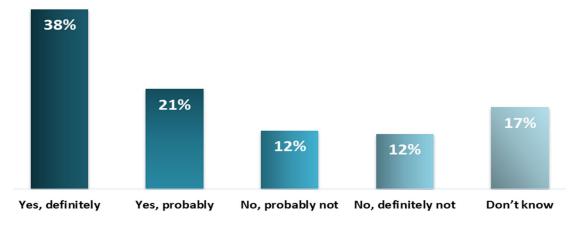
Note: This chart represents the percentage of times that a particular response was selected out of the total number of responses, not the percent of respondents who selected a particular response.

- 51% of respondents who reported that they would not get tested for COVID-19 mentioned other reasons. These included:
  - It is not necessary to get tested because the outcome will be the same and they can isolate and treat symptoms at home (14 mentions).
  - The validity of the test is questionable (false positive rate) or they do not trust the test result (6 mentions).
  - The symptoms will most likely be from cold or flu (5 mentions).
  - o They are uncomfortable with how the test is performed (2 mentions).
  - They do not care about receiving the test or it depends on the situation (2 mentions).
  - o They feel scared or anxious about getting tested and about physical harms from the test (2 mentions).
  - They are concerned about negative impacts on employment (for example, potential loss of income, pressure from boss to get tested) (2 mentions).
  - They are concerned about negative impacts on family or social life (1 mention).
  - They do not want the health unit or anyone else conducting contact tracing (1 mention).
  - o Results take too long to arrive (1 mention).
  - The pandemic is not that serious (1 mention).

#### 2) Once a COVID-19 vaccine is developed, do you plan to get the vaccine?

Overall, 38% and 21% of Timiskaming residents stated that they would *definitely* or *probably* receive the vaccine, respectively (*Figure 6*). The proportion of respondents who stated that they would *definitely* receive the vaccine was *significantly greater* than the proportion of respondents who stated otherwise (probably, probably not, definitely not or don't know). *Significant differences* were also found between the response "yes, probably" and other categories (except "don't know").

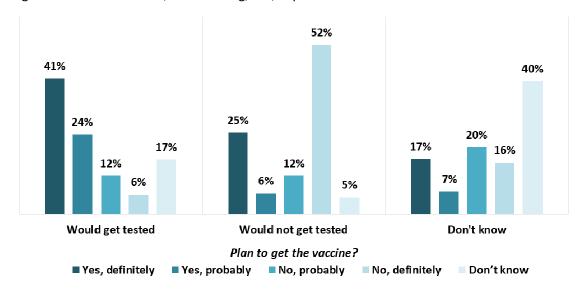
**Figure 6:** Percentage of adults (18+) who plan on receiving the COVID-19 vaccine once it is developed, Timiskaming, ON, September-December 2020



Once a COVID-19 vaccine is developed, do you plan to get the vaccine?

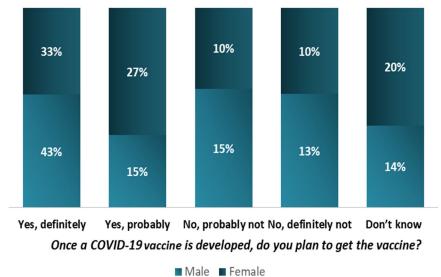
Among respondents who stated that they would get tested for COVID-19 if they had symptoms, the highest proportion also reported that they would definitely receive the vaccine (41%) (Figure 7). Among respondents who stated that they would not get tested for COVID-19 if they had symptoms, the highest proportion also reported they would definitely not receive the vaccine (52%).

**Figure 7:** Percentage of adults (18+) who plan on receiving the COVID-19 vaccine and would get tested for COVID-19, Timiskaming, ON, September-December 2020

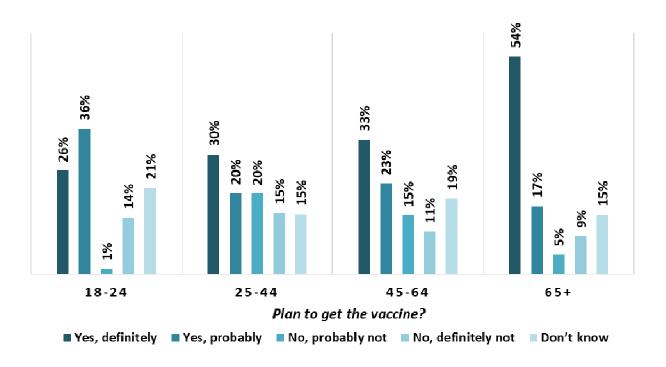


- There were no statistical differences by gender for the "Yes, definitely" category; however, the "Yes, probably" category had a significantly greater proportion of females reporting that they would probably receive the vaccine, compared to males (Figure 8).
- When the data was broken down by age, a significantly higher percentage of individuals aged 65+ planned to get the vaccine, compared to all other age groups. (Figure 9).
- When the data was broken down by age, a significantly higher percentage of individuals aged 25-44 years old stated that they would probably not receive the COVID-19 vaccine, compared to individuals in the 65+ and 18-24 years of age categories.

**Figure 8:** Percentage of adults (18+) who plan on receiving the COVID-19 vaccine once it is developed by gender, Timiskaming, ON, September-December 2020

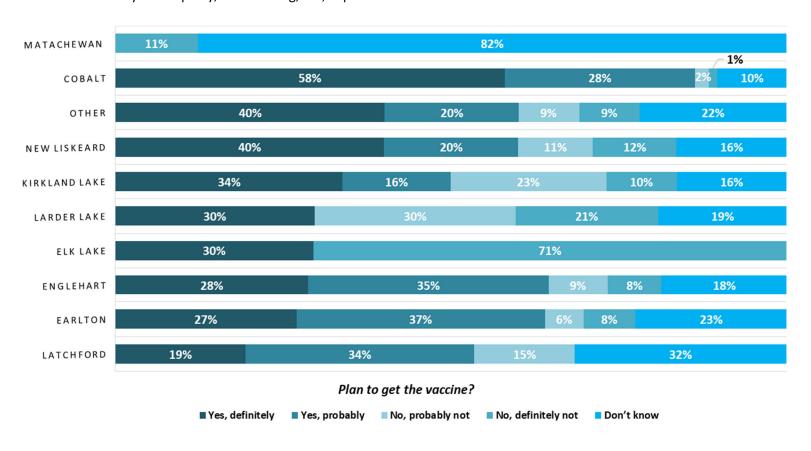


**Figure 9:** Percentage of adults (18+) who plan on receiving the COVID-19 vaccine once it is developed by age group, Timiskaming, ON, September-December 2020



- The municipalities with the highest percentage of respondents who stated that they would *definitely* or *probably* receive the COVID-19 vaccine were **Cobalt** (58%) and **Earlton** (37%), respectively. However the difference was not statistically significant when compared to other areas.
- The Municipality of Elk Lake had the highest percentage of residents who reported that they would definitely
  not receive the vaccine (71%). This was significantly higher than the percentage of respondents in all other
  municipalities except Larder Lake.
- The majority of residents in Matachewan reported that they don't know if they would receive the vaccine (82%)
   (Figure 10). This percentage was significantly greater than those who reported "don't know" in other
   municipalities.

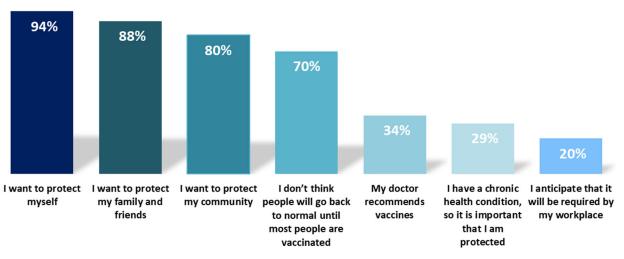
**Figure 10:** Percentage of adults (18+) who plan on receiving the COVID-19 vaccine once it is developed, by municipality, Timiskaming, ON, September-December 2020.



#### Why would you chose to get a COVID-19 Vaccine?

Timiskaming residents who reported that they would definitely or probably receive the COVID-19 vaccine selected reasons regarding why they would get vaccinated (Figure 11). Respondents could select more than one option. Wanting to protect oneself was selected as the top reason (94%), followed by wanting to protect family and friends (88%) and the community (80%), and lastly, due to the vaccine being required by their workplace (20%).

**Figure 11:** Reasons for wanting to get vaccinated for COVID-19, among adults (18+), Timiskaming, ON, September-December 2020



Note: The chart represents the percentage of times that a particular response was selected out of the total number of responses, not the percent of respondents who selected a particular response.

- 2% of respondents who reported wanting to get the COVID-19 vaccine indicated other reasons. These included:
  - They are at high-risk due to age or medical condition (2 mentions).
  - They work in a school and therefore need to protect themselves (1 mention).
  - They want to travel (1 mention).
  - The vaccine is necessary for mental stability and ease (1 mention).

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# Data Notes

According to the 2016 census, 73% of the population in Timiskaming reported English as their mother tongue, followed by 23% French. The present sample had the same distribution of residents who spoke English and French:

- 70% English
- 23% French
- 1% both

## **About RRFSS**

The Rapid Risk Factor Surveillance System (RRFSS) is an on-going telephone survey (using both cell phone and land lines) occurring in multiple public health units across Ontario. In February 2020, the 12 rapidly developed COVID-19 related modules were made available through the RRFSS online survey. The new online data collection method allowed for more efficient collection of information regarding the attitudes, beliefs and behaviours relating to health issues in the jurisdiction of the participating public health unit.

# **Data Source**

Rapid Risk Factor Surveillance System [2020]. Timiskaming Health Unit and Institute for Social Research, York University.

- Point estimates are not reportable if:
  - 1. The unweighted denominator of the proportion is **less than 30** respondents.
  - 2. The unweighted numerator of the proportion is **less than 5** respondents.
- Data was extracted on April 15, 2020.
- Household weights were applied, where applicable.

# **Definitions**

#### **Household weights:**

When a survey samples a proportion of the population with the intention to use the data to make statements about specific populations of interest, weights are used to ensure that the data is representative of those populations.

#### Statistical significance:

Double sided p-values from proportion comparison testing are used to determine statistical significance. A p-value less than 0.05 represents significance.

# **Limitations**

- 1. Individuals not living in households (such as those in prison, hospitals or the homeless) are excluded, and therefore the percentages reported here may not represent the true estimates for the general population.
- 2. Certain populations are less likely to have internet access and to respond to online questionnaires leading to response biases.
- 3. Randomly selected households were sent letters with a web address and a QR code to access the online survey. However, households with no English- or French-speaking residents were excluded. Therefore, results might not be generalizable to residents who speak other languages.
- 4. "Don't know" and refused responses are typically excluded from the analysis. When "don't know" is considered a valid response, or when over 5% of respondents answer "don't know," the response is included in the analysis. In this case, "don't know" was included in all analyses.

# **References**

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- 2. Statistics Canada. (2020 August). COVID-19 testing: Do Canadians plan to get tested and why? Statistics Canada Catalogue no. 45-28-0001. Ottawa. Released August 25, 2020. <a href="https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00072-eng.htm">https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00072-eng.htm</a>
- 3. Statistics Canada. (2020 August). Canadians' willingness to get a COVID-19 vaccine: Group differences and reasons for vaccine hesitancy. Statistics Canada Catalogue no. 45-28-0001. Ottawa. Released August 25, 2020. <a href="https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00073-eng.htm">https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00073-eng.htm</a>
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- Statistics Canada. 2017. Timiskaming Health Unit, [Health region, December 2017], Ontario and Ontario [Province] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <a href="https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm">https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm</a>? Lang=E. Accessed June 7, 2018.
- 6. Statistics Canada, Canadian Community Health Survey (CCHS) 2015/16. Table 13-10-0113-01. Canadian Health Characteristics, two-period estimates. Accessed June 7, 2018.
- 7. Mikkonen, J., Raphael, D. 2010. Social determinants of health: The Canadian facts. Toronto: York University School of Health Policy and Management. Accessed from: <a href="https://thecanadianfacts.org/the\_canadian\_facts.pdf">https://thecanadianfacts.org/the\_canadian\_facts.pdf</a>

# Appendix A

Table 1. Demographics of respondents who completed the RRFSS COVID-19 online survey, Timiskaming, ON, September-December 2020 (N=526).

Sociodemographic Variables	n	%	Mean	SD
Age, years			52.4	1.22
Age Breakdown, years				
18-24	36	6.7		
25-44	140	26.6		
45-64	143	32.9		
65+	152	28.9		
Sex				
Male	260	49.4		
Female	264	50.4		
Geography – Census Subdivision				
Timiskaming District	503	95.7		
Temagami	23	4.3		
Geography – Municipality*				
Cobalt	36	7.4		
Earlton	17	3.2		
Elk Lake	8	1.6		
Englehart	54	10.3		
Kirkland Lake	100	19.2		
Latchford	10	1.8		
Larder Lake	11	2.1		
Matachewan	3	0.5		
New Liskeard	250	47.8		

Abbreviations: n, number of respondents; SD, standard deviation

*Note*: not all numbers add up to the total number of respondents (N=526) because of 1) Missing values and 2) weighted sampling.

<sup>\*27</sup> respondents reported "other" as area of residence and 5 respondents preferred not to answer. New Liskeard includes Dymond and Haileybury