Preface

This is an analysis on mental health by workplace sector through the COVID-19 pandemic. We started this work to answer the question – how has mental health been affected as it pertains to our employment situation? Whose mental health is worse? We knew that some groups, notably the unemployed, had higher levels of anxiety and depression, and we suspected that some employed groups, such as nurses, would have higher negative mental health indicators as a direct result of their job. But a lot of other sectors were affected – from those where employees primarily worked from home to those where lockdowns had a dramatic impact.

What we discovered is what we all should inherently know – workplaces are made up of a variety of different people in various places as it pertains to mental health. It goes with out saying that mental health status is shaped continuously by an individual's social, psychological, and environmental factors. Workplace environment is just one piece in a larger puzzle capturing an individual's overall mental health status. From these collective individual responses, we aggregated our data by sector and realized that every employment sector had a unique mental health profile before the pandemic, just as they have a unique profile now.

Ultimately, our question needed definition. Is mental health worse in the sectors where the vast majority were mentally healthy and are now just average? Or should we focus on the sectors where mental health was already in crisis but got a little bit worse? Do we consider the sectors with higher levels of diagnosis of mental health issues since the pandemic? It's important to note that an individual's mental health is often a major factor in influencing the sector in which they choose to find employment. Certain sectors attract workers based on their pre-existing levels of anxiety or depression, which is one reason individuals working in sectors that are particularly mentally taxing will have an inherent difference in mental health status compared to other workers. Take, for example, the courier industry. You can imagine that many people choose to be couriers with limited interactions with the public, attracting workers who may have anxiety around strangers. It would also attract those who prefer a lower stress job that includes daily public interaction – individuals who might be quite social with low anxiety. In this situation taking an average of the level of anxiety would obscure the fact that there are two distinct groups within this sector.
Looking at diagnoses alone is also challenging. Some sectors seem to attract more people with pre-existing diagnosis, while others may have a higher number of undiagnosed individuals, indicative of the higher levels of undiagnosed mental health issues we've been seeing.

In the end, one should consider that the level of anxiety and depression is not the most important consideration in such analyses. Measuring the starting point, level of change and altered composition of mental health indicators provides a better understanding of the mental health equilibrium in workplaces and how or if it has been disrupted by the onset of the pandemic. We're not giving reasons for poor mental health, rather this analysis is simply the composition of mental health indicators in each sector from before COVID-19 and where they are now. This approach can help us evaluate long-standing gaps in adequate mental health support for workers and identify the sectors that have been most severely impacted by the onset of COVID-19, thereby providing a means for targeted intervention and program delivery.
We ask that these ideas be considered during the discussion of the results of our analysis.

Background

MHRC is conducting work on a national polling project on **the mental health of Canadians during the COVID-19 pandemic.** We are proud to partner with *Health Canada* to collect, analyze, and present this data to be freely available to stakeholders in our community. The information in this report is from data gathered from polls 2 to 10 of our ongoing national 12-poll series.

Research Questions

Through analysis of our polling data, we are looking for trends in negative mental health by workplace sectors. Specifically, we are looking to answer the following questions:

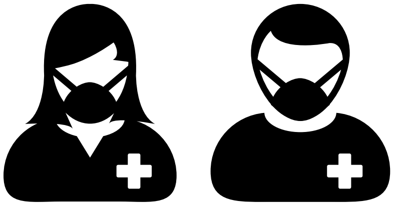
1. **Which workplace sectors have been most severely impacted by the pandemic?**
2. **Which sector experiences high levels of anxiety and depression prior to or regardless of the pandemic?**
3. **Which sector has seen the broadest range of experiences?**

Key Insights

Through our analysis on anxiety and depression (both self-rated and diagnosed) across workplace sectors, these were our key findings:

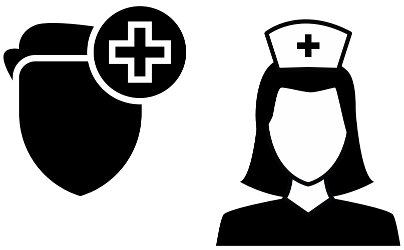
1

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.



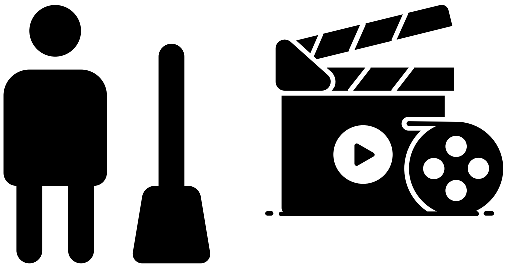
This sector has also **experienced the largest increases in both self-rated levels and diagnoses of anxiety and depression**. Workers in this sector will need targeted and long-term support to address the mental health challenges they face and will continue to face throughout the COVID-19 recovery period.

2 There is a 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.



3 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. However, **they are not among the highest rates of diagnosis**, which 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.

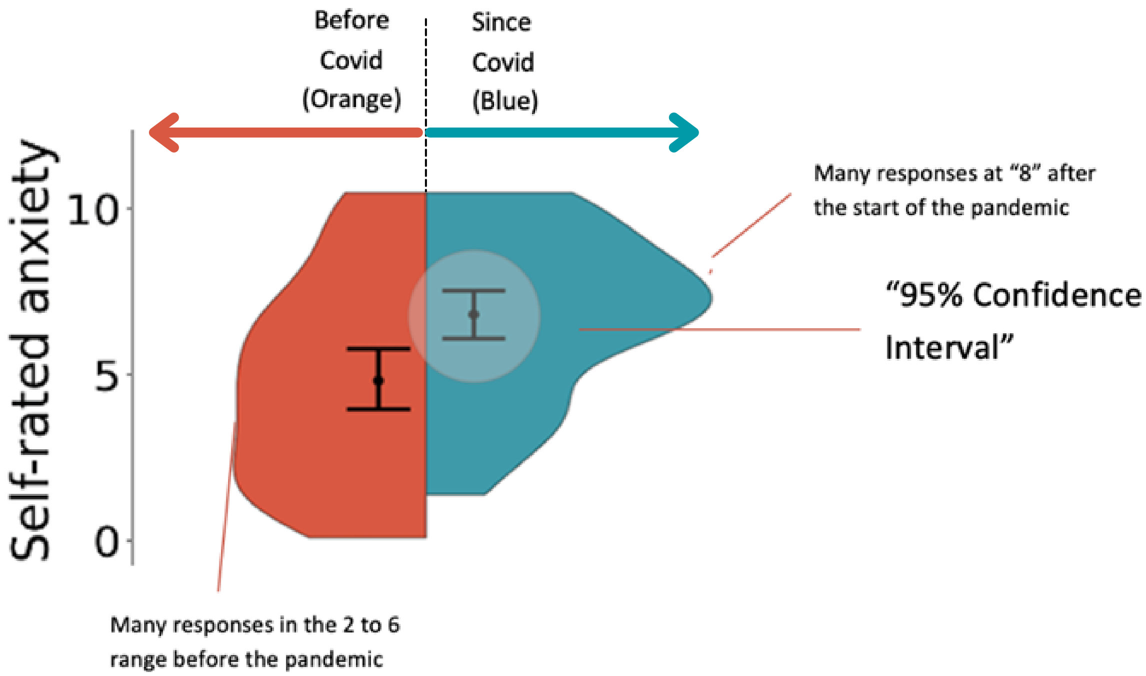
4 **"Janitorial and Maintenance Services" and "Arts, Entertainment and Information" sectors are reporting the highest levels of diagnosis** of anxiety and depression prior to the pandemic, but have not seen a considerable increase since the onset of COVID-19.



Analysis Through Double Violin-Graphing

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. The following example illustrates how a double-violin graph can be interpreted.

EXAMPLE OF A DOUBLE-VIOLIN GRAPH



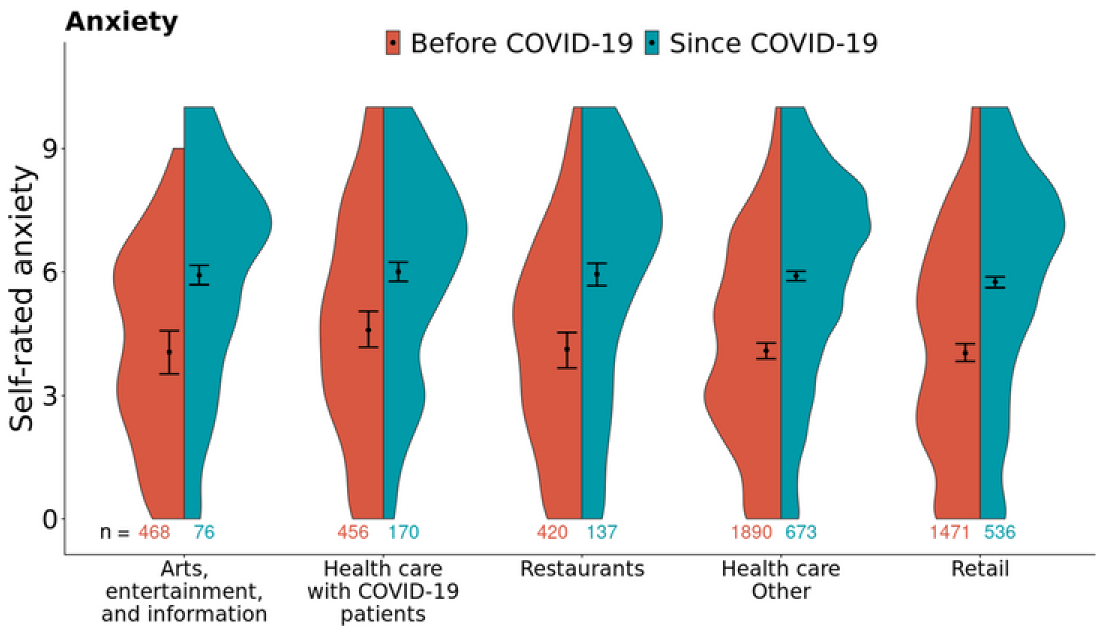
- We can see that prior to the pandemic (the orange image), most responses were in the **2-6** score range for self-rated anxiety.
- After the pandemic (the blue image), the self-rated anxiety levels are primarily scored at **8**.
- The black bars in the middle represents the **95% confidence interval**:
  - In layman terms, the black dot at the center of the vertical bar is the average response (mean), 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 in agreement, you will have a very small bar showing a very high confidence.
  - A more varied response indicates more people are having different experiences– less variance means the experience is more consistent.

Findings for Anxiety

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

As seen in Figure A1 below, the **Frontline Healthcare sector ("Health Care with COVID-19 Patients")** is experiencing a **considerable rise in self-rated levels of anxiety since the onset of COVID-19.** "Restaurants", "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).

FIGURE A1. SELF-RATED ANXIETY PRE- AND POST-COVID-19 BY SECTOR (1/4)



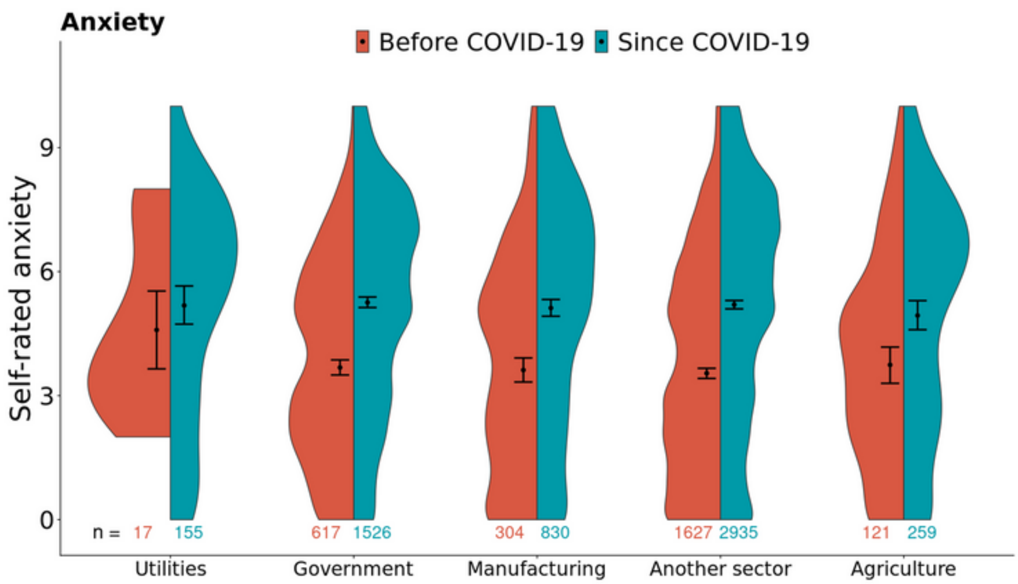
Which sectors experienced high self-rated levels of anxiety prior to the pandemic?

Frontline healthcare workers were experiencing high levels of anxiety in comparison to other sectors prior to the pandemic, though they have increased considerably since COVID-19. This trend is also seen in the "Healthcare-Other" (Figure A1), "Retail" (Figure A1), "Government" (Figure A2), and "Restaurants" (Figure A1) sectors, where anxiety is high in both pre- and post-COVID-19 times.

It can be seen that sectors where workers are heavily affected by the pandemic are the same sectors that have experienced relatively higher self-rated levels of anxiety before the pandemic as well.

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 A3).

FIGURE A2. SELF-RATED ANXIETY PRE- AND POST-COVID-19 BY SECTOR (2/4)



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, transportation"** sector (Figure A3), as well as in the **"Restaurants"** (Figure A1) and **"Utilities"** (Figure A2) sectors.

FIGURE A3. SELF-RATED ANXIETY PRE- AND POST-COVID-19 BY SECTOR (3/4)

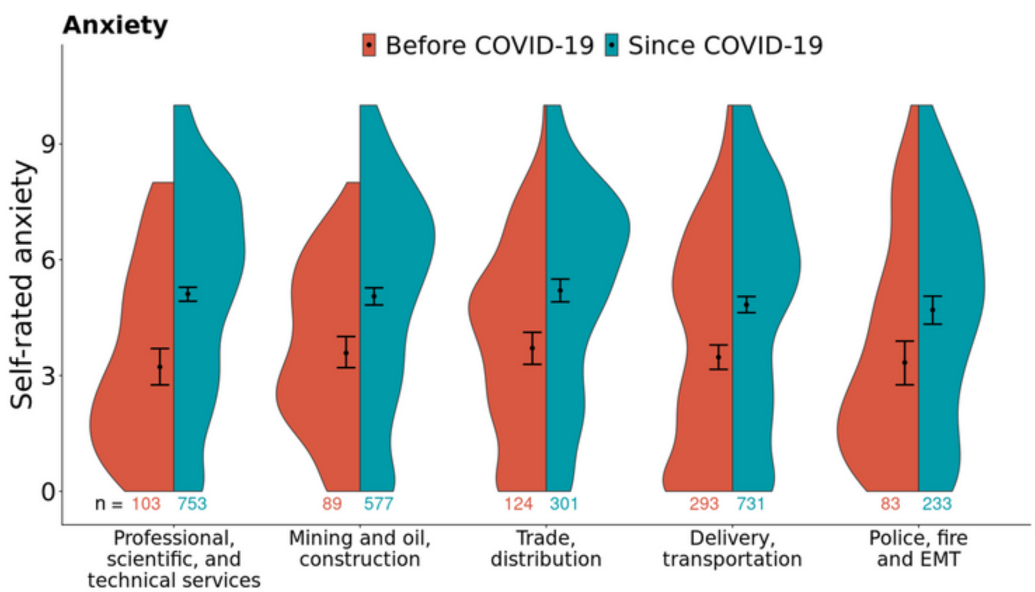
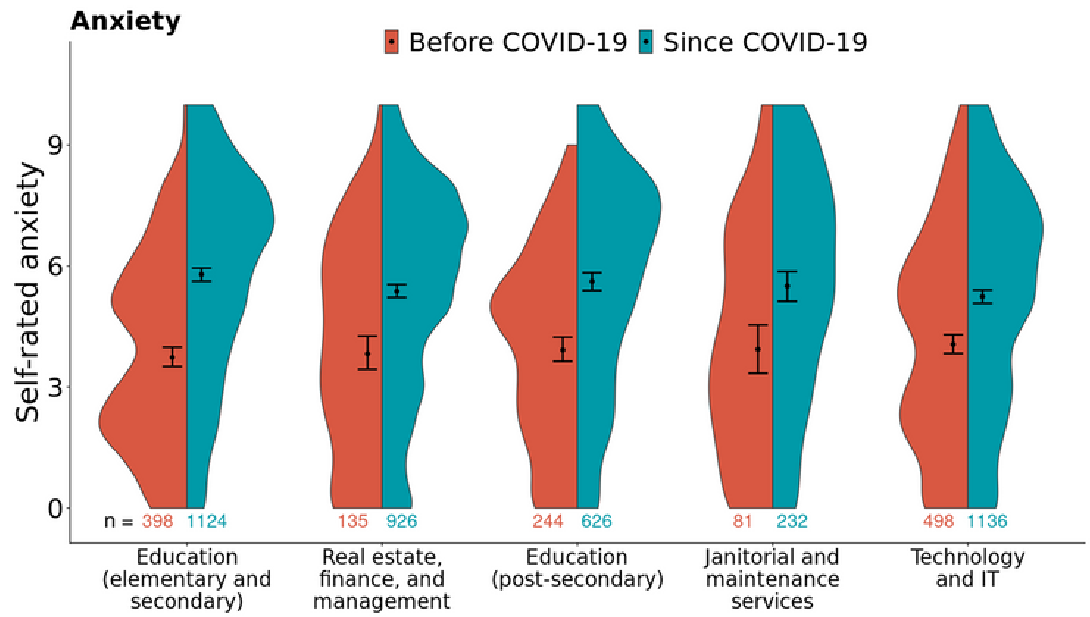


FIGURE A4. SELF-RATED ANXIETY PRE- AND POST-COVID-19 BY SECTOR (4/4)

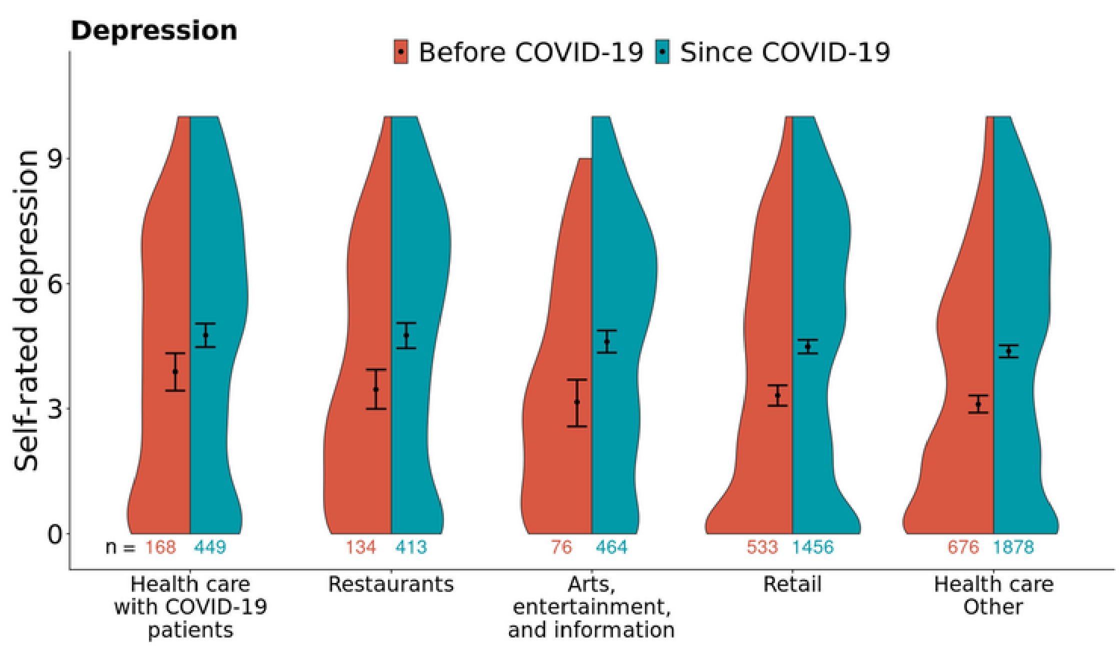


Findings for Depression

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

As shown in Figures B1 to B6, though self-rated depression has increased across every sector, **there is not a considerable increase anywhere in particular**. The **mean response remains between 4- 6** on the self-rated scale for all the sectors.

FIGURE B1. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY SECTOR (1/6)



Which sectors experienced high self-rated levels of anxiety and depression prior to the pandemic?

Similar to self-rated levels of anxiety, **frontline healthcare workers ("Healthcare-Other") have been experiencing higher levels of self-rated depression**, in comparison to other sectors prior to the pandemic (Figure B1).

FIGURE B2. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY SECTOR (2/6)

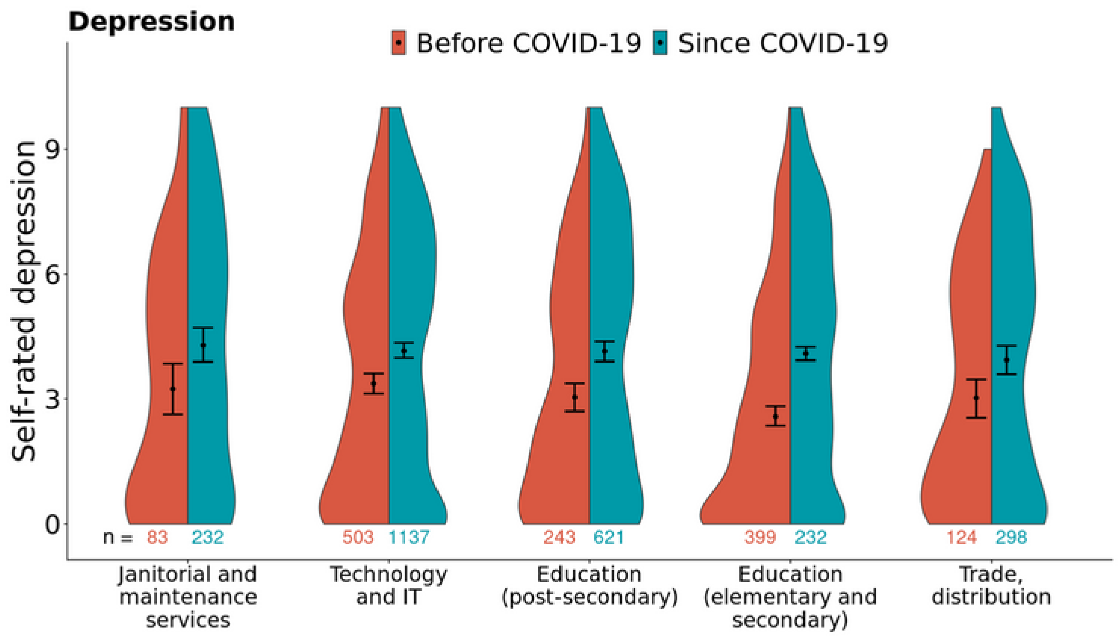


FIGURE B3. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY SECTOR (3/6)

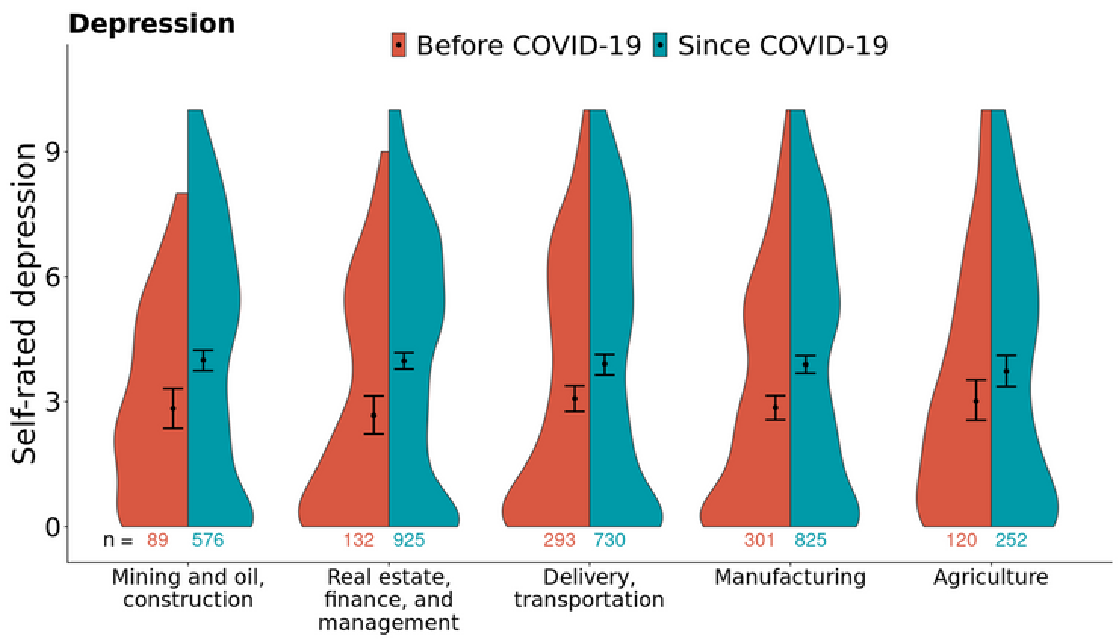


FIGURE B4. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY SECTOR (4/6)

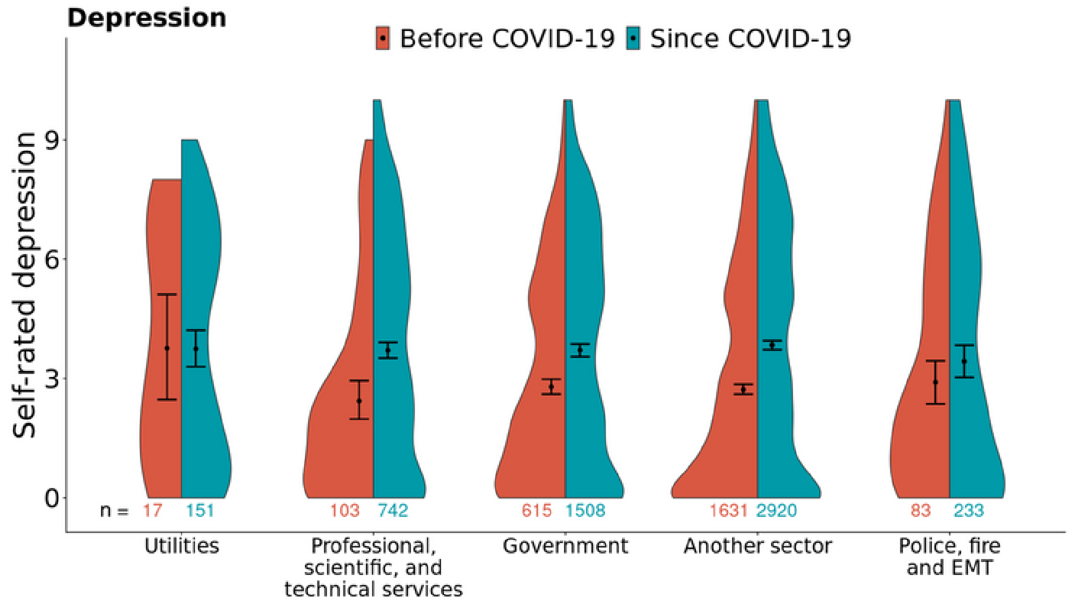
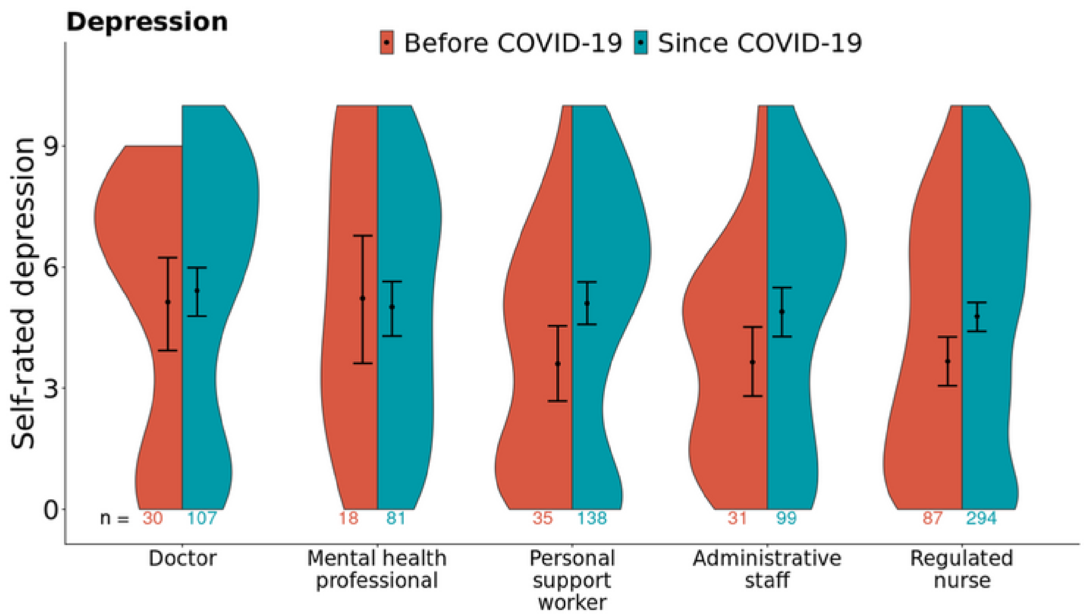


FIGURE B5. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY SECTOR (5/6)



Which sector has seen the broadest range of experiences throughout the COVID-19 pandemic?

Figures B5 and B6 show self-rated levels of depression across various frontline healthcare sectors. It is evident that **self-rated levels of depression varied considerably between frontline healthcare sectors**, both pre- and post-COVID-19. For example, "**Pharmacists"** (Figure B6) **have experienced relatively low levels of depression** both prior to the onset of the pandemic and currently. Though the mean demonstrates a somewhat broad range of experiences, they generally fall in the low to medium-low range and have seen meaningful change caused by COVID-19.

In comparison, **"Regulated Nurse"** (Figure B5) and **"Other Nurse"** (Figure B6) are reporting **elevated levels of depression, from medium-low to medium**. There is a much smaller variance in experience, meaning a more collective shift in self-rated levels of depression.

FIGURE B6. SELF-RATED DEPRESSION PRE- AND POST-COVID-19 BY SECTOR (6/6)

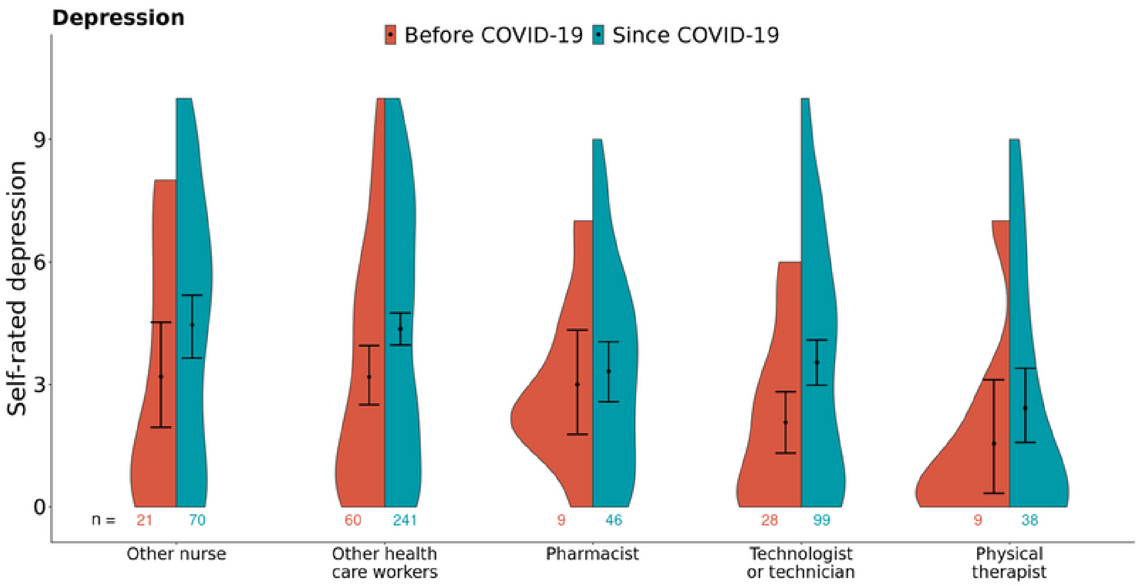
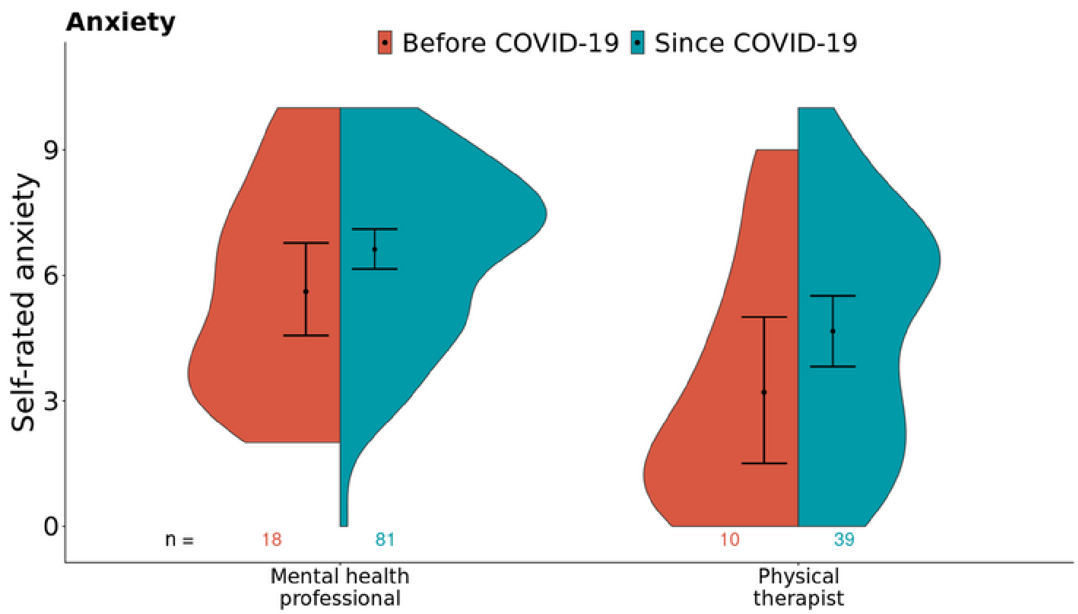


Figure C1, below, is a demonstration of how greatly the experiences of two sectors can differ.

FIGURE C1. EXAMPLE OF SELF-RATED ANXIETY PRE- AND POST-COVID-19 IN MENTAL HEALTH PROFESSIONALS VS PHYSICAL THERAPISTS

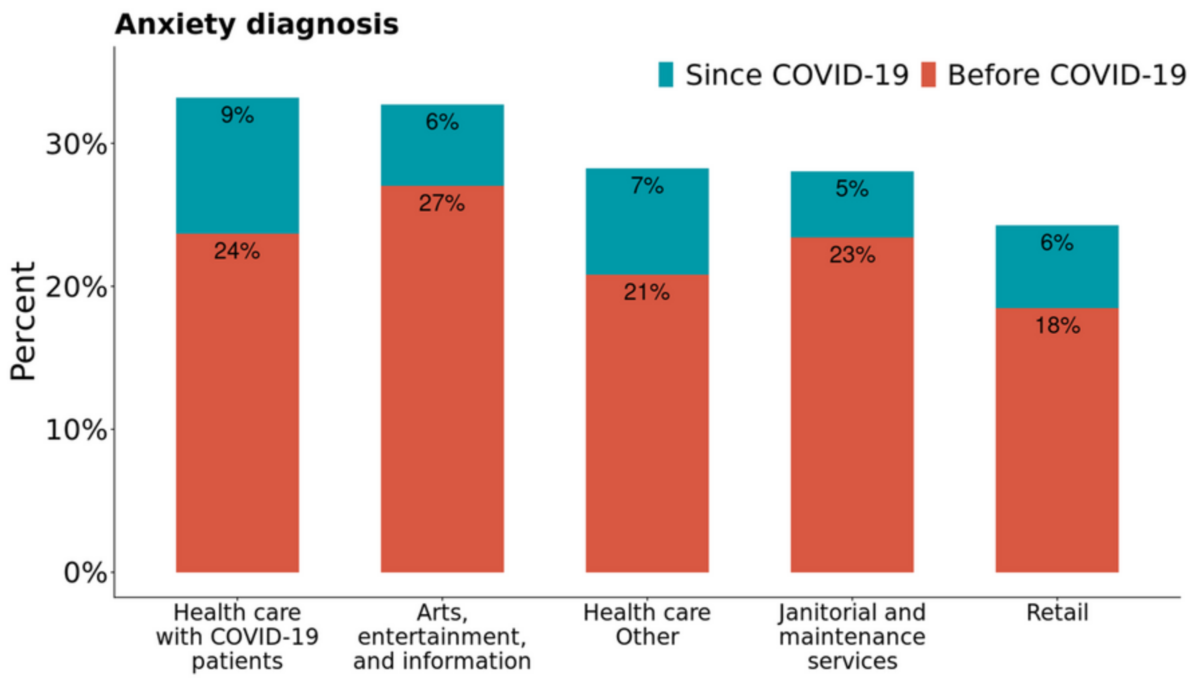


Mood Disorder Diagnoses Pre- and Post-COVID-19

Figures D1 to D4 below show a comparison of **anxiety and depression diagnoses pre- and post-COVID-19**. This analysis helps us to better understand the long-term effects of elevated levels of anxiety and depression.

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 (1/4)



As demonstrated in Figure D1 above, **"Arts, Entertainment, and Information"** and **frontline healthcare ("Health care with COVID-19 patients")** sectors reported the **highest levels of anxiety diagnoses pre-COVID-19** at 27% and 24% respectively. While the "Arts, entertainment and information" sector hasn't seen a significant rise in diagnoses (6%), the **"Health care with COVID-19 patients" sector has seen a considerable rise in anxiety diagnoses since COVID-19 (9%)**. 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.

Low diagnosis levels of mentally taxing professions such as Police, Fire, EMT (12% pre-COVID-19 and 5% post-COVID-19), could be due to low levels of access to care rather than low levels of need (see Figure D2 below).

FIGURE D2. ANXIETY DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR (2/4)

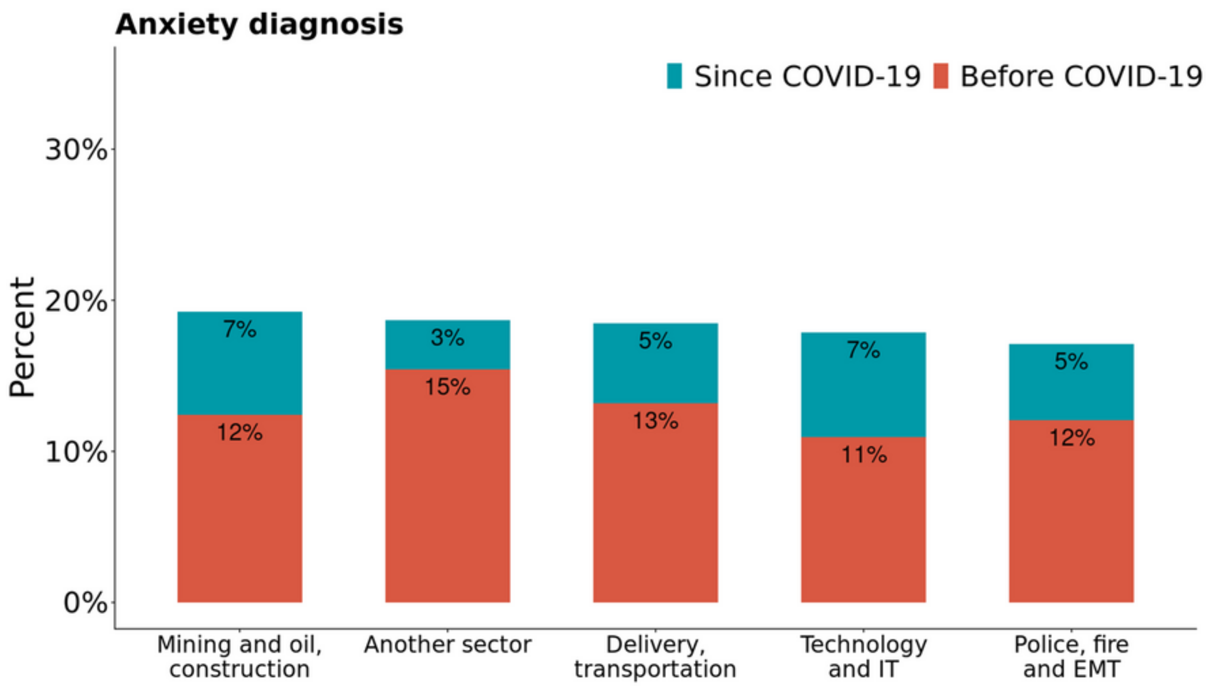


FIGURE D3. ANXIETY DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR (3/4)

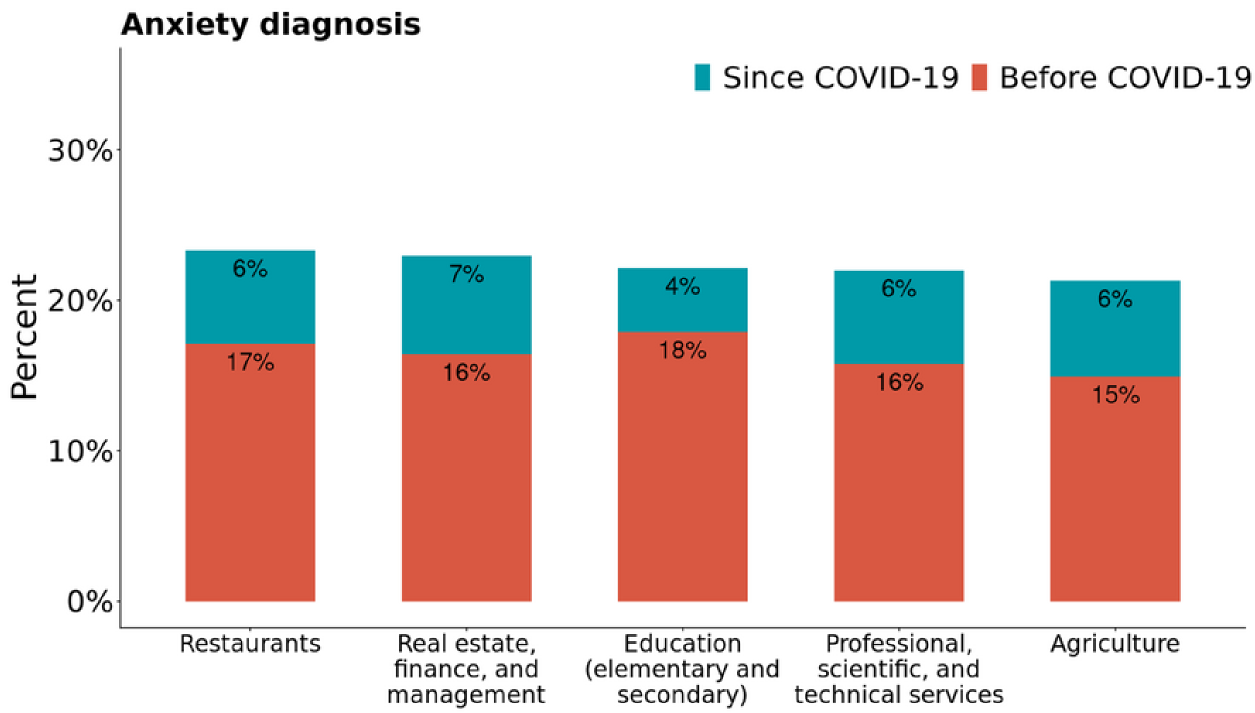
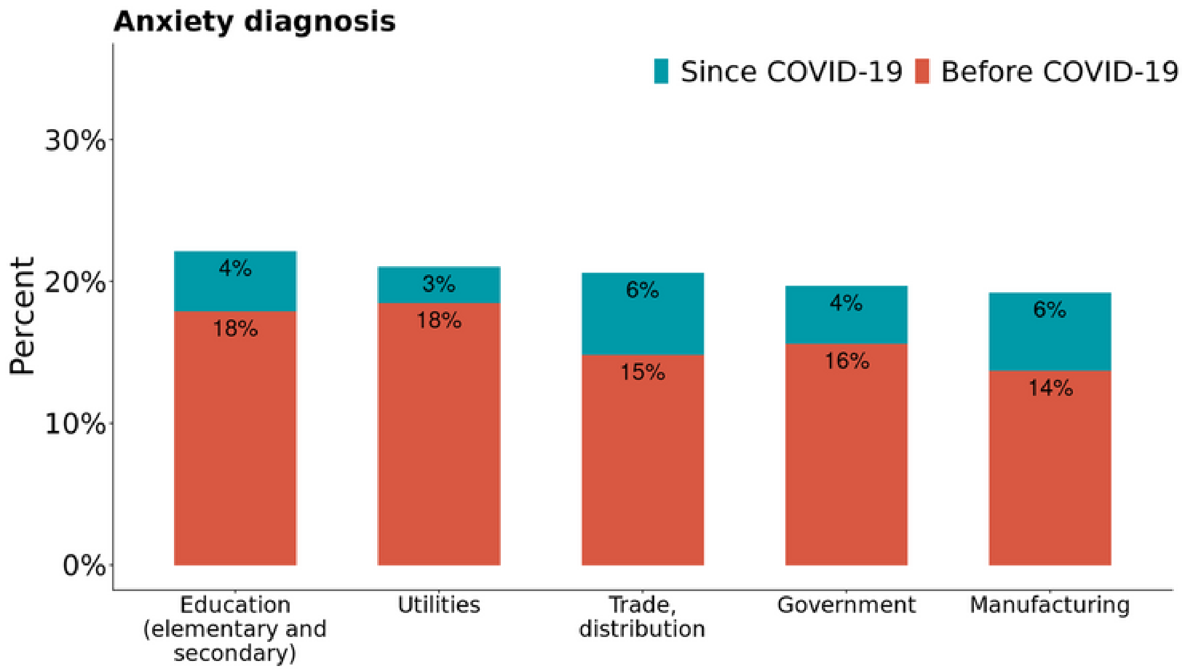


FIGURE D4. ANXIETY DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR (4/4)



Figures E1 to E4 below show depression diagnosis pre- and post-COVID-19 across the sectors. Prior to the pandemic, the sectors showing **the highest rates of diagnosis of depression were "Arts, Entertainment and Information" (29%),** followed by **frontline healthcare ("Health Care with COVID-19 Patients") (22%)** and **"Janitorial and Maintenance Services" (23%)**. As with anxiety diagnoses, the frontline healthcare sector has singularly seen a considerable increase; more respondents in this sector are now reporting a professional diagnosis of depression causing a 10% increase since the onset of the pandemic.

FIGURE E1. DEPRESSION DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR (1/4)

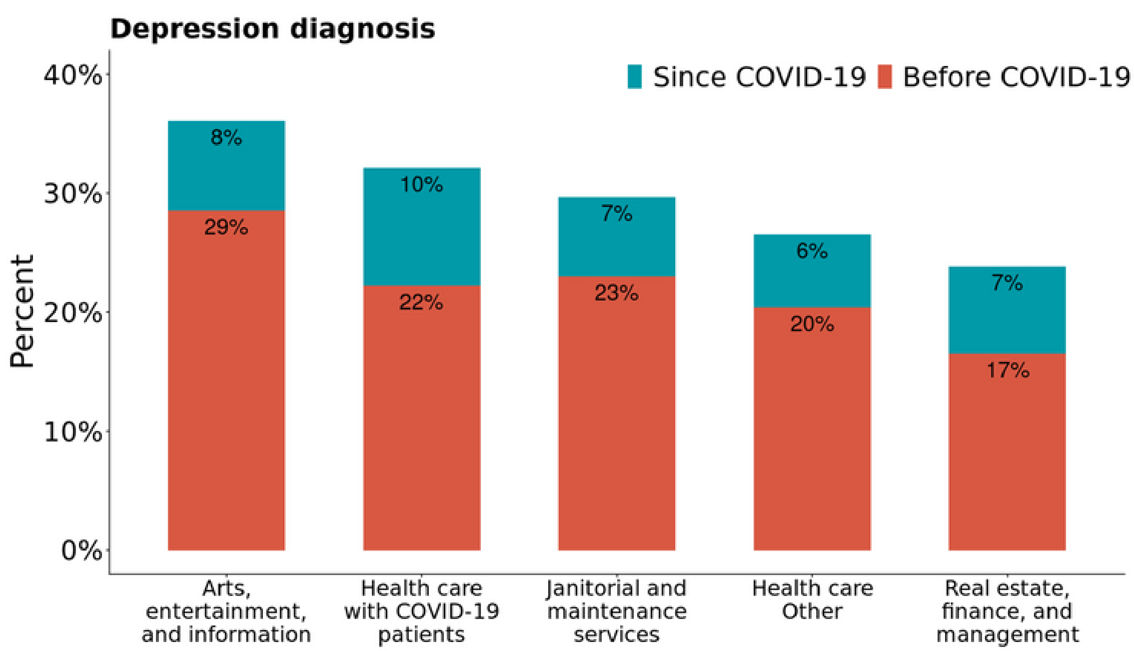


FIGURE E2. DEPRESSION DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR (2/4)

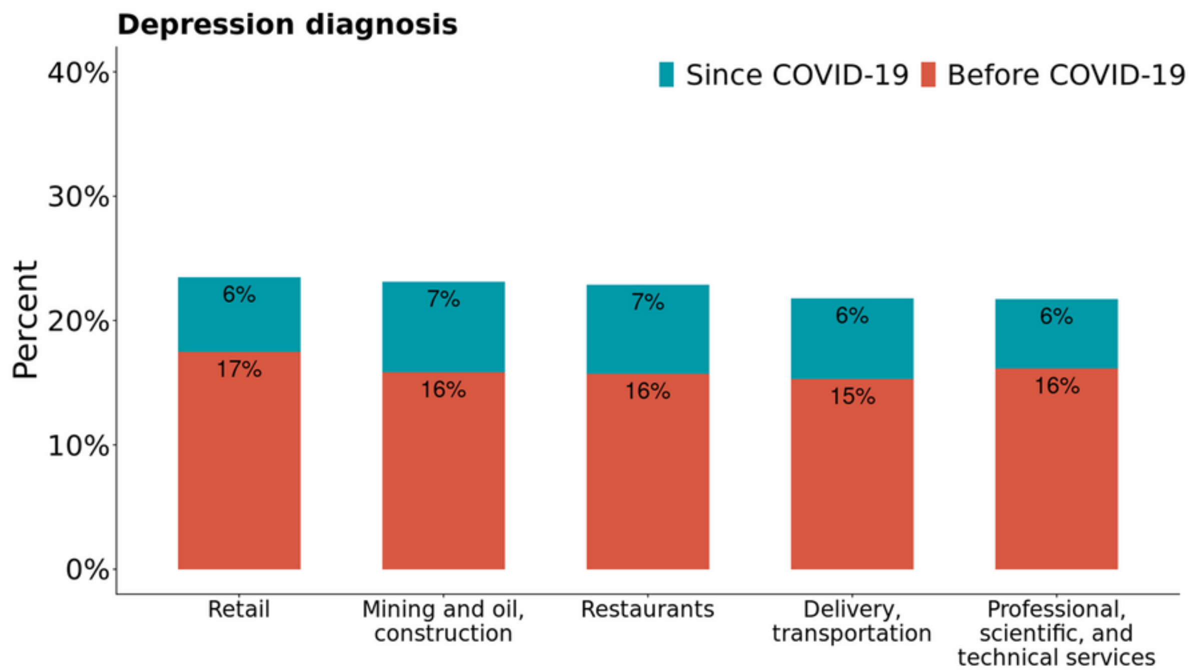


FIGURE E3. DEPRESSION DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR (3/4)

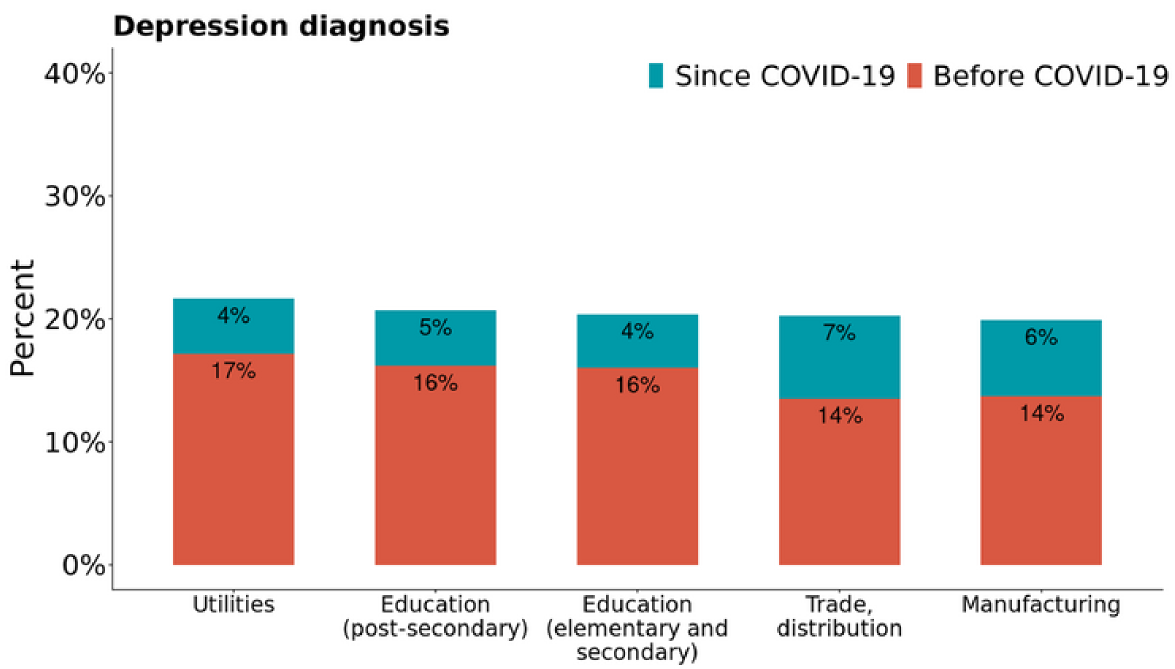
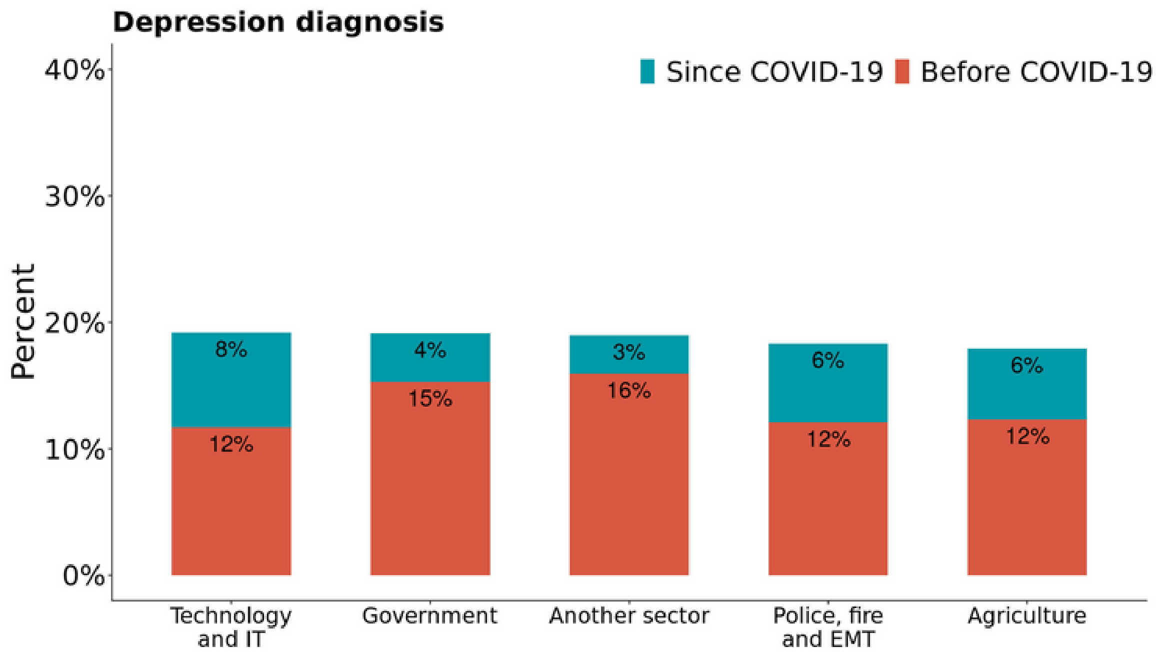


FIGURE E4. DEPRESSION DIAGNOSIS PRE- AND POST-COVID-19 BY SECTOR (4/4)



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

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