# Exploring the Impacts of the COVID-19 Pandemic on the Number of Reported Missing Persons in Canada during 2020

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Authors: Alexandria Connolly, Mauranne Ste-Marie, and Kevin O'Shea from the Sensitive and Specialized Investigative Services of the Royal Canadian Mounted Police

## Abstract

The COVID-19 pandemic has resulted in significant social and economic impacts in many countries, including Canada. This study examines the impacts of the COVID-19 pandemic on the number of reported missing persons, adults and children, in Canada during 2020. This study was completed by comparing relevant statistical data from 2018, 2019 and 2020 by province, probable cause, age, sex, and the average time before the case was resolved. Results indicate that there was a significant decrease in the number of runaways during 2020, with the exception of New Brunswick particularly.  The pandemic also had significant impacts on the number of missing children, missing teenagers, and missing males in general. This study provides a better understanding on how the restrictions of the pandemic affected missing persons numbers and the nature of who goes missing, as well as provides some insight into the situations and conditions in which people go missing. These findings can be used to inform strategies under similar future states.

## Introduction

Every year in Canada, thousands of individuals are reported as missing to the police (Royal Canadian Mounted Police, 2020). In Canada, a missing person is defined as "anyone reported to police or by police as someone whose whereabouts are unknown, whatever the circumstances of their disappearance, and they are considered missing until located" (Government of Canada, 2014, para. 5). Understanding the factors surrounding a person's disappearance has been the focus of scholarly interest for many years. Literature has generally focused on missing children more than adults (Greene, 2020); however, in recent years, research has been carried out in additional areas (Kiepal, Carrington and Dawson, 2012). This includes identifying high-risk populations such as those with mental health issues, dementia, and those who are experiencing unemployment or homelessness (Huey and Ferguson, 2020; Kiepal, Carrington and Dawson, 2012; Taylor, Woolnough and Dickens, 2019).

Another area of study has examined best practice recommendations to improve police investigations (Greene, 2020). Common suggestions include the need for specialized missing person units, improved information collection processes, and increased use of social media to

engage the public (Ferguson and Soave, 2021; Gabbert, Tamonyte, Apps, Caso, Woolnough, Hope, Handscomb, and Waterworth, 2020; Greene, 2020). These recommendations have the potential to affect the outcome of investigations. While the impacts of policy and procedural changes investigations have been examined, there is a gap in terms of examining the impact of societal phenomena on missing person incidences.

On March 11, 2020, the World Health Organization officially declared a global pandemic, the *coronavirus* or *COVID-19* pandemic. The pandemic resulted in significant global social and economic disruptions due to implementation of various measures aimed to reduce the risk of widespread infection. The Royal Canadian Mounted Police (RCMP) Sensitive and Specialized Investigative Services' (SSIS) National Centre for Missing Persons and Unidentified Remains (NCMPUR) and Program Research and Development Unit (PRDU) developed the present study to examine the impacts of the COVID-19 pandemic on the number and nature of reported[1] missing persons in Canada in 2020. The research design of the study posed the following questions:

- Did the pandemic affect the number of missing persons in Canada in 2020?
  - If so, were the impacts different across province(s)/territories?
- Was the effect more significant for a particular type of case (Probable Cause[2])?
- Was the effect more significant for a specific age group or sex[3] of missing persons?
- Did the pandemic affect the average time a person stayed missing in 2020?

The findings are intended to inform law enforcement working in the area of missing persons as well as the public on how the pandemic, particularly the lockdowns and mobility restrictions, may have impacted the prevalence of persons going missing in Canada in 2020. Findings from this research can be used to inform future responses to similar societal phenomena.

## Methodology

Phase 1 of this study entailed a review of academic literature and relevant law enforcement reports to identify any similar research conducted on this topic since the onset of the worldwide

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[1] For the purposes of this report, a "missing person" refers to someone who was reported to law enforcement as being missing.

[2] In MC/PUR there are multiple Probable Causes for someone reported missing, including: abducting by a stranger, accident, wandered off/lost, parental abduction with custody order, parental abduction without custody order, runaway, unknown, other, presumed dead, abducted by a relative, and human trafficking.

[3] *Sex* refers to the biological categorization of individuals based on primary sexual characteristics at birth (Government of Canada, 2019). In contrast, gender refers to the socially constructed roles, behaviours, expressions and identities of individual (Government of Canada, 2019; Government of Canada, 2021b). Sex was used as a variable in this report, as the individual's gender is not available in the Missing Children/Persons and Unidentified Remains (MC/PUR) database. Additionally, individuals whose sex was identified as "unknown" and "other" were excluded from this report as to allow for consistent comparison to other Missing Person reports.

pandemic. It was found that only one country, the United Kingdom (UK), completed a study on the impact of COVID-19 lockdown restrictions on missing persons reports (Greene, O'Brien, Collie and Giles, 2020). The results of that research were used as international comparatives for this study, particularly to see if Canada and the UK observed similar or different impacts during the pandemic.

For Phase 2, data required for this study was extracted from the Missing Children/Persons and Unidentified Remains (MC/PUR) database[4]. More specifically, an extract of the data was completed to gather information about all persons reported missing between January 1, 2018 and December 31, 2020, including the details related to province/territory, sex (female or male[5]), age (adult, teenager and children[6]), Probable Cause[7], and Time to Resolve[8]. This timeframe enabled a multi-year comparison to identify potential changes observed during the COVID-19 pandemic in missing persons numbers in Canada as compared to the same periods in 2018 and 2019[9].

For Phase 3 of this study, the data was imported into a quantitative analysis software, the Statistical Package for the Social Sciences (SPSS). The data was then reorganized to allow for the creation of graphs, descriptive tables and statistical manipulations. These graphs and tables allowed for differences to be observed between the variables, which then was used to guide the statistical analysis portion of the study. The data was statistically analyzed using Pearson's

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[4] MC/PUR is the only Canadian national police database specifically for missing persons (MP) and unidentified remains (UR) cases. It provides the necessary data and tools to coordinate a national approach to these investigations. The MC/PUR database is used by trained specialists to provide Canadian law enforcement, medical examiners and chief coroners with comprehensive information on MP and UR cases across jurisdictions. It is also used to conduct in-depth analyses in an attempt to identify trends and to link MP to UR.

[5] For the purposes of this study, and due to the low number of reports, the "other" and "unknown" categories for sex were excluded.

[6] 'Missing adult' refers to anyone reported missing who is between the ages of 18 and 102. 'Missing teenager' refers to anyone reported missing who is between the ages of 11 and 17 inclusive. 'Missing child' refers to anyone reported missing who is between the ages of 0 and 10. The age used is the age the person had reached on the date they went missing.

[7] Probable Causes include: abduction by a stranger, abduction by a relative (which includes abducted by a relative, parental abduction with custody order and parental abduction without custody order), accident, wandered off/lost, runaway, presumed dead, human trafficking, other and unknown. Probable Cause may not be comprehensive nor entirely dependable because it is often subjective (individual investigator or agency) and not consistently completed nor maintained on CPIC.

[8] This refers to the number of days between Date Last Seen and Date Occurrence Concluded (for cases that have been resolved).

[9] It must be noted that these changes cannot all be attributed to the pandemic. The correlations included in this report are statistical ones and thus, do not necessarily represent a cause-to-effect relationship. Numbers for both 2018 and 2019 were included to illustrate the natural variability between years.

Correlation[10] which shows how strongly two variables are related to each other or the degree of association between the two. Correlation is measured by the correlation coefficient that ranges between -1 to 1, where -1 indicates a perfect negative correlation, +1 a perfect positive correlation, and 0 no correlation at all (Everitt and Hothorn, 2009). The results of this analysis are presented in the Results section below.

Since 2018 and 2019 data were very similar and no significant differences in missing persons were observed between the two years[11], a baseline measure could be established to calculate and measure differences in 2020 data that could possibly be attributed to the pandemic restrictions. As such, many of the data comparisons are presented between 2019 and 2020.

## Limitations

MC/PUR includes occurrences which are currently open, and concluded occurrences[12] only if they were open on or after May 16, 2014. The data in MC/PUR is derived from missing person transactions in the Canadian Police Information Centre (CPIC). Therefore, it is limited by the quality and types of data that agencies enter into CPIC and the techniques used by MC/PUR to compile that data. CPIC transactions include repeat runaways, and situations where a single instance of a missing person may be entered and deleted multiple times by different agencies over a period of time (e.g., a child goes missing with the initial report being filed with one police service; however, further investigation indicates the file falls within another police service's jurisdiction). MC/PUR uses algorithms in an attempt to identify and eliminate duplicate data and produce more accurate statistics. An occurrence is considered as belonging to a respective year based on the reported Date Last Seen. The number of missing person subjects reported herein reflects a "point in time" and can change if records for 2018, 2019 and 2020 cases are later added, modified, or flagged as duplicate[13]. It is also important to note that in terms of probable cause, there is some subjectivity in the original CPIC data that populates MC/PUR, and it may not be consistently completed nor maintained by agencies. Although the authors recognize the limitations of this study based on the data available, the limitations are consistent across the time periods examined, and the study provides unique insight into how missing persons numbers changed over the period of the pandemic.

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[10] The chosen significance level is a=0.05 or 95% confidence interval for the data.

[11] Both years had around 73,000 reported Missing Persons, and a similar percentage of children vs adults, male vs female numbers (within 5% variability). With respect to per-province numbers, there was an average variability range between 2.35% and 5.67% for the Probable Causes.

[12] Open occurrences are ones that have not yet been resolved. An occurrence is concluded when the missing persons case is resolved (e.g., person has been located). For most occurrences in the database, the indicator used is the date at which the last mention of the case was removed from CPIC.

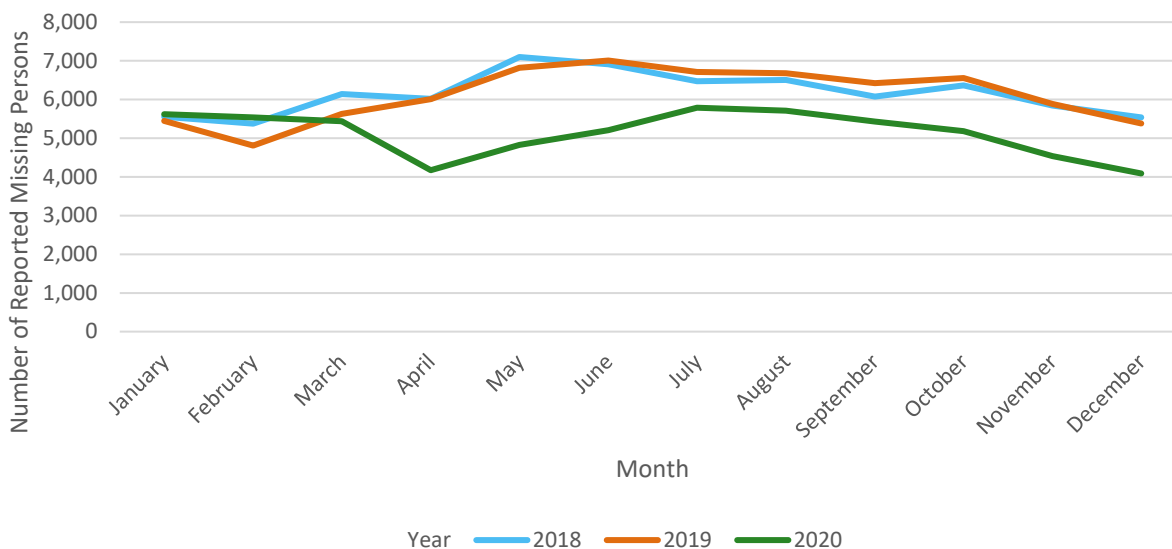[13] The MC/PUR data used for this report were generated on April 8, 2021.

## Results

Graph 1 below demonstrates the number of missing persons by month for 2018, 2019 and 2020. As can be seen, during the time of the restrictions related to the pandemic (beginning in March 2020), there was a substantial reduction in the overall number of missing persons in Canada compared to the two previous years, especially in April and December. From March to December in both 2018 and 2019, there were approximately 63,000 missing persons. For the same period in 2020, there were approximately 50,000 people missing, representing a 20.00% decrease. Normal fluctuations in the previous 5 years were about +/-6.00%[14]. Graph 2 demonstrates the number of reported COVID-19 cases between January and December 2020. The numbers used to generate this graph can be found in Table 1 (Appendix A), along with the number of missing persons per month of 2020. Overall, there is a correlation of -0.77[15] between these variables, indicating that there is a strong negative relationship between these phenomena: as the number of monthly COVID-19 cases increased, the number of missing persons decreased. This relationship can be seen in Graph 3 where data from graphs 1 and 2 are superimposed. On the strength of this observation, tables were then generated examining the number of missing persons in comparison with the other relevant variables (e.g. province/territory, age, sex, probable cause) in this study to gain a better understanding of potential correlation. These are explored in the following sections.

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[14] NCMPUR Fast Facts 2015-2020 (https://www.canadasmissing.ca/pubs/index-eng.htm).

[15] A correlation coefficient ranges from -1 to +1 and is denoted by *r*. The closer *r* is to zero, the weaker the linear relationship. For absolute values of r, 0-0.19 is regarded as very weak, 0.2-0.39 as weak, 0.40-0.59 as moderate, 0.6-0.79 as strong and 0.8-1 as very strong correlation, but these are rather arbitrary limits, and the context of the results should be considered (https://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one/11-correlation-and-regression).

Graph 1: Number of Reported Missing Persons by Month and Year



Graph 2: Number of Reported COVID-19 cases in 2020 by Month
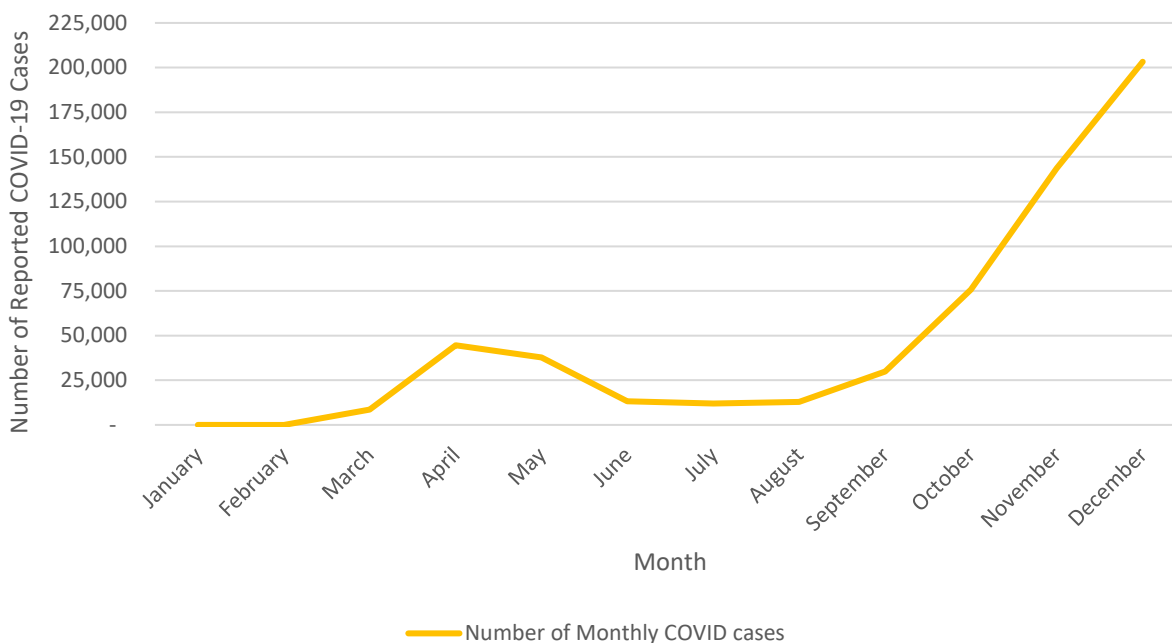
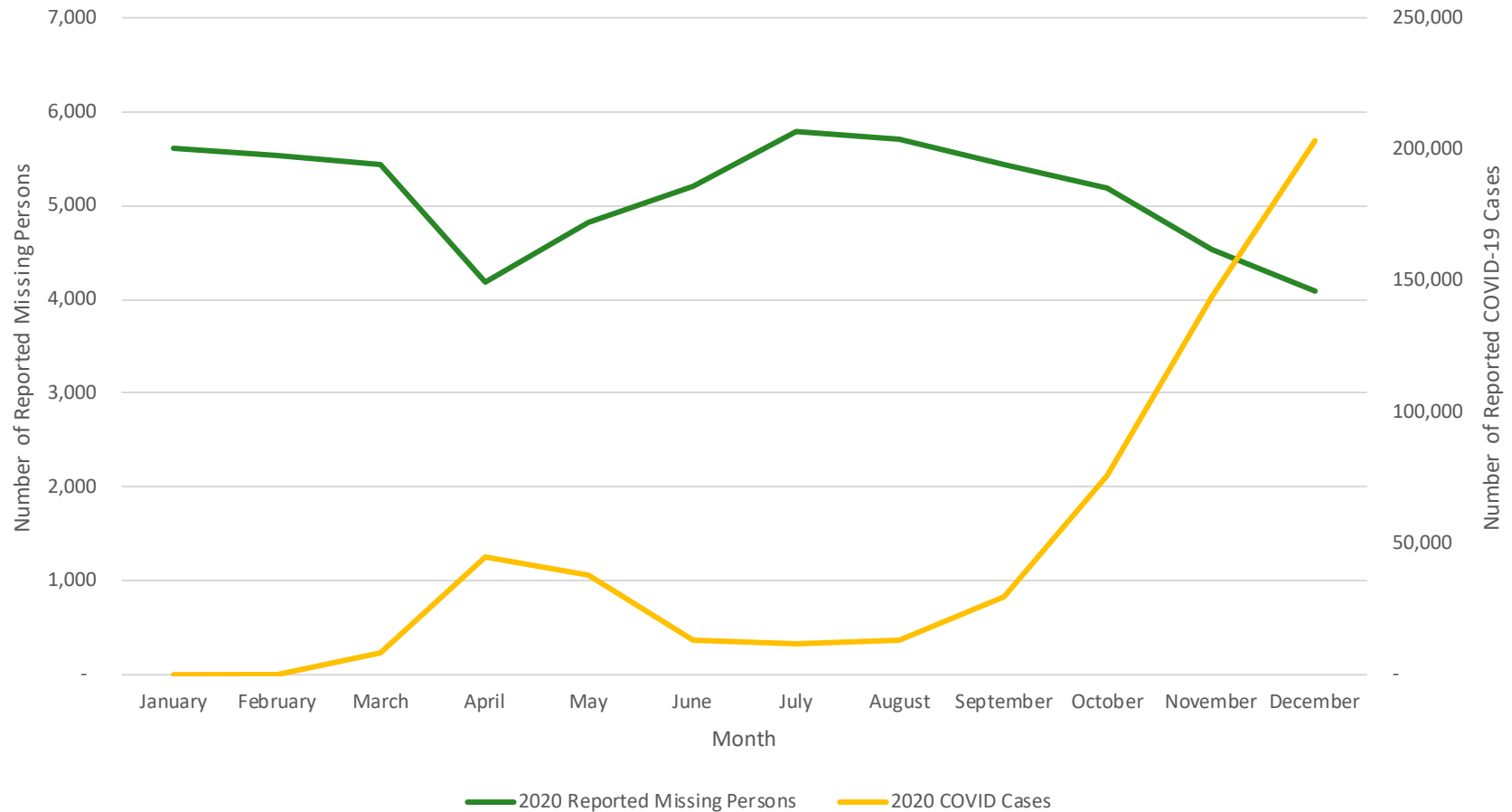Graph 3: Number of Reported Missing Persons and COVID-19 Cases in 2020 per Month

Table 2 (see Appendix) highlights the information from Graph 1 in a frequency table and lists the percentage change between *2018 and 2019, 2018 and 2020*, as well as *2019 and 2020* for each month. At the beginning of 2020, before the onset of the COVID-19 pandemic, the number of missing persons compared to 2019 was similar, if not slightly higher (3.23-15.22% increase for the months of *January* and *February*). Then, a slight decrease occurred in the month of *March* (3.39%), followed by significant decreases in the number of missing persons for the months of *April* and *May* (30.49% and 29.27% decrease as compared to 2019). This corresponds to the time immediately following the implementation of strict restrictions[16], (at end of *March*) across Canada. This decrease percentage remained stable until *July 2020*, during which a higher number of missing persons was observed, as compared to the previous months of that year. Despite this increase in *July 2020*, the number of missing persons was nonetheless lower compared to *July 2019* (13.75% decrease). This increase in numbers aligns with more relaxed restrictions nation-wide, weather providing an ability to socialize outdoors where there was lower risk of transmission, and the end of school year and summer holidays, taking people out of situations that were sources of transmission (i.e. the workplace). Later, as outdoor socialization became more challenging due to the cold weather, students returned to school and parents to work, a significant increase in COVID-19 cases resulted (beginning in *September*) and a parallel decrease (15.49%) in missing persons was noticed as government responded with more restrictions. Across the following months, the decrease in missing persons continued to grow, beginning with 20.87% in *October* and ending with a 23.97% decrease by *December 2020,* compared to what was observed in 2019. These findings reinforce the correlation between COVID-19 cases (with restrictions imposed in response) and a decrease in missing persons in Canada.

## Provinces and Territories

Graph 4 compares the percentage difference in the number of reported missing persons across provinces and territories[17] for 2018, 2019 and 2020. The data for this can be found in Table 3 (Appendix A). There was a significant reduction in missing persons in Canada for 2020 across most provinces and territories, except for *the Maritimes* and *the Territories*. Specifically, there is an average of 16.09% decrease in missing persons between 2019 and 2020 for all provinces and territories, as compared to an average decreasing fluctuation of only 0.74% between 2018 and

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[16] Measures put in place by the Government of Canada include restricting entry into the country to Canadian citizens and permanent residents and their immediate families; social distancing; face masks; limited socialization, particularly indoors; and mandatory quarantine for those who tested positive, or were in contact with someone who tested positive or those arriving in Canada.

[17] Since Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland and Labrador had a low number of reported missing persons, they were grouped together. Statistics were calculated for the "Maritimes" in general. The same was done for Nunavut, Northwest Territories and Yukon, which were grouped under "The Territories".

2019. The most significant decrease in 2020 as compared to the previous year is noted in the following provinces: *Québec* (27.77%), *Ontario* (21.58%), and *Saskatchewan* (21.23%).



Graph 4: Differences in Number of Reported Missing Persons by Province and by 2018/2019 and 2019/2020 (in %)
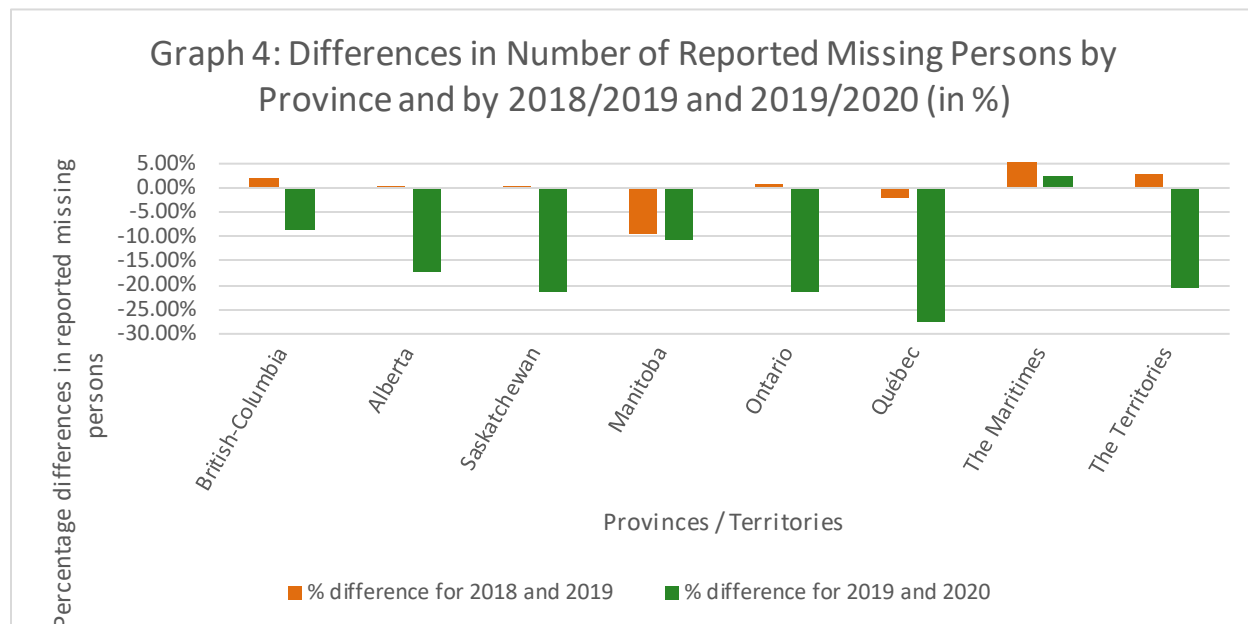
Graph 5 shows the results when the rate per 100,000 people is calculated (refer to Table 4 in Appendix A). *Manitoba* had a 10.97% decrease in missing persons per 100,000 people between 2019 and 2020, although a similar decrease was observed between 2018 and 2019 (10.55%), showing a general decreasing trend. The same observation was made for the *Maritimes* where a 2.40% increase was noted, similar to the 4.35% increase as the previous year. *Québec* remains



Graph 5: Rate of Reported Missing Persons per 100,000 by Province/ Territory and by Year
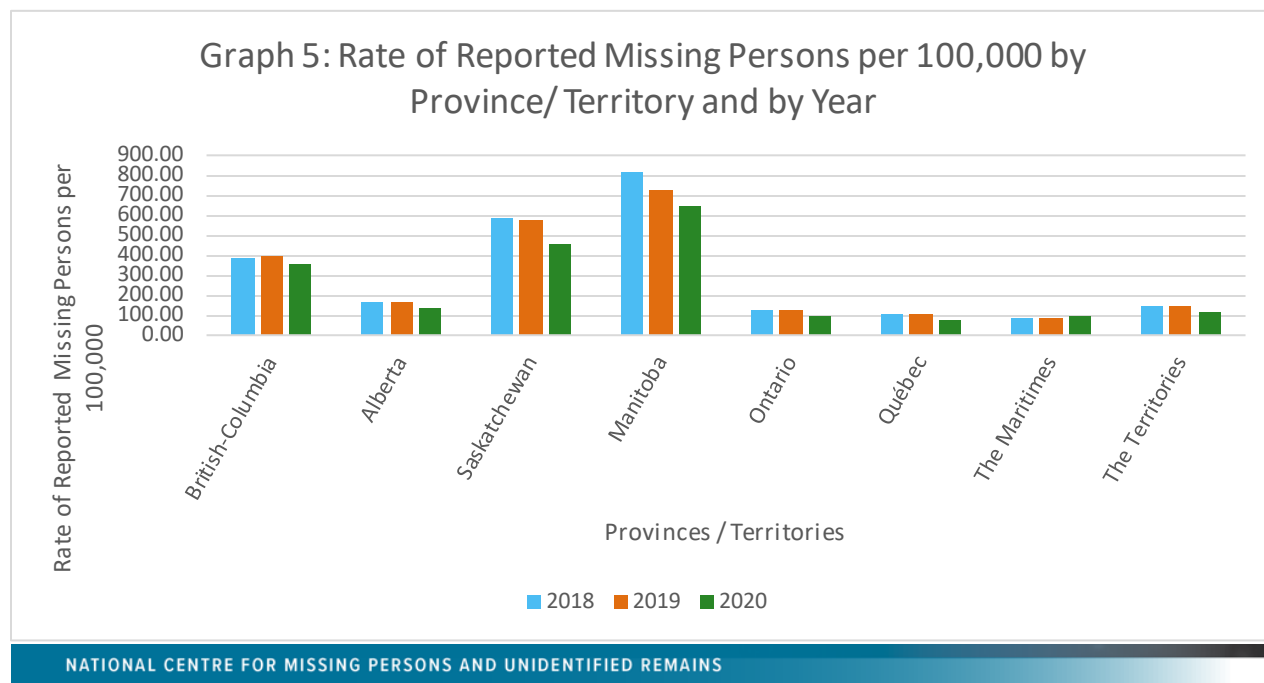
the province with the largest decrease between 2019 and 2020 with 28.21% per 100,000 people, followed by *Ontario* (21.97%) and *The Territories* (21.73%). The latter experienced an increase in population in 2020, which accentuates the decrease in the numbers of missing persons when viewed per 100,000 population, unlike other provinces where the populations were relatively stable.

This significant decrease in *Québec* is largely attributed to the *teenager age category*[18] (33.95% decrease in reported missing persons from 2019 to 2020) of both sexes, and runaways in particular (33.01% decrease). Although the numbers are small each year, Québec also saw a statistically significant decrease in the number of children abducted by a relative (40.82%)[19], as well as the number of *abductions by a stranger* (57.14%)[20]. The overall decrease may be explained by the strict COVID-19 (travel) restrictions that were imposed to Québec at the onset of the pandemic. The province of Québec declared a state of emergency on March 13th 2020, which was 4 to 7 days ahead of *Ontario, British Columbia, Manitoba, and New Brunswick*[21]. This allowed *Québec* to limit mobility between regions and close all non-essential businesses early on, as well as impose curfews, to an extent which no other provinces/territories reached during the pandemic (Rowe, 2020). These restrictions were enforced with checkpoints and a heavy municipal and provincial enforcement presence throughout the province (Rowe, 2020). This severe restriction in mobility would logically reduce the opportunities for running away or any sort of abduction.

While the general trend in Canada indicates a decrease in missing persons in 2020, there is a notable 23.01% increase in the numbers for *New Brunswick*. One of the main contributors to this is a 43.00% increase in *runaways* in that province in 2020, as compared to a 16.29% increase between 2018 and 2019, while the number of cases from other probable causes remained relatively stable in the province in 2020. When looking at the number of missing persons for *New Brunswick* by month for 2020, the largest spikes in *runaways* are observed during the months of *March, July* and *October,* and specifically for men and teenage boys. A reason for this increase in New Brunswick has not been found in the data and warrants further research. More detailed information related to Probable Cause is found in the following section.

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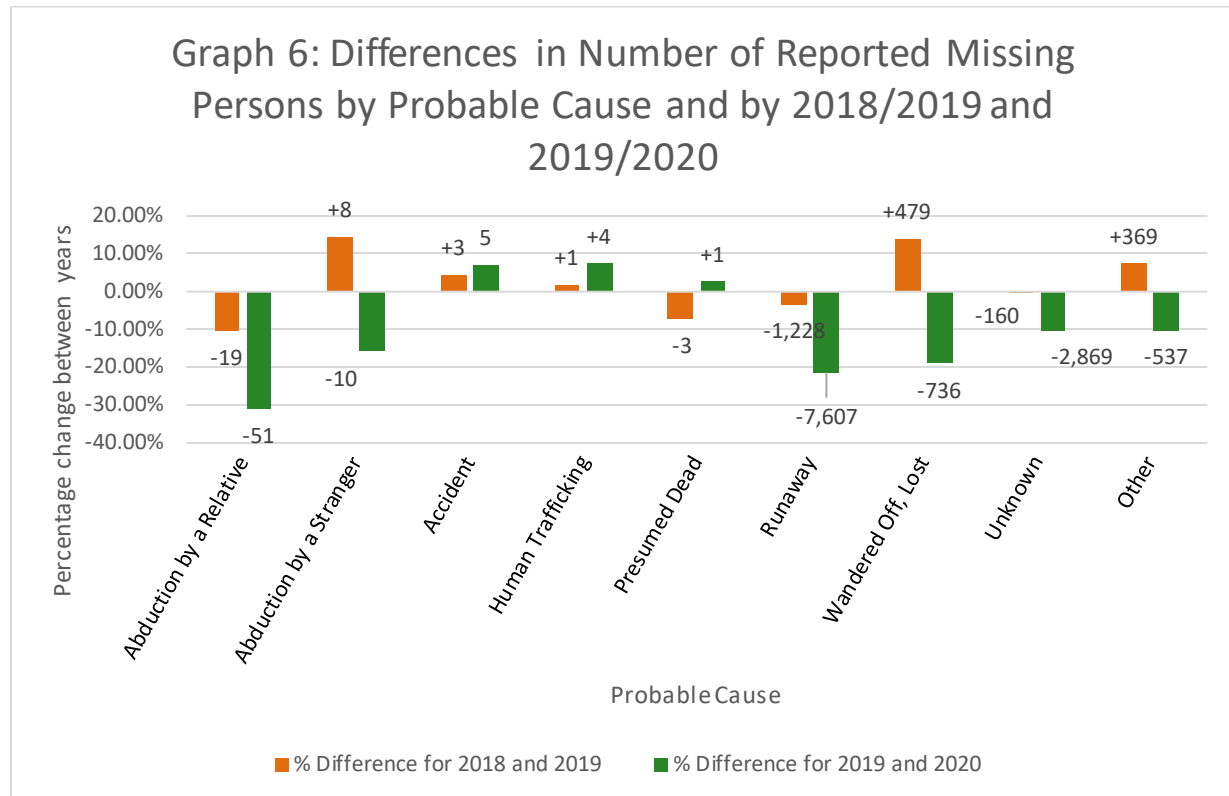[18] The *teenager age category* consisted of individuals between the age of 11 and 17 years old.
[19] In 2018, there were 48 abductions by a relative, whereas in 2019, there were 49 and in 2020, there were 29.
[20] In 2018, there were 15 abductions by a stranger, whereas in 2019, there were 14 and in 2020, there were 6.
[21] Ontario declared a state of emergency on March 17th 2020, British Columbia on March 18th 2020, Manitoba on March 20th 2020, and New Brunswick on March 19th 2020.

## Probable Cause

Graph 6[22] demonstrates the number of missing persons per Probable Cause for the years 2018, 2019 and 2020. The data for this is available in Table 5 (see Appendix A). As seen in the graph, the *other* and *wandered off, lost* probable causes remained relatively stable between the years, in comparison to *runaways*, which show a 21.35% decrease in 2020. In fact, there was a strong negative correlation (-0.80) between COVID-19 cases and runaways: as the COVID-19 cases increased, the number of runaways decreased. The frequency table also demonstrates that *abductions by a relative* decreased by 31.10% between 2019 and 2020, while *accidents*, *human trafficking and presumed dead* saw slight increases between 2019 and 2020. That being said, considering the small number of the three latter categories (less than 75) and the small number of additional missing persons in these categories in 2020 (less than 5), the variability between years is not considered statistically significant But these issues should be examined in future years when more cases are available.



Graph 6: Differences in Number of Reported Missing Persons by Probable Cause and by 2018/2019 and 2019/2020

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[22] It is important to note that while the "Percentage change between years" and bar value is expressed in percentages; the number near each bar is the change in reported missing persons between the years, expressed in whole numbers.

NATIONAL CENTRE FOR MISSING PERSONS AND UNIDENTIFIED REMAINS

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## Sex

Graph 7 looks at the number of reported missing persons according to *sex*. It can be seen that both *male* and *female* saw a decrease in 2020 as compared to 2018 and 2019. Particularly, between 2019 and 2020, there was a 13.49% decrease in missing females, while there was a 18.73% decrease in missing males (refer to Table 6, Appendix A). When the study compared sex with other variables, some significant observations were made from the data. With regard to probable cause, there was a statistically significant decrease in male runaways (27.43%) as compared to the normal year-to-year variation (as illustrated by the 2018/2019 comparisons in Graph 7). Female runaways dropped by 16.43% between 2019 and 2020. In fact, for all four most numerous probable causes (runaways, unknown, wandered off/lost, other) the decrease in male numbers was larger than the decrease in female numbers. Between 2019 and 2020, the province of *Saskatchewan* noted the largest drop in *male* missing persons (30.98%), followed by *Québec* (27.57%).



Graph 7: Number of Reported Missing Persons by Year and Sex
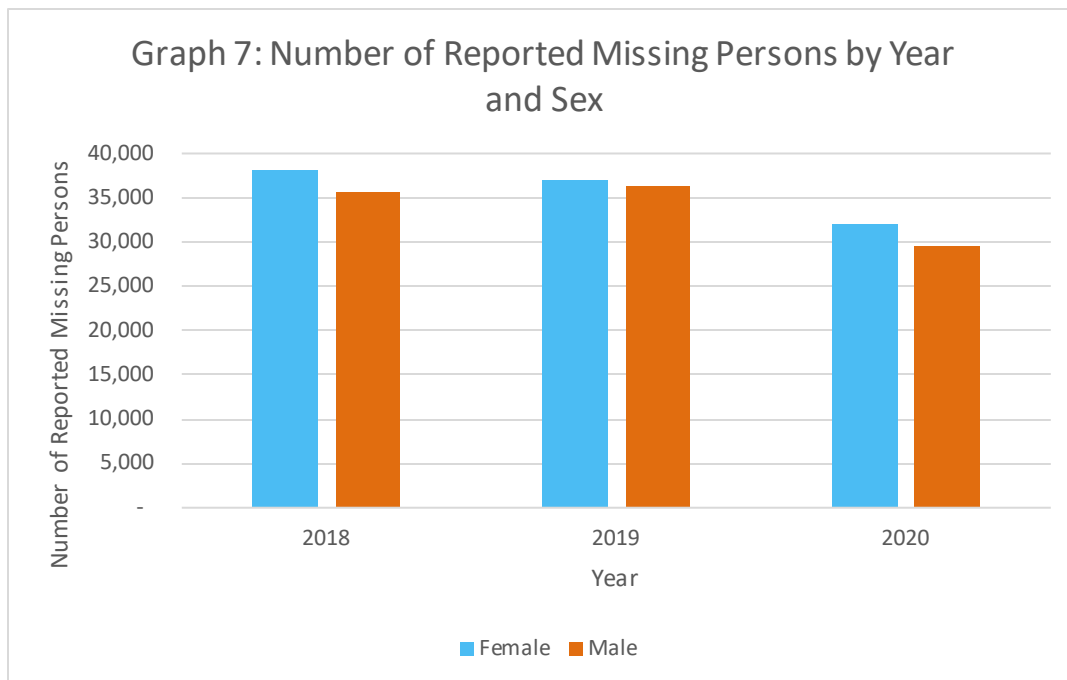
## Age[23]

Graph 8 demonstrates the number of missing persons by age group for 2018, 2019 and 2020. The data is available in Table 7 (see Appendix A). The a*dult age group* saw the smallest decrease

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[23] The category of age was divided into three groups: child (ages 0 to 10 years old), teenager (11 to 17 years old) and adult (18 to 102 years old). This is a finer breakdown than is used in the Fast Facts for Missing Children (0-17) versus Missing Adults (18+).

(10.07%) between 2019 and 2020, whereas the *child* and *teenager age groups* both saw larger decreases (27.73% for *child* and 20.87% for *teenager*). There was a strong negative correlation (-0.75) between COVID-19 cases and missing teenagers: as COVID-19 cases (and restrictions) increased, the number of missing teenagers decreased.  The province that saw the largest decrease in missing teenagers is *Saskatchewan* (30.98%) followed by *Québec* (27.57%). More specifically, with respect to *teenagers* in 2020, there were 27.07% less *males* and 22.60% less *runaways* as compared to previous years.



Graph 8: Number of Reported Missing Persons by Age Category and Year
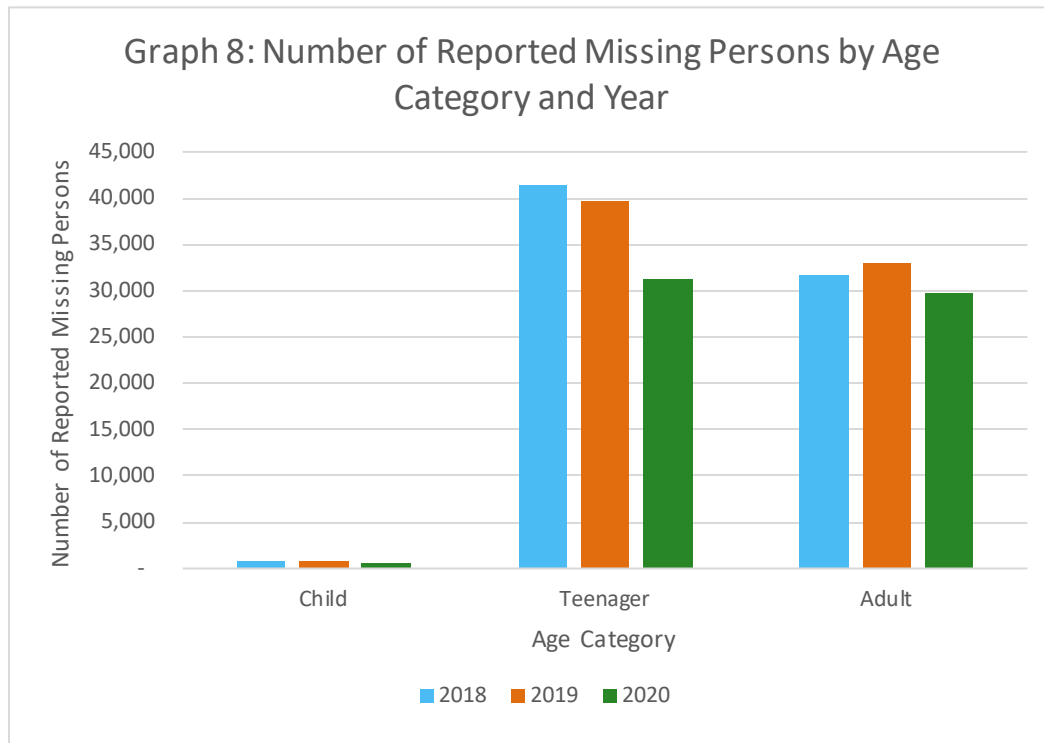
## Time to Resolve

The time to resolve in this study corresponds to the number of days between the date a person was last seen and the date the file was concluded and removed from CPIC. This is the data available related to the number of days for which a person was missing. The results suggest that there were no significant differences in the time to resolve missing persons cases in 2020, as compared to the two previous years. Graph 9 illustrates how approximately 59.59% of reported missing persons occurrences in 2020 were resolved within 2 days, 82.96% within one week, while 94.40% were located within one month[24]. A yearly month-to-month comparison versus

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[24] Please note that 2020 numbers were generated on April 8, 2021. Therefore, fewer cases would have been resolved by that time as compared to previous years for which we have a longer history to measure.

time to resolve was conducted and showed no variations that were statistically significant over the years.

Graph 9: Time to Resolve shown as cumulative percentage
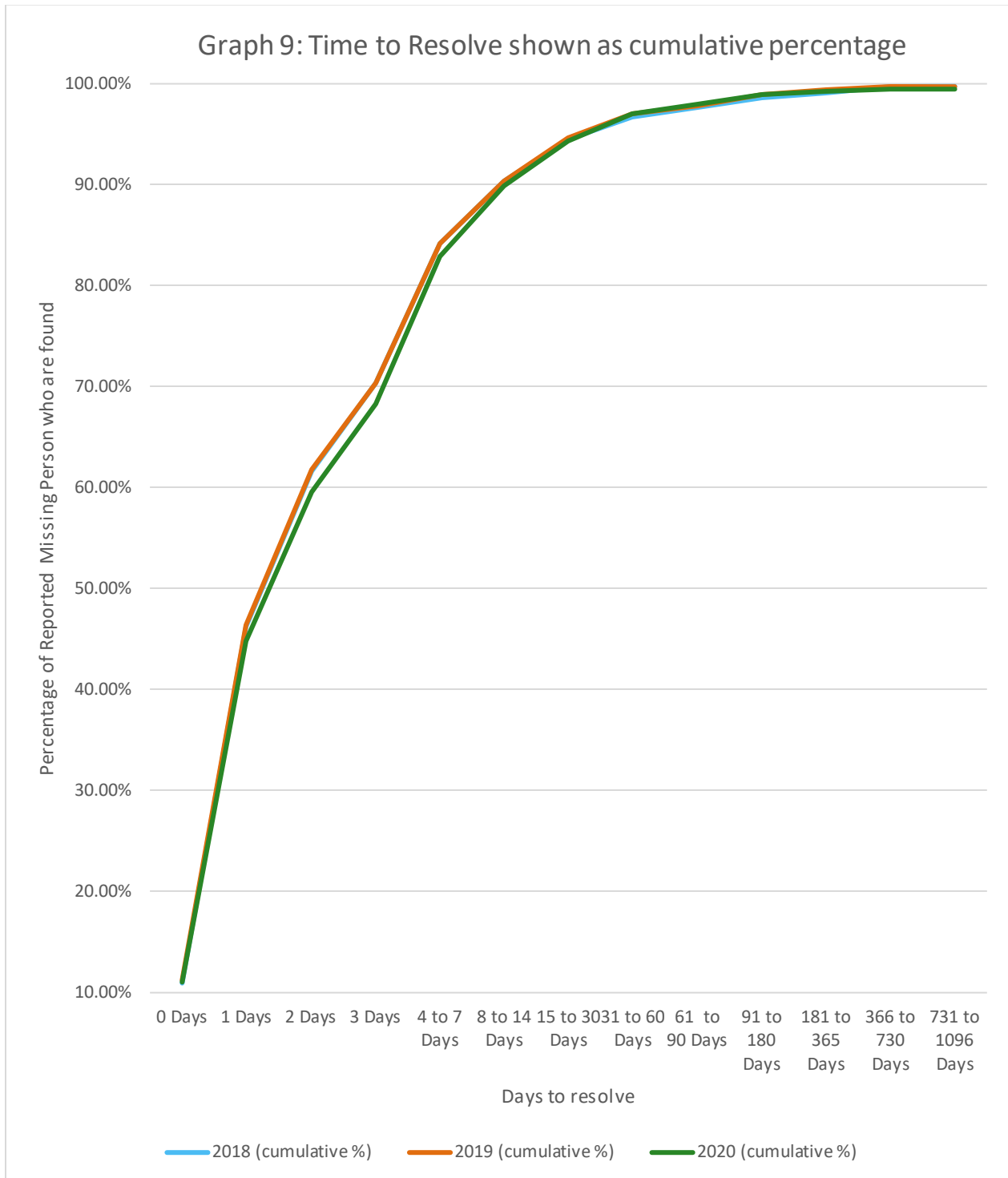
## Conclusion

This study has shown that during the COVID-19 pandemic in 2020, the number of missing persons decreased from previous years by approximately 20.00%. Given the restrictions in social interactions and disruptions to work and school, there may have been reduced opportunities or situations for someone to go missing.  This contrasts with the observed effect of the pandemic on certain crime types that saw a significant increase in 2020 (e.g. online child sexual exploitation, domestic and intimate partner violence) (Thompson 2020, Thompson, 2021). This shows how the pandemic impacts different crime types and social phenomena differently. The Canadian numbers are similar to those from the UK where the overall 35% decrease in missing children and 36% reduction in missing adult reports, as compared to *2019,* were credited to the lockdown (Greene, O'Brien, Collie and Giles, 2020).

Of course, these changes may not all be attributable to the pandemic - the correlations included in this report are statistical ones and thus do not necessarily prove a cause-to-effect relationship. More research is required.  However, there appears to be some statistically significant correlations between the severity of the pandemic restrictions and the decrease in missing persons reports from previous years. Moreover, *Québec* imposed very strict restrictions at the onset of the pandemic and interestingly, *Québec* observed the most significant decrease in missing persons in Canada, strengthening the conclusion that it is the pandemic restrictions and disruptions that may have led, in part, to these decreases.

The most significant decrease throughout Canada has been in the number of runaways. Abductions by a relative also show a statistically significant decrease. Although the pandemic restrictions had a similar impact on the number of missing *children* versus *adults*, and *female* versus *male*, it was the category of *male teenagers* that saw the largest decrease in *2020* compared to previous years. Most other statistically significant correlations between pandemic restrictions and age or gender are explained by the way those characteristics appear in the population of runaways. Finally, the pandemic did not appear to affect the time it took to resolve cases of missing persons.

Since the pandemic is still ongoing and new restrictions and measures have been put in place in the various provinces and territories since December 31, 2020, the current study should be repeated when the pandemic restrictions are permanently lifted.  A subsequent analysis should be conducted to see if the number of missing persons returns to quantities and/or proportions consistent with pre-pandemic numbers. Considering the high number of *runaways*, even during the pandemic, and the significant effect on the number of runaways, a potential future area of research could examine the location from which these individuals ran away (e.g. home, institutions, schools, etc.) as a variable. This could demonstrate potential issues at such premises

or the type of runaway cases dampened by pandemic conditions[25]. While some questions remain, the results of this study provide a better understanding on how a pandemic like the COVID-19 (or the associated restrictions) affects missing persons numbers and the nature of who goes missing, such that law enforcement can explore potential strategies to enhance their response should it happen again. Observations of how the pandemic affected the numbers also provide some insight into the situations and conditions under which people go missing, and can inform strategies for dealing with those situations under normal times as well as in future times of similar social phenomena.

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[25] This gap in knowledge related to runaways was noted by Greene et al. (2021) who stated that "it will be necessary to consider whether this is due to reduced levels of oversight, stretched resources by those providing care, and whether the lockdown exacerbated already acute risk factors among this population" (n.p.)

# References

Everitt, B., & Hothorn, T. (2009). *A handbook of statistical analyses using R, Second Edition*. Florida, US: Taylor & Francis Group.

Ferguson, L., & Soave, V. (2021). #Missing to #Found: Exploring police Twitter use for missing persons investigations. *Police Practice & Research, 22*(1), 869–885. https://doi.org/10.1080/15614263.2020.1753516

Frazer, E. (2020). Domestic Violence on the rise during COVID-19 — here's what you can do about it. *CBC News.* https://www.cbc.ca/news/canada/new-brunswick/domestic-violence-mindy-godin-1.5852689

Gabbert, F., Tamonyte, D., Apps, J., Caso, A., Woolnough, P., Hope, L., Handscomb, M., & Waterworth, G. (2020). Examining the efficacy of a self-administered report form in missing person investigations. *Legal and Criminological Psychology, 25*(1), 1–16. https://doi.org/10.1111/lcrp.12163

Greene, K. (2020). Missing Persons: Identifyng Best Practice, Training and Research Needs. *The Independent Civilian Review into Missing Persons Investigation.* https://8e5a70b5-92aa-40ae-a0bd e885453ee64c.filesusr.com/ugd/681ae0_3ba4a6ab51b243f588131c8f9ec4de11.pdf

Greene, K., O'Brien, F., Collie, C., & Giles, S. (2020). *The impact of COVID-19 lockdown restrictions on missing person reports*. University of Portsmouth: Centre for the Study of Missing Persons.

Government of Canada. (2014). Report a Missing Person/Unidentified Remains. *Canada's Missing.* https://canadasmissing.ca/report-signale/index-eng.htm

Government of Canada. (2019). Gender and Sexual Diversity Glossary. Translation Bureau. https://www.btb.termiumplus.gc.ca/publications/diversite-diversity-eng.html#m

Government of Canada. (2021a). Fact sheets. *Canada's Missing.* https://www.canadasmissing.ca/pubs/index-eng.htm

Government of Canada. (2021b). GBA+: Beyond Sex and Gender. Women and Gender Equality Canada. https://femmes-egalite-genres.canada.ca/en/gender-based-analysis-plus/microlearning-videos/gbaplus-beyond-sex-gender.html

Hosmer, D. & Lemeshow, S. (2000). *Applied logistic regression (Second Edition).* New York, US: John Wiley & Sons

Huey, L., & Ferguson, L. (2020). "Going Missing" as a Maladaptive Coping Behavior for Adults Experiencing Strain. *Deviant Behavior*, 1–13. https://doi.org/10.1080/01639625.2020.1773175

Kiepal, L. C., Carrington, P. J., & Dawson, M. (2012). Missing Persons and Social Exclusion. *Canadian Journal of Sociology, 37*(2), 137–168. https://doi.org/10.29173/cjs10114

Rowe, D. (2020). COVID-19 in Québec : a timeline of key dates. *Montreal CTV News*. https://montreal.ctvnews.ca/covid-19-in-Québec-a-timeline-of-key-dates-and-events-1.4892912

Royal Canadian Mounted Police. (2020). *Missing Persons.* https://www.rcmp-grc.gc.ca/en/missing-persons

Taylor, C., Woolnough, P. S., & Dickens, G. L. (2019). Adult missing persons: a concept analysis. *Psychology, Crime & Law, 25*(4), 396–419. https://doi.org/10.1080/1068316X.2018.1529230

Thompson, E. (February 15, 2021). Reports of domestic, intimate partner violence continue to rise during pandemic. CTV News. https://www.ctvnews.ca/health/coronavirus/reports-of-domestic-intimate-partner-violence-continue-to-rise-during-pandemic-1.5309118

Thompson, E. (July 13, 2020). *Child sex exploitation is on the rise in Canada during the pandemic*. CBC News. https://www.cbc.ca/news/politics/pandemic-child-sexual-abuse-1.5645315

Walker, K. & April, A. (2020). Moncton women's shelter sees increase in domestic violence calls. Atlantic CTV News https://atlantic.ctvnews.ca/moncton-women-s-shelter-sees-increase-in-domestic-violence-calls-1.5119836

## Appendix A

All source data in these tables is derived from the national database maintained by the NCMPUR unless otherwise indicated.

| Table 1: Number of Reported Missing Persons and Monthly COVID case trend by month of 2020 | | |
|---|---|---|
| **Month** | **Number of Report MPs** | **Number of Monthly COVID cases**[26] |
| January | 5,619 | 4 |
| February | 5,541 | 16 |
| March | 5,438 | 8,571 |
| April | 4,175 | 44,637 |
| May | 4,826 | 37,711 |
| June | 5,210 | 13,257 |
| July | 5,788 | 11,928 |
| August | 5,713 | 12,816 |
| September | 5,428 | 29,810 |
| October | 5,186 | 75,753 |
| November | 4,538 | 143,628 |
| December | 4,088 | 203,266 |
| **Total** | **61,550** | **581,397** |

| Table 2: Number of Reported Missing Persons by Year and Month, and percentage change between years | | | | | | |
|---|---|---|---|---|---|---|
| **Month** | **2018** | **2018 to 2019** | **2019** | **2019 to 2020** | **2020** | **2018 to 2020** |
| January | 5,558 | -2.07% | 5,443 | 3.23% | 5,619 | 1.10% |
| February | 5,376 | -10.55% | 4,809 | 15.22% | 5,541 | 3.07% |
| March | 6,141 | -8.34% | 5,629 | -3.39% | 5,438 | -11.45% |
| April | 6,015 | -0.15% | 6,006 | -30.49% | 4,175 | -30.59% |
| May | 7,099 | -3.89% | 6,823 | -29.27% | 4,826 | -32.02% |
| June | 6,911 | 1.40% | 7,008 | -25.66% | 5,210 | -24.61% |
| July | 6,473 | 3.68% | 6,711 | -13.75% | 5,788 | -10.58% |
| August | 6,507 | 2.63% | 6,678 | -14.45% | 5,713 | -12.20% |
| September | 6,078 | 5.68% | 6,423 | -15.49% | 5,428 | -10.69% |
| October | 6,364 | 2.99% | 6,554 | -20.87% | 5,186 | -18.51% |
| November | 5,841 | 0.82% | 5,889 | -22.94% | 4,538 | -22.31% |
| December | 5,537 | -2.89% | 5,377 | -23.97% | 4,088 | -26.17% |
| **Total** | **73,900** | **-0.74%** | **73,350** | **-16.09%** | **61,550** | **-16.71%** |

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[26] Reference: Esri Canada. (2021). COVID-19 Resources. https://resources-covid19canada.hub.arcgis.com/

| Table 3: Number of Missing Persons by Year and Province, and Percentage Changes by Province[27] | | | | | |
|---|---|---|---|---|---|
| **Province** | **2018** | **2018 to 2019** | **2019** | **2019 to 2020** | **2020** |
| British-Columbia | 19,570 | 1.95% | 19,952 | -8.47% | 18,262 |
| Alberta | 7,235 | 0.18% | 7,248 | -17.25% | 5,998 |
| Saskatchewan | 6,816 | 0.47% | 6,848 | -21.23% | 5,394 |
| Manitoba | 11,035 | -9.42% | 9,995 | -10.60% | 8,936 |
| Ontario | 17,778 | 0.73% | 17,907 | -21.58% | 14,043 |
| Québec | 9,185 | -1.94% | 9,007 | -27.77% | 6,506 |
| The Maritimes | 2,095 | 5.20% | 2,204 | 2.59% | 2,261 |
| The Territories | 184 | 2.72% | 189 | -20.63% | 150 |
| Total | **73,898** | | **73,350** | | **61,550** |

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[27] The total of reported missing persons is 208,798 in contrast to other tables which may indicate the total is 208,800. This discrepancy is due to the fact that two of the missing persons listed in the data set were not assigned provinces but rather coded as taking place in Canada.

| Table 4: Number of Reported Missing Persons per 100,000 population | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Province** | **2018** | | **2018 to 2019** | **2019** | | **2019 to 2020** | **2020** | |
| | **Population[28]** | **MPs per 100,000 population** | **% difference per 100,000 population** | **Population[29]** | **MPs per 100,000 population** | **% difference per 100,000 population** | **Population[30]** | **MPs per 100,000 population** |
| British-Columbia | 5,016,322 | 390.13 | 0.17% | 5,105,576 | 390.79 | -9.19% | 5,145,851 | 354.89 |
| Alberta | 4,330,206 | 167.08 | -1.31% | 4,395,586 | 164.89 | -17.85% | 4,428,112 | 135.45 |
| Saskatchewan | 1,165,903 | 584.61 | -0.62% | 1,178,657 | 581.00 | -21.18% | 1,177,884 | 457.94 |
| Manitoba | 1,356,836 | 813.29 | -10.55% | 1,373,859 | 727.51 | -10.97% | 1,379,584 | 647.73 |
| Ontario | 14,411,424 | 123.36 | -0.98% | 14,659,616 | 122.15 | -21.97% | 14,733,119 | 95.32 |
| Québec | 8,421,698 | 109.06 | -3.10% | 8,522,800 | 105.68 | -28.21% | 8,575,779 | 75.86 |
| The Maritimes | 2,416,754 | 86.69 | 4.35% | 2,436,612 | 90.45 | 2.40% | 2,441,141 | 92.62 |
| The Territories | 123,428 | 149.07 | 1.60% | 124,790 | 151.45 | -21.73% | 126,535 | 118.54 |
| **Total** | **37,242,571** | | | **37,797,496** | | | **38,008,005** | |

[28]The population represents quarter 4 of the 2018 Statistics Canada quarterly estimates. Statistics Canada. Table 17-10-0009-01 Population estimates, quarterly.
https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901

[29] The population represents quarter 4 of the 2019 Statistics Canada quarterly estimates. Statistics Canada. Table 17-10-0009-01 Population estimates, quarterly.
https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901

[30] The population represents quarter 4 of the 2020 Statistics Canada quarterly estimates. Statistics Canada. Table 17-10-0009-01 Population estimates, quarterly.
https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901

Table 5: Number of Reported Missing Persons by Year and Probable Cause, and Percentage Changes by Probable Cause

| Probable Cause [31] | 2018 | 2018 to 2019 | 2019 | 2019 to 2020 | 2020 |
|---|---|---|---|---|---|
| Abduction by a relative | 183 | -10.38% | 164 | -31.10% | 113 |
| Abduction by a Stranger | 55 | 14.55% | 63 | -15.87% | 53 |
| Accident | 66 | 4.55% | 69 | 7.25% | 74 |
| Human Trafficking | 52 | 1.92% | 53 | 7.55% | 57 |
| Presumed Dead | 41 | -7.32% | 38 | 2.63% | 39 |
| Runaway | 36,858 | -3.33% | 35,630 | -21.35% | 28,023 |
| Wandered Off, Lost | 3,388 | 14.14% | 3,867 | -19.03% | 3,131 |
| Unknown | 28,354 | -0.56% | 28,194 | -10.18% | 25,325 |
| Other | 4,903 | 7.53% | 5,272 | -10.19% | 4,735 |
| Total | 73,900 | | 73,350 | | 61,550 |

Table 6: Number of Reported Missing Persons by Year and Sex, and Percentage changes by Sex

| Sex | 2018 | 2018 to 2019 | 2019 | 2019 to 2020 | 2020 |
|---|---|---|---|---|---|
| Female | 38,191 | -3.27% | 36,941 | -13.49% | 31,959 |
| Male | 35,709 | 1.96% | 36,409 | -18.73% | 29,591 |
| Total | 73,900 | | 73,350 | | 61,550 |

Table 7: Number of Reported Missing Persons by Age Category and Year, Percentage Changes by Age Group

| Age Group | 2018 | 2018 to 2019 | 2019 | 2019 to 2020 | 2020 |
|---|---|---|---|---|---|
| Child | 776 | -1.03% | 768 | -27.73% | 555 |
| Teenager | 41,434 | -4.46% | 39,585 | -20.87% | 31,322 |
| Adult | 31,690 | 4.12% | 32,997 | -10.07% | 29,673 |
| Total | 73,900 | | 73,350 | | 61,550 |

[31] For any Probable Cause with less than 100 people, as these numbers are low, the study could not imply statistical significance.