

# The Effect of Covid-19 lockdowns on Torontonians Mental Health\*

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## Abstract

The Covid-19 pandemic resulted in the provincial implementation of several lockdown mandates in 2020. Although the lockdowns have ended, the consequences of this time on mental health persists. This paper uses data from Toronto Police Open Data to determine relationships between increasing mental health crisis calls to police and the number of apprehensions related to mental health cases. This analysis will then be used to discuss the need for increased access to mental health services in the city.

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## 1 Introduction

Mental Health crises are unfamiliar occurrences in Toronto and around the world. Many of the victims end up in confrontations with police, with lethal force against them. The Toronto Police record around 20,000 calls per year related to persons in crisis. The Covid-19 pandemic challenged the lives of Torontonians further, disrupting many aspects of daily life. Furthermore, the lockdown implementation for public health had crucial consequences to the mental well-being of many individuals. As a result of this, rates of attempted suicides, drug abuse, and domestic violence have increased significantly in the city. In this paper, I will discuss the number of crisis calls made to Toronto Police and its relation to the number of apprehensions by police. In section 2, the source of the data will be discussed and any limitations that the data contains. Section

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\*Code and Data are available at: <https://github.com/chyhhui/toronto-mental-health-covid19>

2.1 will discuss the methodologies used to construct the tables and graphs used to analyze. Additionally, other factors such as sex and age will be considered to determine correlations to the number of received calls. Finally, section 3 will be analyzed to determine trends and relationships between the mental health of Torontonians and the Covid-19 pandemic and lockdown. This analysis will propose reasons based on this data for why an increase of mental health services are crucial to Toronto’s well-being as a whole.

## 2 Data

### 2.1 Source

To analyze the occurrences of Mental Health related cases with Toronto police intervention, data was downloaded from the Toronto Police Open data portal (Police 2022). The Toronto Police released online datasets related to Mental Health cases in February 2022 as part of the Mental Health Act (MHA). The datasets used in this paper include; ‘Mental Health Apprehensions’ and ‘Persons in Crisis Calls for Service Attended.’ The data was cleaned using the ‘R programming language’ (R Core Team 2020) and ‘R’ packages including; ggplot (Wickham 2016), tidyverse (Wickham et al. 2019), dplyr (Wickham et al. 2021), and kable (Zhu 2021).

The dataset ‘Mental Health Apprehensions’ consists of data from 2014 to 2020. Each row in the dataset represents an individual apprehended by Toronto Police under the Mental Health Act (MHA). The date of occurrence, location, sex, age, and apprehension type is included in the raw data. The types of Apprehensions vary, and are important to consider. MHA 17-Police’s power of apprehension, MHA 15 or Form 1 refers to an application for psychiatric assessment, MHA 16 or Form 2-Order of Examination, MHA 28-Elopee Order for Return, and MHA 33.4- Community Treatment for Examination. The dataset ‘Persons in Crisis Calls’ provided data from the number of Crisis Calls that were made by Torontonians to police. This data included; the types of calls, neighborhood, and if the individual was apprehended.

### 2.2 Limitations

The data provided by the Toronto Police are thorough, however, also the impact of on the mental health of children from the pandemic is widely underrepresented. In the data sets provided by Toronto Police, it is explicitly stated that individuals under 17 were excluded from the data for the privacy and protection the identity of minors. Minors under 17 made up 6.5% of apprehensions linked to mental health case from 2014-2020. Furthermore, there are instances in the data where individuals apprehended by Toronto Police are not classified in the sex category, and listed as ‘Not Recorded.’ This has been addressed to be reevaluated to be more inclusive of individuals identifying beyond the categories provided.

### 2.3 Tables

The tables included in this paper will analyze the numbers of mental health apprehensions prior to Covid-19 to the first year of the pandemic and lockdown in Toronto. Table 2 will display data for number of crisis calls made to Toronto Police in 2020 by month.

Table 1: Mental Health Apprehensions in 2018-2020

Year	Number of Apprehensions
2018	10588
2019	11168
2020	11707

Table 2: Number of Crisis Calls made to Toronto Police in 2020 by Month

Month	Number of Calls
April	2560
August	3051
December	2846
February	2400
January	2533
July	2917
June	2874
March	2577
May	2851
November	2805
October	2829
September	2816

### 2.3.1 Table Results

Table 1 shows the number of apprehensions made by Toronto police from 2018 to 2020. This shows the increase in apprehensions prior and during the Covid-19 pandemic in 2020/ Table 2 expresses this in deeper detail by months in 2020. Table 2 displays the number of crisis calls made to Toronto police in 2020. It is evident of the increasing number in March on, with its peak in August.

## 2.4 Graphs

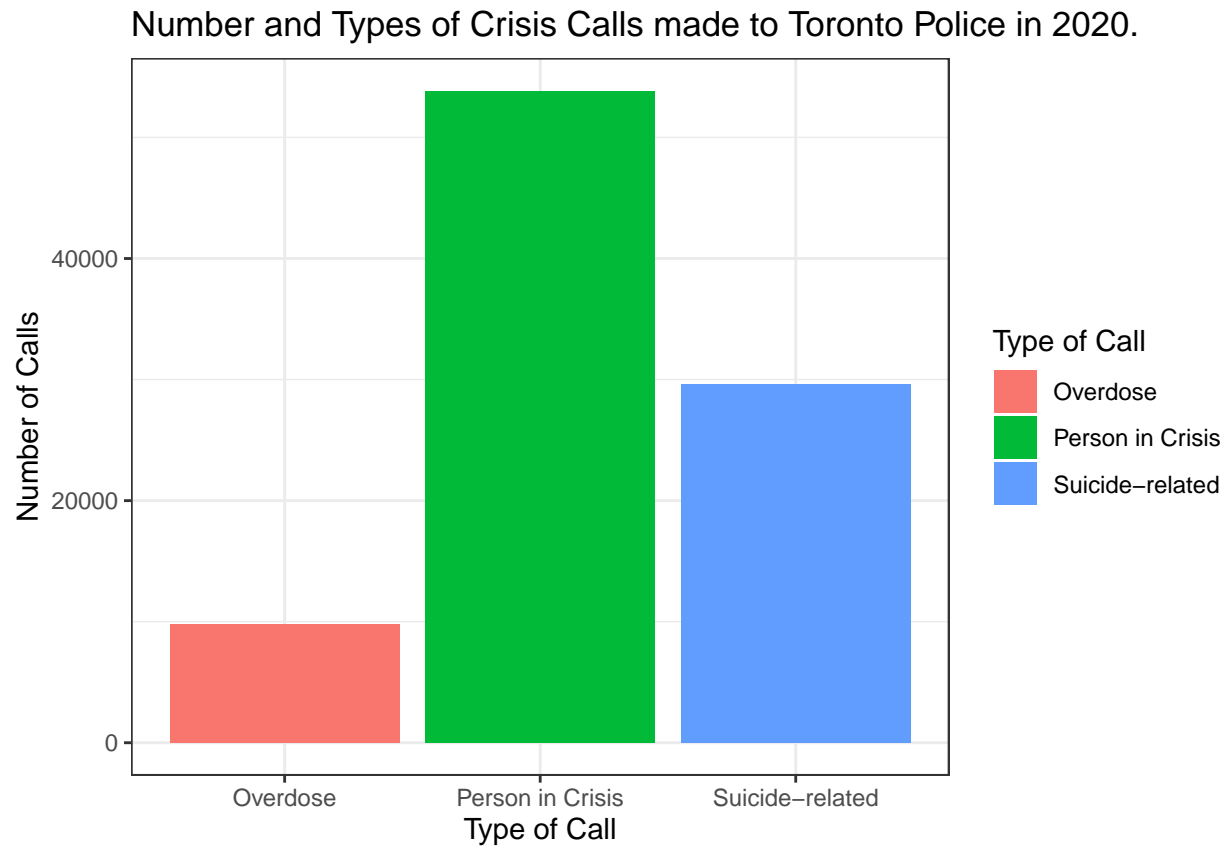


Figure 1: Number and Types of Crisis Calls made to Toronto Police in 2020

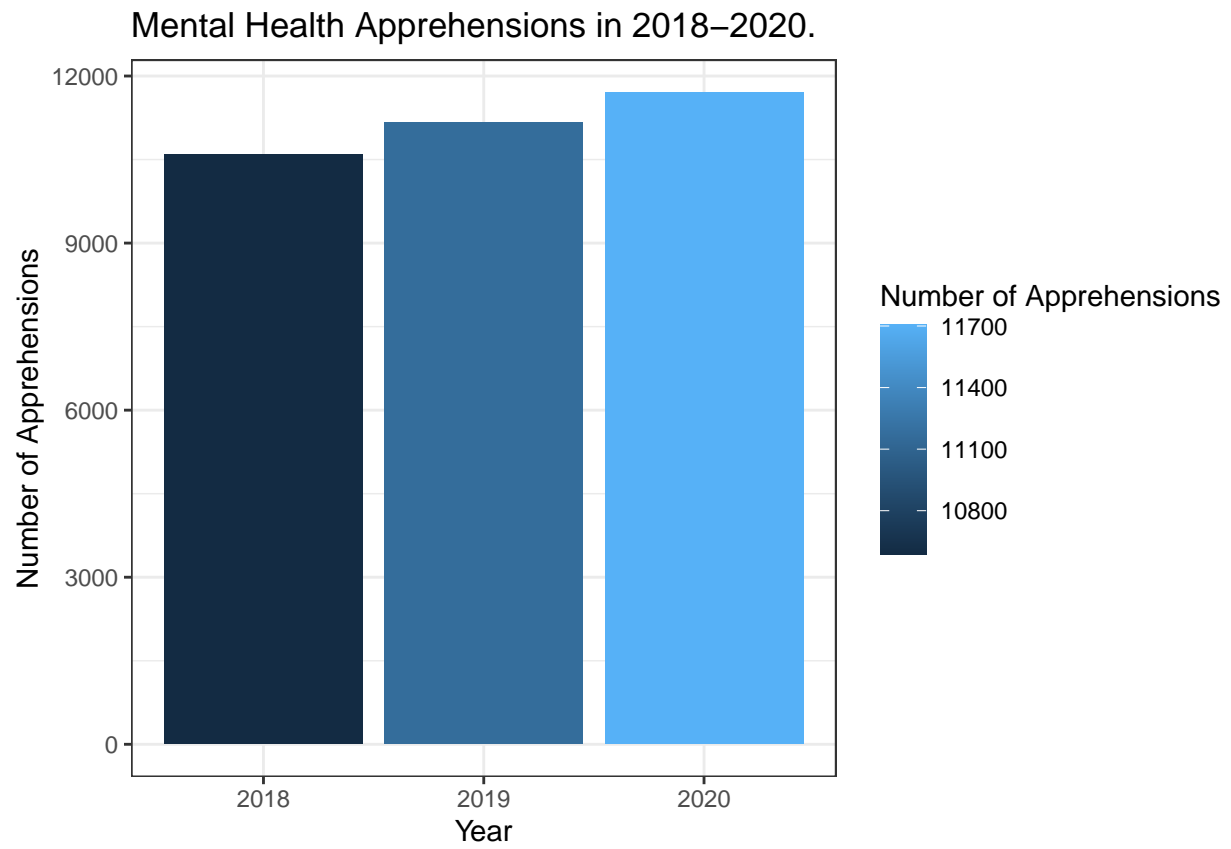


Figure 2: Mental Health Apprehensions in 2018-2020

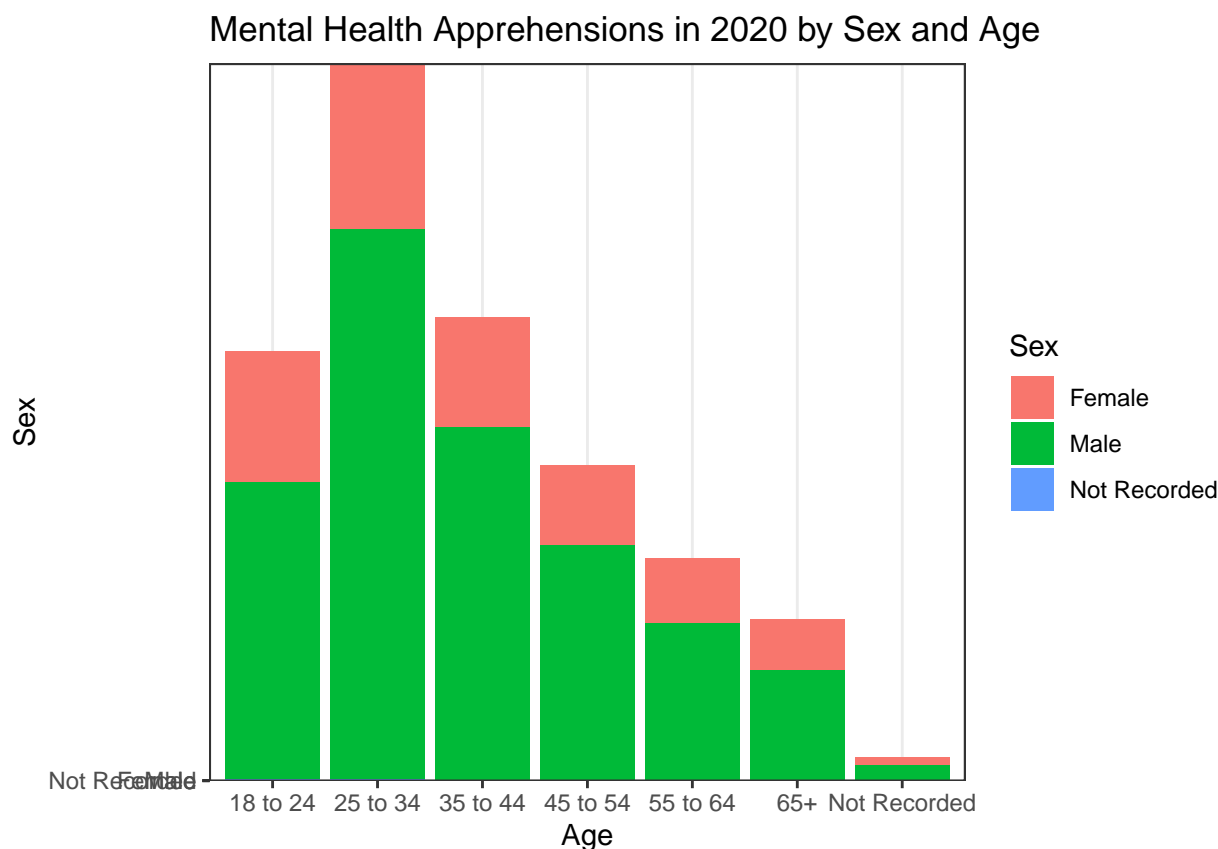


Figure 3: Mental Health Apprehensions by Age in 2020

### 3 Discussion

Discussions surrounding the mental health of populations have increased significantly over the past decade, as awareness and resources for mental health have also increased. Cases that are affiliated with individuals that have mental health issues must be treated in a different manner than normal circumstances. However, it is evident in Toronto and around the world of the fatalities that these conflicts often end with. Evident in graph 2, the number of apprehensions by Toronto Police have increased every year. There can be many reasons for this increase, however, it is also important to consider the social aspects that contribute to the apprehensions of individuals. Evidence of police brutality towards certain minority communities, specifically persons of colour have been increasingly present in media in the last few years. Even more, these communities are also often at higher risk of mental health issues, as well as face a lack of mental health resources.

Table 2 shows the spike in Crisis Calls made to Toronto Police in 2020, from March on. This is parallel to the beginning of the Covid-19 pandemic and the implementation of lockdown mandates. The disruption of Torontonians daily lives had a great influence on their mental health, as evident by the increased number of crisis calls and mental health apprehensions in 2020. The spike in August, with 3051 calls made aligns with the four month point since the beginning of lockdown in March.

Graph 1 displays the number of calls categorized by the reason for the call in 2020. The types are; overdose, persons in crisis, and suicide-related. The persons in crisis make up the highest count in 2020, however, it is also unclear what scenario or case constitutes a ‘person in crisis.’ The generalization makes it difficult to determine what the dominant reason for the crisis calls are being made for. This information would be helpful for medical practitioners and mental health staff to navigate and address these particular reasons.

Graph 3 exhibits the age demographics of mental health apprehensions in 2020. The largest demographic being 25-34 years old. This demographic faces many challenges from work to personal obstacles that may have contributed to their mental health.

Good judgement, sensitivity, and skills in deescalating difficult situations are crucial to navigating these cases and the police have addressed this. The use of police force in deescalating situations with persons in crisis are often criticized heavily by the public, and demands for new methods were met. The data collecting surrounding mental health related crisis and apprehensions in Toronto was sufficient for the police to finally take action. In early 2022, a special mobile unit was dispatched, to potentially deescalate situations without the presence of police force. These mobile units are headed by a harm-reduction worker, nurse, indigenous elder, or de-escalation expert. The success of this taskforce will be determined with time, with the eventual decrease of the need for police force in these situations.

## 4 Conclusion

The goal to get every Torontonians the mental health support they need seems like an unattainable goal and this is true with the lack of resources available at this moment. The number of mental health affiliated cases and calls made by Torontonians in 2020 is evident of the need for support to address this issue. The on-going pandemic and on and off again lockdown mandates only negatively influence mental health. In addition to this, the data is evidence of the devastating numbers of Toronto individuals that are suffering some form of mental health issue and requires police intervention. It is important to note there are thousands of individuals that are also suffering in silence, and not part of this data. For these reasons, I would implore Toronto and Ontario government to reevaluate the existing resources that are available and allocate to those in need.

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