ANXIETY AND DEPRESSION IN THE WORKPLACE ANALYSIS BY SECTOR

Our ongoing COVID-19 national polls reveal trends in negative mental health by workplace sector.

Which sectors have been most severely impacted by the COVID-19 pandemic?

Frontline Healthcare sector is experiencing a considerable rise in self-rated levels of anxiety since the onset of COVID-19.

Restaurant workers, retailers are demonstrating a shift from medium levels of self-rated anxiety to high levels.

Self-rated levels of anxiety vary considerably between frontline healthcare sectors

Levels of anxiety in the **mental health workers** remains the highest of all the frontline healthcare sectors.

Registered nurses are collectively experiencing higher self-rated levels of anxiety now.

Physical therapists have had overall lower levels of anxiety. **Pharmacists** experienced low-medium levels of anxiety.

WHAT COMES AS A SURPRISE

The following sectors had the highest levels of self-rated anxiety BEFORE the pandemic

Janitorial Services

Arts

Entertainment

For more information, visit www.mhrc.ca

RECHERCHE EN SANTÉ MENTALE CANADA
MENTAL HEALTH RESEARCH CANADA

ANXIETY AND DEPRESSION IN THE WORKPLACE ANALYSIS BY SECTOR

Self-rated anxiety in various sectors pre-COVID and since-COVID

Frontline healthcare, delivery/utilities, restaurant/retail, janitorial services and arts sector show an **increase** in anxiety since the COVID-19 pandemic

Increase in levels of self-rated depression in various sectors pre-COVID and since-COVID

ARTS/ENTERTAINMENT

FRONTLINE HEALTHCARE

JANITORIAL SERVICES

Frontline healthcare sector experiences the **largest** increases in both self-rated levels of depression. Workers in this sector will need long-term support to address the mental health challenges they face throughout the COVID-19 recovery period.

Janitorial and Maintenance Services and **Arts, Entertainment and Information** sectors report the **highest** levels of diagnosis of depression prior to the pandemic but have not seen a considerable increase since the onset of COVID-19.

Learn more at www.mhrc.ca

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RESEARCH BRIEF

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ANXIETY AND DEPRESSION IN THE WORKPLACE ANALYSIS BY SECTOR

BACKGROUND

MHRC is conducting work on a national polling project on the mental health of Canadians throughout the COVID-19 pandemic. We are proud to partner with Health Canada to collect, analyze, and present these data to be freely available to stakeholders in our community. The information in this report is from data gathered from polls 2 to 7 of our ongoing national 12-poll series.

INTRODUCTION

COVID-19 and its associated restrictions continue to have a negative effect on the mental health of Canadians. In recent polls we found that frontline healthcare workers were experience significantly heightened levels of anxiety and depression; through this analysis we are looking for trends in negative mental health by workplace sector. In an examination of levels of anxiety and depression pre-COVID-19 compared to post-COVID-19 we can discern three relevant questions: which sectors have been most severely impacted by the pandemic, which sector experiences high levels of anxiety and depression prior to or regardless of the pandemic, which sector has seen the broadest range of experiences. Through violin charting we are able to determine and depict a median response as well as the ranges of experiences that respondents are facing. Beyond self-rated levels of anxiety and depression, this analysis considers mood disorder diagnoses as well as access to benefits. Furthermore, we did a closer examination of respondents in the Frontline Healthcare sector to determine how the pandemic is affecting self-rated levels of anxiety and depression, as well as diagnoses of mood disorders.

EXECUTIVE SUMMARY

Overall, our analysis shows frontline healthcare workers, especially nurses, have the highest increase in self-rated levels of anxiety during the pandemic, along with a significant increase in mental health diagnoses. The *Restaurant, Retail, Healthcare – Other (not patient facing)* and *Mental Health Professionals* sectors have also all seen significant increases, although it is worth noting the *Mental Health Professionals* sector reported high anxiety levels even pre-COVID-19. Rates of diagnosis among other employment sectors have not seen a significant increase, though *Janitorial and Maintenance Services* and *Arts, Entertainment, and Information* report very high percentages of mental health diagnoses prior to the pandemic.

Though this brief does not attempt to report on increases or likewise of Post-Traumatic Stress Disorder, it is a factor that must be considered after many months of exposure to high levels of stress, particularly within the frontline healthcare sectors, as mentioned above.

SAMPLE

As displayed in Table A1, the total sample for Polls 2 through 7 ranged between 2,004 and 4,010, and frequently include provincial upsamples from participating provinces. These upsamples are adjusted for in our national analyses to ensure a balance representation based on population.

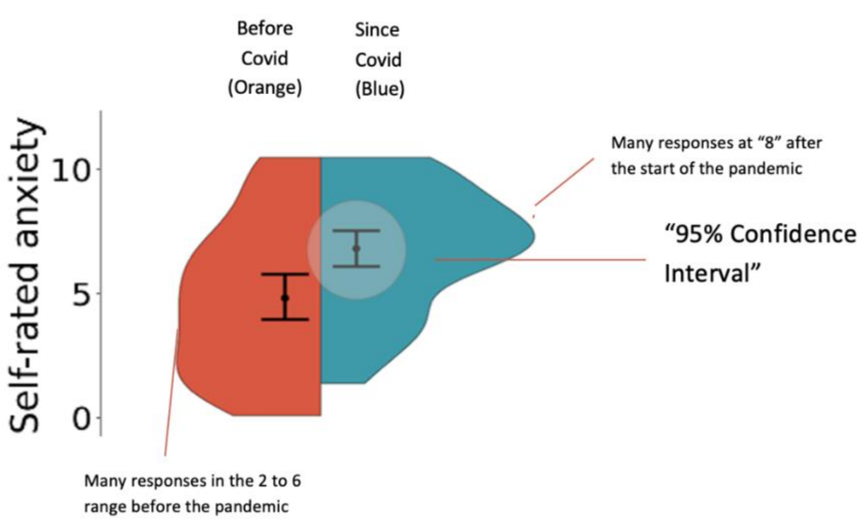
TABLE 1: SAMPLE SIZE AND DATE OF DATA COLLECTION

	National Sample	Margin of Error	Collection Date
Poll 2	4,010	±1.5%	August 21 to 31, 2020
Poll 3	2,004	±2.2%	October 22 to 28, 2020
Poll 4	2,761	±1.9%	December 10 to 18, 2020
Poll 5	3,005	±1.8%	February 1 to 8, 2021
Poll 6	4,005	±1.5%	April 20 to 28, 2021
Poll 7	4,010	±1.5%	June 7 to 13, 2021

Through double-violin graphing, we can depict responses from before and during the pandemic, as well as the range of experiences that respondents are facing in the present. Further on in this report, stacked bar graphs demonstrate mood disorder diagnoses that have occurred pre- and post-pandemic.

For those unfamiliar with violin graph formatting, you can interpret them as follows:

EXAMPLE OF A DOUBLE-VIOLIN GRAPH



In this particular chart, we can see that prior to the pandemic (the orange image), most responses were in the 2-6 score range for self-rated anxiety. After the pandemic (the blue image), the self-rated anxiety levels are primarily scored at 8. The black bars in the middle represents the 95% confidence interval: in layman terms, the black dot at the center of the vertical bar is the average response, and we are 95% confident that if you polled the entire Canadian population, the average would be within the range of the bar. The more varied responses are to a question, the longer the bar will be, as we can be less confident your average would apply to everyone outside of the sample. In contrast, if everyone is experiencing the same levels of anxiety or depression, you will have a very small bar showing a very high confidence. A more varied response indicates more people are having different responses – less variance means the experience is more consistent.

FINDINGS

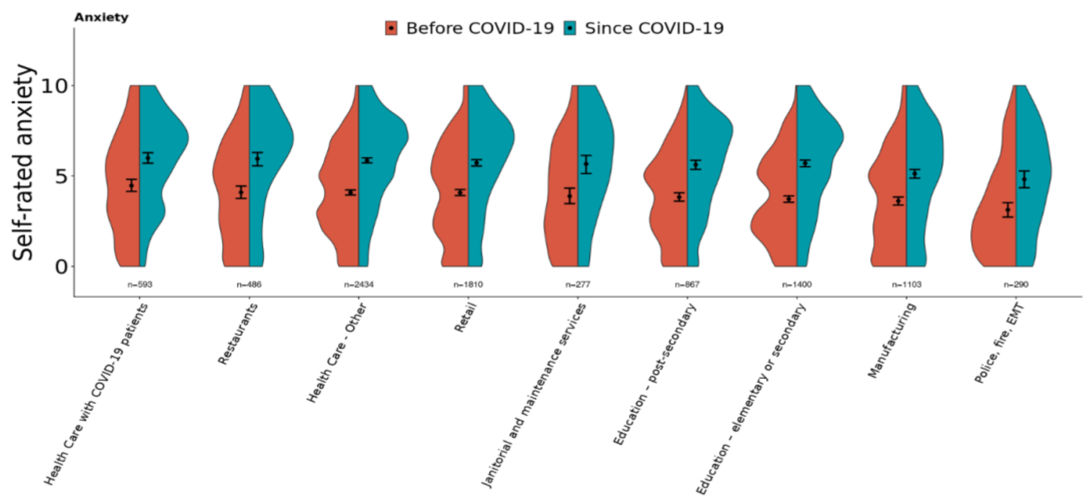
SELF RATED ANXIETY AND DEPRESSION

1. **Which sectors have been most severely impacted by the COVID-19 pandemic?**
   As seen in Figure A1 below, and as noted in our Poll 7 report, the Frontline Healthcare sector (noted as *Health Care with COVID-19 Patients*) is experiencing a considerable rise in self-rated levels of anxiety since the onset of COVID-19. 'Restaurant', 'Retail', and 'Healthcare – Other' are also demonstrating a shift from medium levels of anxiety (4-6 on the self-rated scale) to high levels of anxiety (7-10 on the self-rated scale). Though self-rated depression has increased across every sector there is not a considerable increase anywhere in particular. As shown in Figures B1 and B2, the median response remains between 4- 6 on the self-rated scale.

2. **Which sectors experienced high self-rated levels of anxiety and depression prior to the pandemic?**
   Frontline healthcare workers were experiencing high levels of anxiety and depression in comparison to other sectors prior to the pandemic, though they have increased considerably since COVID-19. Other sectors that demonstrate similar workplace experience with high self-rated levels of anxiety and depression both pre- and post-COVID-19 are 'Healthcare-Other', 'Retail', 'Government', and 'Restaurant'. Therefore, it is evident that sectors in which workers have been considerable affected by the pandemic and the same sectors that experience high self-rated levels of anxiety and depression prior to the pandemic. Visualisation of this analysis is shown in Figures A1, A2, B1 and B2. It is important to note that these are self-rated scales and under

reporting may be especially prevalent in certain sectors that traditionally value resiliency, such as, 'Police, Fire, EMT'.

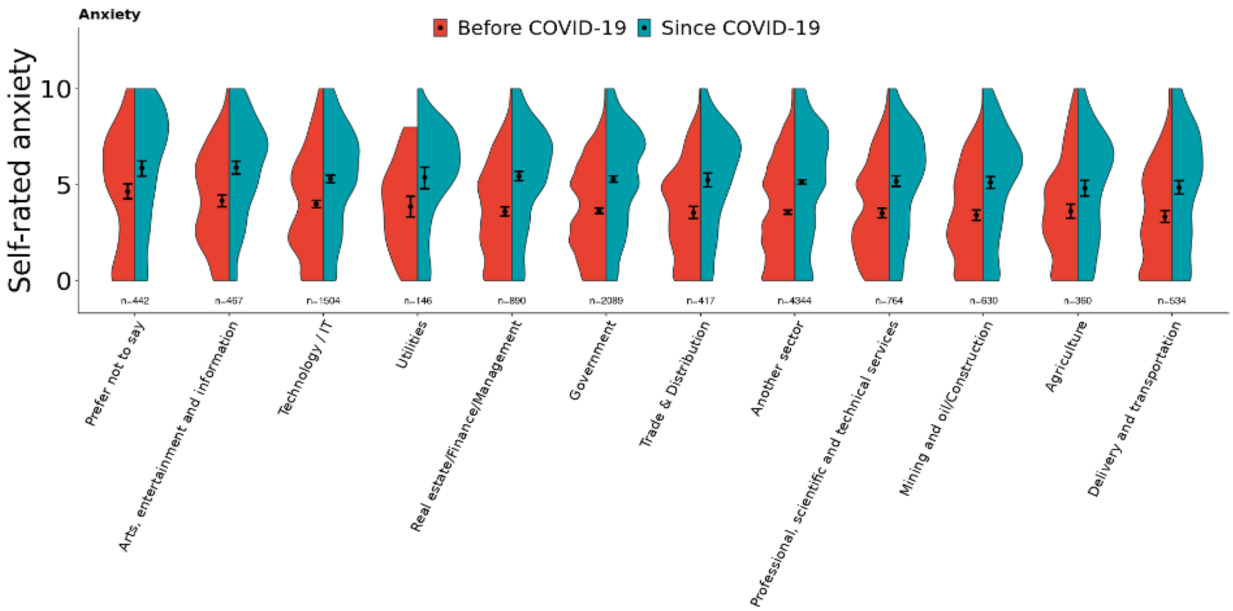
FIGURE A1. SELF-RATED ANXIETY PRE- AND POST-COVID-19 BY SECTOR 1/2



A1: Self-rated levels of anxiety pre- and post-COVID-19 separated by sector. This is one of two visualizations of the breakdown. The other half of the sectors are found in Figure A2. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 9,258.

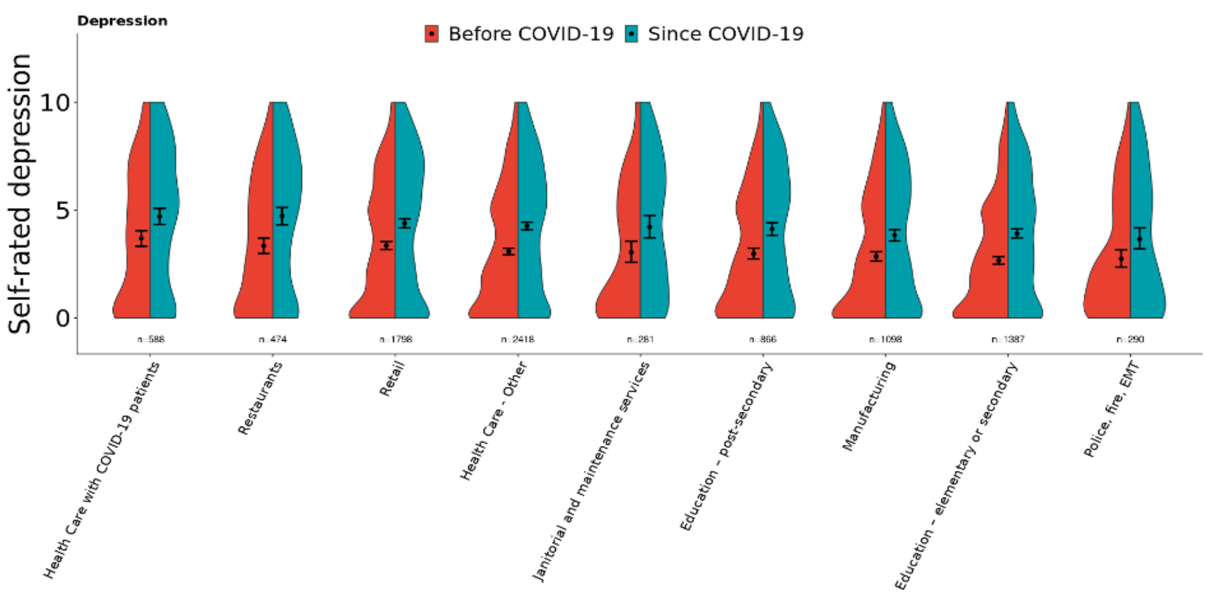
3. **Which sector has seen the broadest range of experiences throughout the COVID-19 pandemic?**
   The mental health experiences of workers are not entirely dependent on the sector itself; factors such as management, location, and pre-existing mental health challenges may contribute to heightened levels of self-rated anxiety and depression, or lack thereof. This is demonstrated clearly in the *Delivery* sector, as well as in the *Restaurant* and *Utilities* sectors. The analysis of these sectors is demonstrated in Figure A2 below; this visualization was completed through the same analysis as the sectors in Figure A1 and are, therefore, comparable.

FIGURE A2. SELF-RATED ANXIETY PRE- AND POST-COVID-19 BY SECTOR 2/2



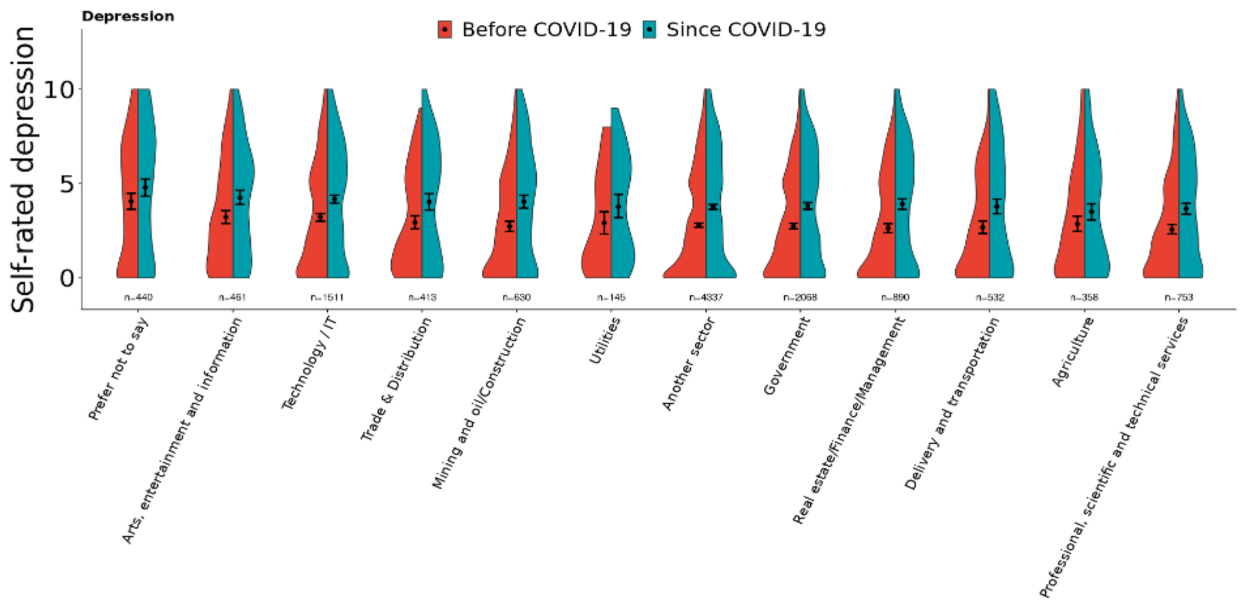
A2: Self-rated levels of anxiety pre- and post-COVID-19 separated by sector. This is one of two visualizations of the breakdown. The other half of the sectors are found in Figure A1. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 12,587.

FIGURE B1. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY SECTOR 1/2



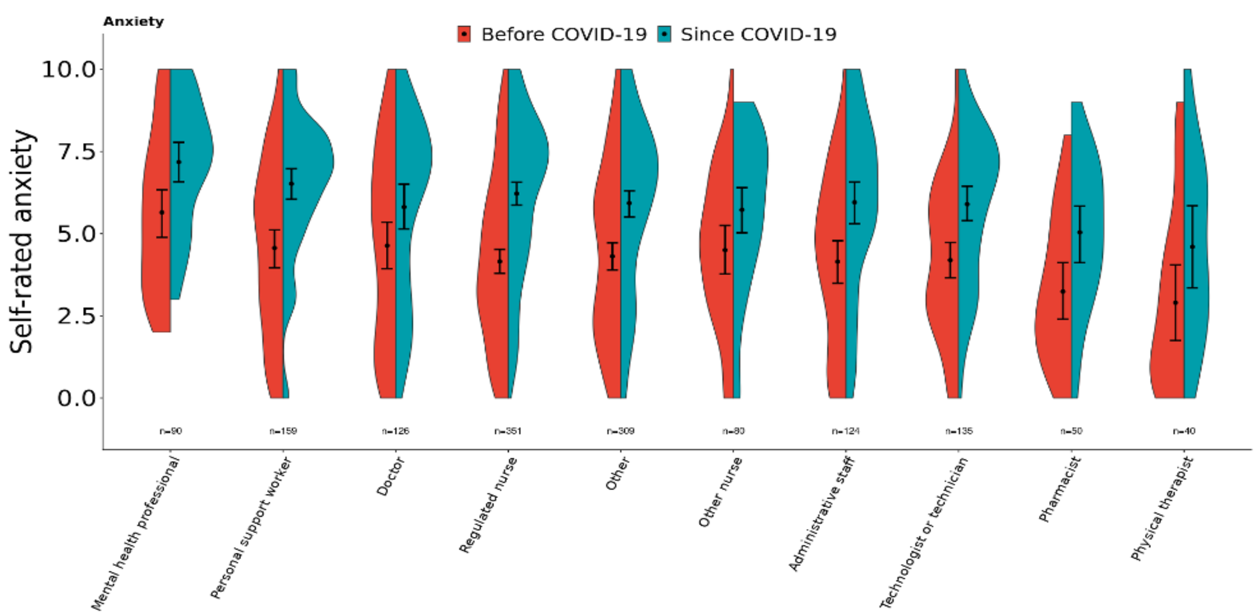
B1: Self-rated levels of depression pre- and post-COVID-19 separated by sector. This is one of two visualizations of the breakdown. The other half of the sectors are found in Figure A2. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 9,200.

FIGURE B2. SELF-RATED DEPRESSION PRE AND POST-COVID-19 BY SECTOR 2/2



B2: Self-rated levels of depression pre- and post-COVID-19 separated by sector. This is the second of two visualizations of the breakdown. The other half of the sectors are found in Figure A2. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 12,538.

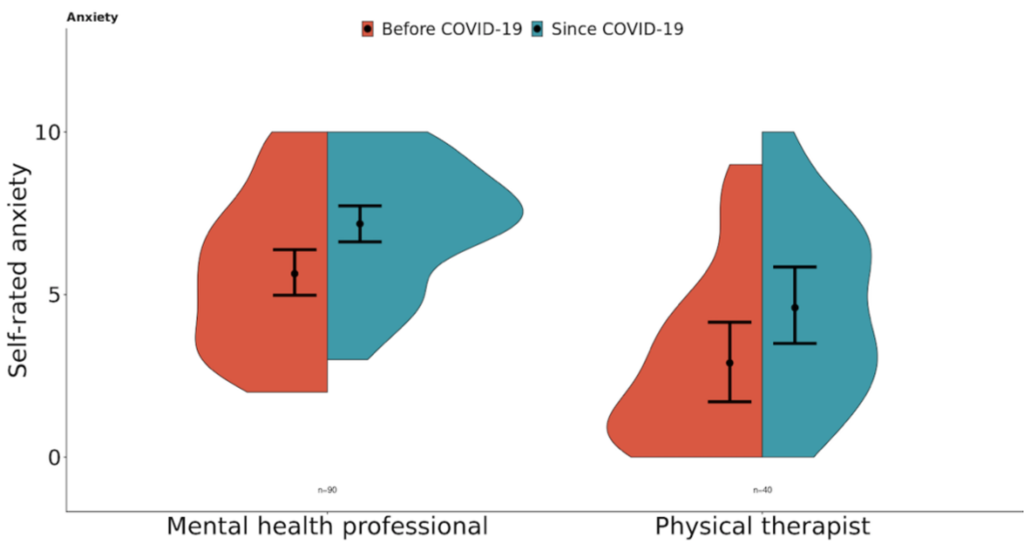
FIGURE C1. SELF-RATED ANXIETY PRE AND POST-COVID-19 BY HEALTHCARE SECTOR



C1: Self-rated levels of anxiety pre- and post-COVID-19 separated by healthcare sector. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 1,464.

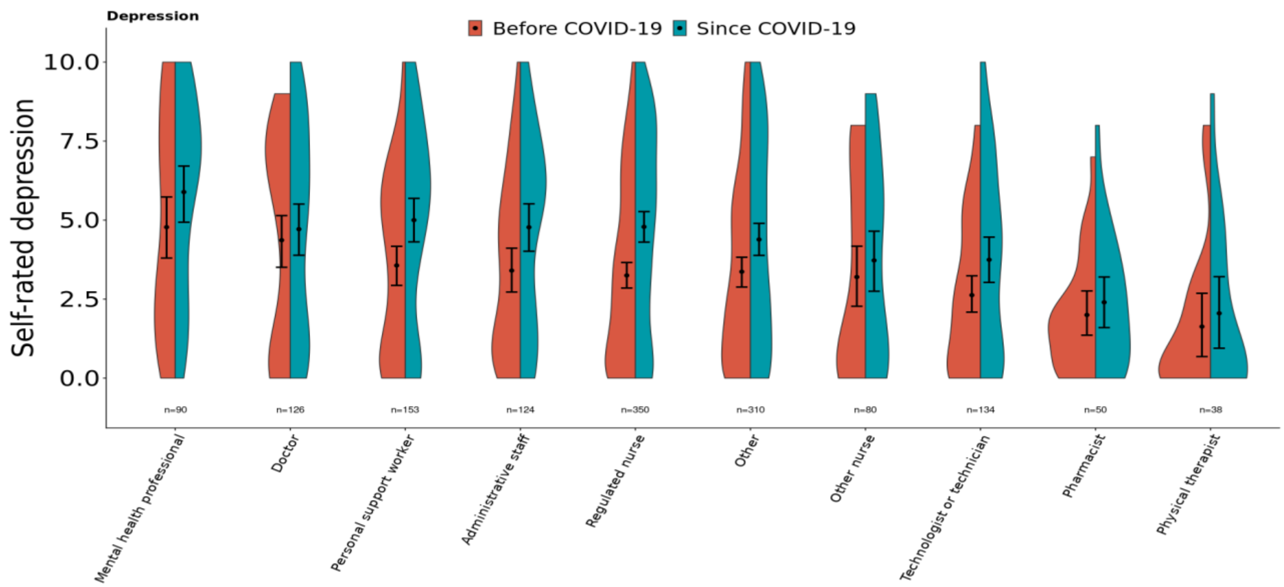
As you can see in the Figure C1 above, self-rated levels of anxiety varied considerably between frontline healthcare sectors. In mental health care workers, the level of anxiety was higher pre-COVID-19 than that of the average physical therapist, for example. Levels of anxiety have become further elevated in the mental health workers since the beginning the pandemic and, their level of anxiety at the median remains the highest of all the frontline healthcare sectors. Registered nurses, on the other hand, had lower overall anxiety pre-COVID-19 but are collectively experiencing higher self-rated levels of anxiety now. Nurses also have lower variance in responses – that is, more people in this sector are experiencing similar increases in anxiety, versus some other sectors where the responses are more varied. Figure C2, below, is a demonstration of how greatly the experiences of two sectors can differ.

FIGURE C2. EXAMPLE OF SELF-RATED ANXIETY PRE- AND POST-COVID-19 IN MENTAL HEALTH PROFESSIONALS VS PHYSICAL THERAPISTS



C2: A demonstration of how greatly two professions can differ regarding mental health experiences, both pre- and post-COVID-19. Not only are the average levels of self-rated anxiety higher among mental health professionals, but they also have a lower variance, meaning they consistently experience these levels across the sector, while self-rated anxiety levels vary more across physical therapists.

FIGURE C3. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY HEALTHCARE SECTOR



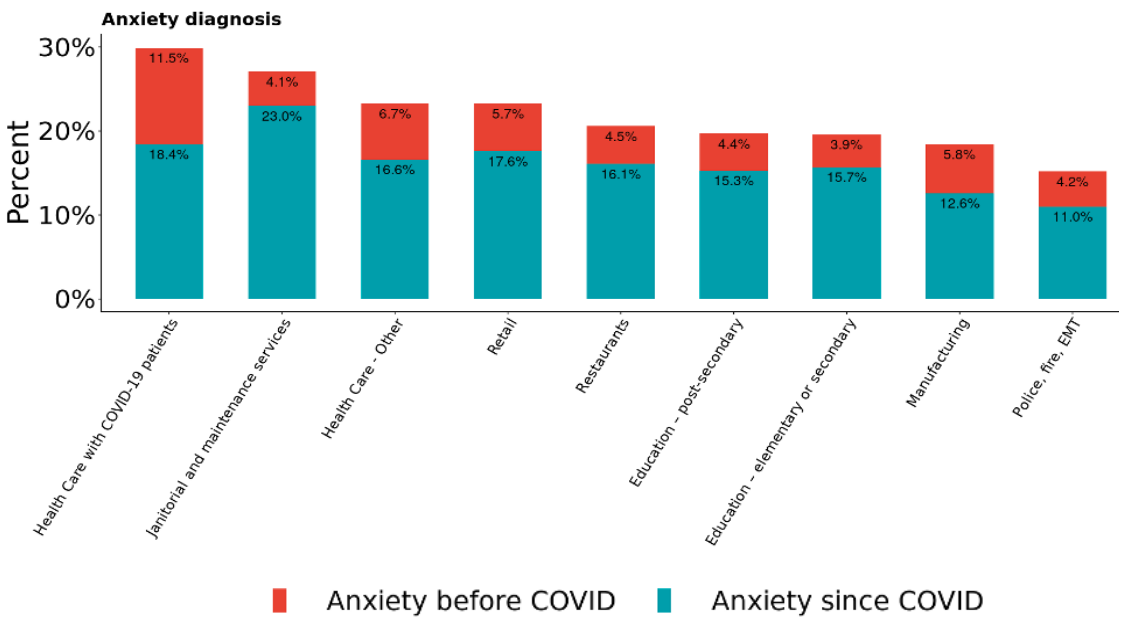
C3: Self-rated levels of depression pre- and post-COVID-19 separated by healthcare sector. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 1,455.

As with self-rated levels of anxiety, seen in Figure C1, levels of depression among frontline health care workers are extremely varied, both pre- and post-COVID-19. Figure C3, above, demonstrates that Pharmacists, for example, have experienced relatively low levels of depression both prior to the onset of the pandemic and currently. Though the median demonstrates a somewhat broad range of experiences, they generally fall in the low to medium-low range and have seen meaningful change caused by to COVID-19. In comparison, Regulated/Registered Nurses are reporting elevated levels from depression, from medium-low to medium, with a much smaller variance in experience meaning a more collective shift in self-rated levels of depression.

MOOD DISORDER DIAGNOSES PRE- AND POST-COVID-19

While self-rated levels of anxiety and depression are an important tool for understanding the impact of COVID-19 on different sectors, a comparison of anxiety and depression diagnoses pre- and post-COVID-19 can help us to understand the longer-term effects of elevated levels of anxiety and depression. Figures D1, D2, E1 and E2 show the results of these analyses. It is important to note that not all respondents have equal access to professional mental health support to be able to receive a diagnosis; that being said, an analysis of access to benefits versus limited or no access to benefits did not yield significant disparities in levels of diagnoses.

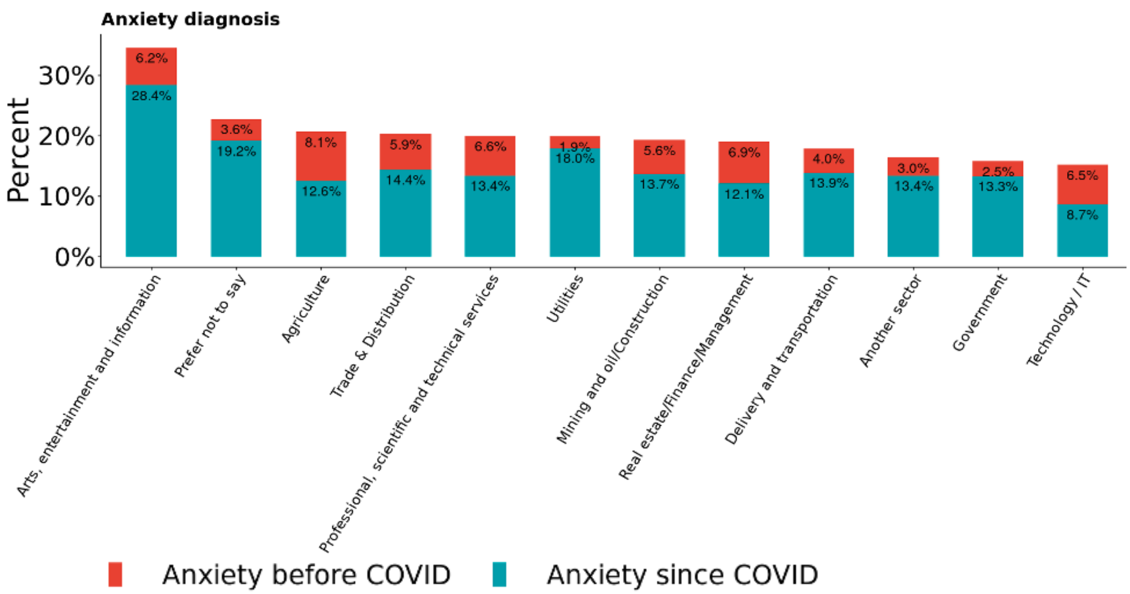
FIGURE D1. ANXIETY DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR ½



D1: Anxiety diagnoses pre- and post-COVID-19 separated by sector. This is one of two visualizations of this breakdown, the other half of the sectors are found in Figure D2. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 995.

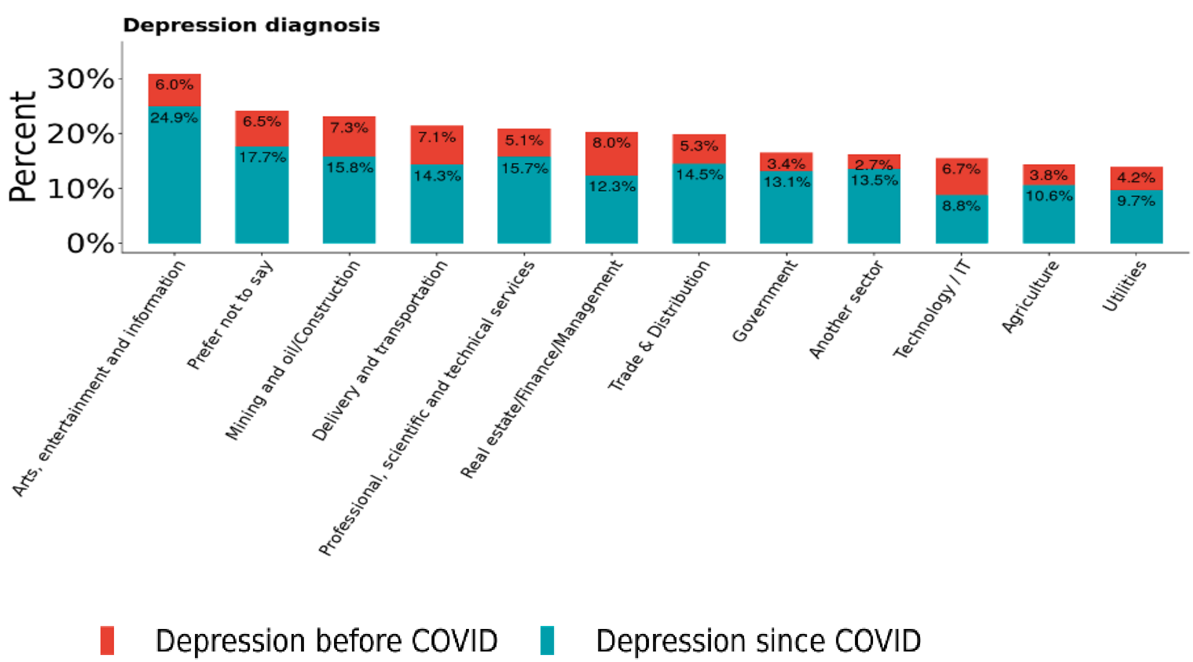
As demonstrated in Figures D1 (above) and D2 (below) *Janitorial and Maintenance Services* and *Arts, Entertainment,* and *Information* sectors reported the highest levels of anxiety diagnoses pre-COVID-19 at 29% and 28% respectively. Since the onset of the pandemic, however, they have not seen a significant increase (5% each). In our Poll 7 report, we noted that anxiety diagnoses of frontline healthcare workers had a considerable increase in anxiety diagnoses; the results of this analysis are consistent with that finding. Diagnoses of anxiety have increased from 21% pre-pandemic to 38% post-COVID-19 with a large portion of these diagnoses occurring since our Poll 6 analysis (April 2021). This could be a lagging mental health indicator following a year of high stress levels. As mentioned, low diagnosis levels of mentally taxing professions such as Police, Fire, EMT (15% pre-COVID-19 and 6% post-COVID-19), could be due to low levels of access to care rather than low levels of need.

FIGURE D2. ANXIETY DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR 2/2



D2: Anxiety diagnoses pre- and post-COVID-19 separated by sector. This is the second of two visualizations of this breakdown. The other half of the sectors are found in Figure D1. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 1,157.

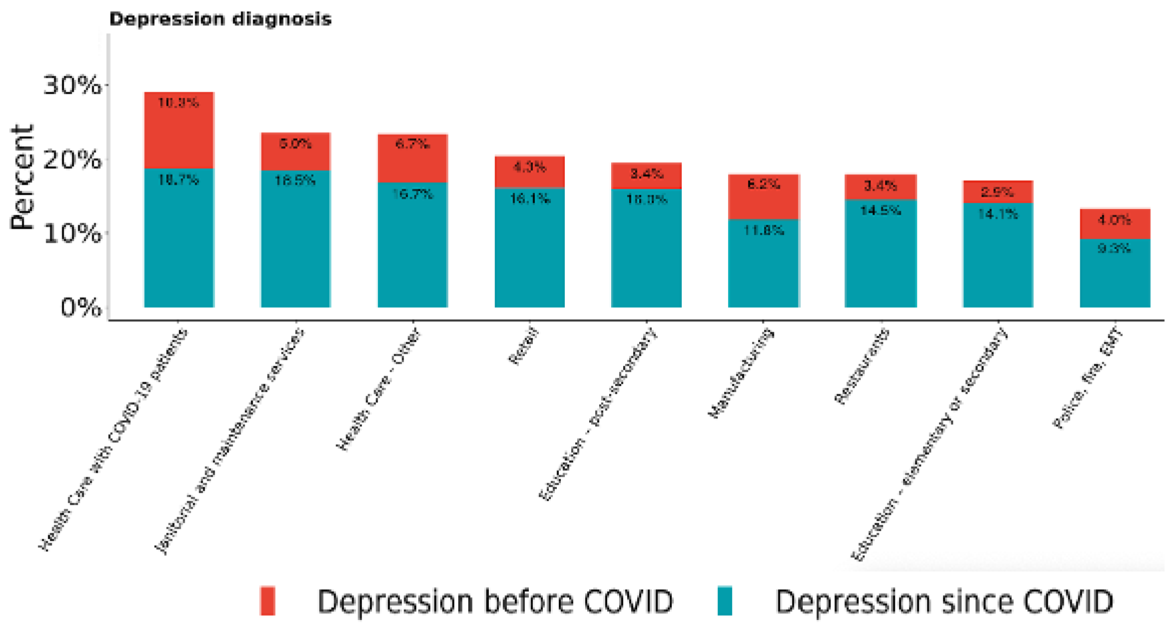
FIGURE E1. DEPRESSION DIAGNOSIS PRE- AND POST-COVID-19 1/2



E1: Depression diagnoses pre- and post-COVID-19 separated by sector. This is one of two visualizations of this breakdown. The other half of the sectors are found in Figure E2. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 940.

Prior to the pandemic, the sector showing the high rates of diagnosis of depression was *Arts, Entertainment and Information* (25%) followed closely by frontline healthcare (noted as *Health Care with COVID-19 Patients*) (24%) *and Janitorial and Maintenance Services* (23%). As with anxiety diagnoses, the frontline healthcare sector has singularly seen a considerable increase; 37% of respondents in this sector are now reporting a professional diagnosis of depression which is a 13% increased since the onset of the pandemic.

FIGURE E2. DEPRESSION DIAGNOSIS PRE- AND POST-COVID-19 2/2



E2: Anxiety diagnoses pre- and post-COVID-19 separated by sector. This is the second of two visualizations of this breakdown. The other half of the sectors are found in Figure E1. Data collected from MHRC Polls 2 to 7 between August 2020 and June 2021. Total number of responses included in this figure is 1,174.

CONCLUSION

Through our analysis on anxiety and depression by sector, both self-rated and diagnosed, we can ascertain three things. The first is that the frontline healthcare sector (noted as *Health Care with COVID-19 Patients* in our survey) experiences the highest rates of self-rated and diagnosed anxiety both pre- and post-COVID-19. This sector has also experienced the largest increases in both self-rated levels and diagnoses of anxiety and depression. Workers in this sector will need targeted and long-term support to address the mental health challenges they face and will continue to face throughout the COVID-19 recovery period. There is also major discrepancy between professions in a breakdown of the frontline healthcare sector: *Mental Health*

Professionals and *Nurses* are experiencing the highest levels of anxiety and depression, which have been further exacerbated by the pandemic. We also note that we are not attempting to ascertain levels of PTSD in this report – as this is both a more challenging diagnosis but also often a lagging or delayed disorder which manifests after the trauma. That said, the high levels of self-reported anxiety and increases in diagnosis do point to a likely increase in PTSD and other issues like burnout in the future.

The *Restaurant* and *Retail* sectors are also demonstrating some of the highest self-rated levels of anxiety and depression both pre- and post-COVID-19, though they are not among the highest rates of diagnosis, this could be a result of limited access to benefits or industry stigma. We also consider that the anxiety created by precarious employment is likely different than the anxiety created by facing waves of COVID-19 patients. *Janitorial and Maintenance Services* and *Arts, Entertainment and Information* sectors are reporting the highest levels of diagnosis of both anxiety and depression prior to the pandemic but have not seen a considerable increase since the onset of COVID-19.

Thank you to **Pollara Strategic Insights** for their continued partnership in our national polling project evaluating the impact of COVID-19 on the mental health of Canadians. Full reports of our findings can be found at www.mhrc.ca.

Data Analysis: Gustavo Betini – University of Waterloo, PhD Student
Prepared by: Brittany Saab – MHRC, National Coordinator of Stakeholder Engagement
Advisor: Michael Cooper – MHRC, Vice-President

For more information about MHRC's national polling project, *How COVID-19 is Impacting Mental Health in Canada*, contact Brittany Saab at bsaab@mhrc.ca