

1 in 5 Saskatchewan adults experienced negative mental health during the first 16 months of COVID-19; visible minorities, immigrants were harder hit

Results from the Adult Mental Health COVID-19 Research

November 4, 2022 (Taking the Pulse of COVID-19 in Saskatchewan, Issue 11)

This brief reports depression and anxiety experienced by Saskatchewan adults during the first 16-months of COVID-19. Data analyzed were collected through the Mental Health Research Canada (MHRC)'s ongoing National study to understand the impact of COVID-19 on Canadian's mental health. The research findings were discussed with mental health professionals for future implications (post-pandemic mental health services in SK) in a World Café format. Details on survey and World Café policy dialogue can be found at the end of this brief.

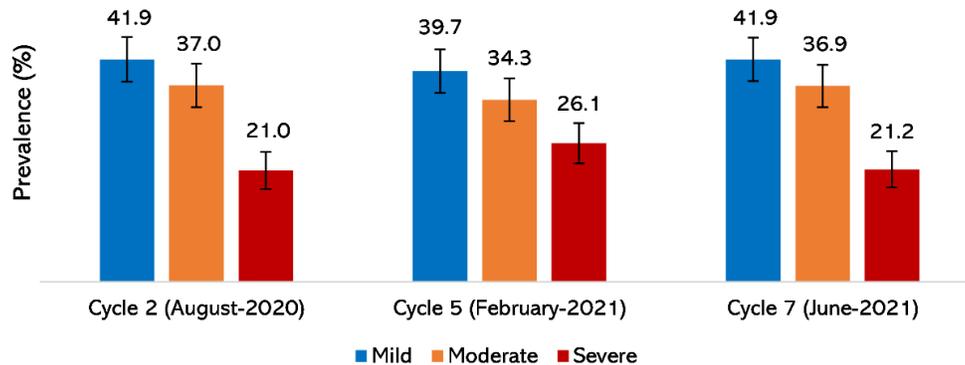
Research questions: What is the prevalence of negative mental health outcomes in Saskatchewan adults during the first 16-months of the pandemic? How did visible minorities, immigrants, people with lower socioeconomic status fare? What were the policy implications?

Key Takeaways

- A High proportion of Saskatchewan adults reported anxiety and depressive symptoms. About 60% of respondents reported any form of anxiety and about 45% reported any form of depression during the study timeline, August 2020 to June 2021.
- During the Alpha-driven pandemic wave (February 2021) prevalence of severe anxiety (26%) and severe depression (19%) were highest.
- Of the three cycles of data, in August 2020, February 2021, June 2021, the highest percentage of respondents reported needing-but not accessing-mental health support was in June 2021 at 12%.
- Younger, low household income, immigrants with lower education were a few of the risk factors associated with mental health symptoms. Retired/student status and lower education were protective factors for severe depression- and moderate anxiety, respectively.

1. One in 4 or 5 Saskatchewan adults reported severe anxiety during the COVID-19 pandemic waves.

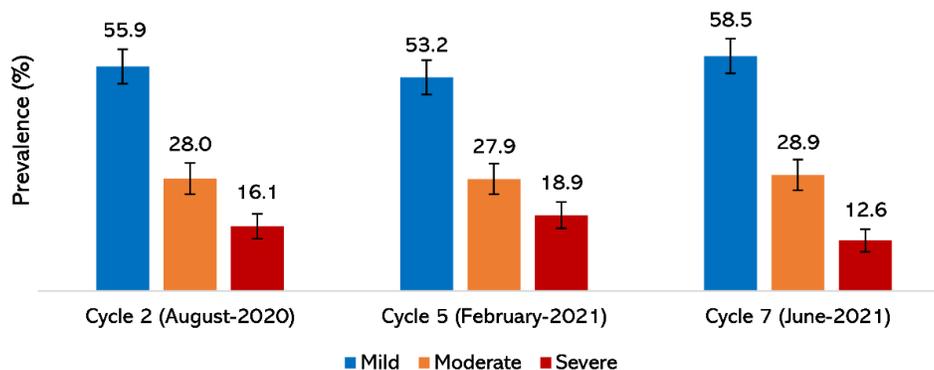
Level of anxiety since outbreak



- Among Saskatchewan adults about 60% of the respondents reported either moderate or severe anxiety symptoms during the study period.
- The highest proportion of those with anxiety symptoms was reported in February 2021 (Alpha wave). During this time, prevalence of severe anxiety reported was 26%, compared to Canada's national average at 18%.
- Prevalence of moderate level of anxiety during June 2021 among Saskatchewan adults was also higher than that of the national average.

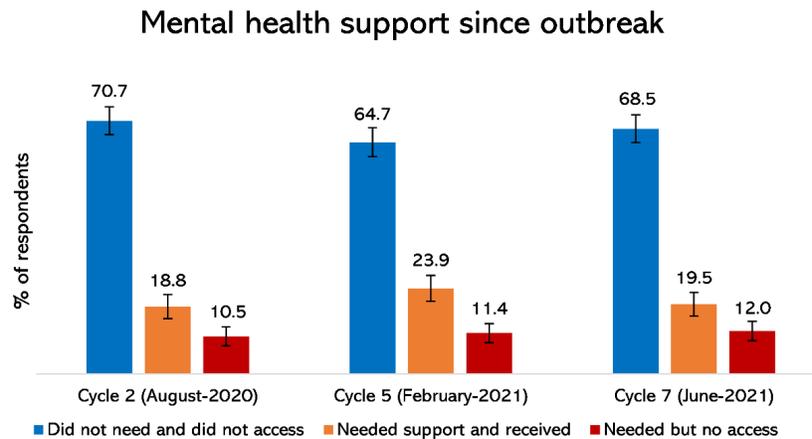
2. Prevalence of depression among Saskatchewan adults was highest in February 2021 and was consistently higher than the national average.

Level of depression since outbreak

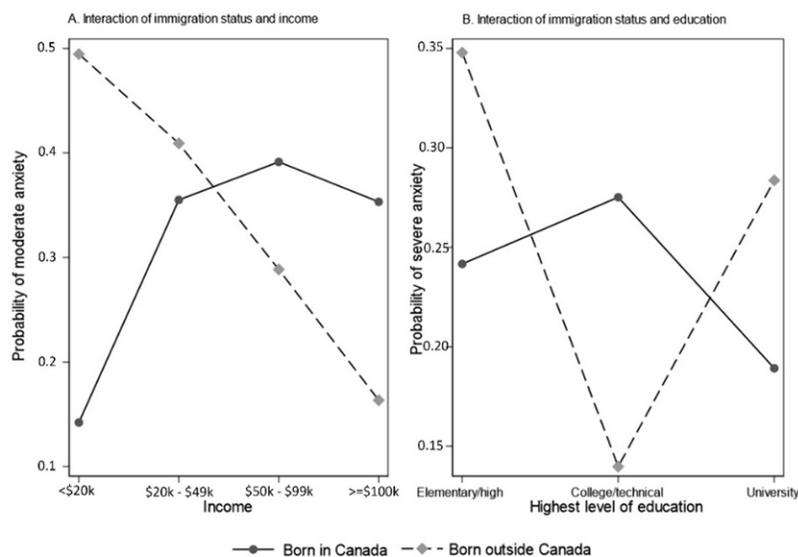


- Consistent with experiencing anxiety, the prevalence of depression was highest in February 2021, during Alpha COVID-19 wave—with almost one in five adults reporting severe depression.
- Prevalence of moderate and severe depression in August 2020, were higher than the National level [moderate 28% vs 25%, severe 16% vs 13%].

3. At least one in ten Saskatchewan adults reported needing--but not accessing--mental health support during the pandemic. This unmet need was highest in June 2021 (12%), increasing gradually over the three time points (cycles) data were collected.

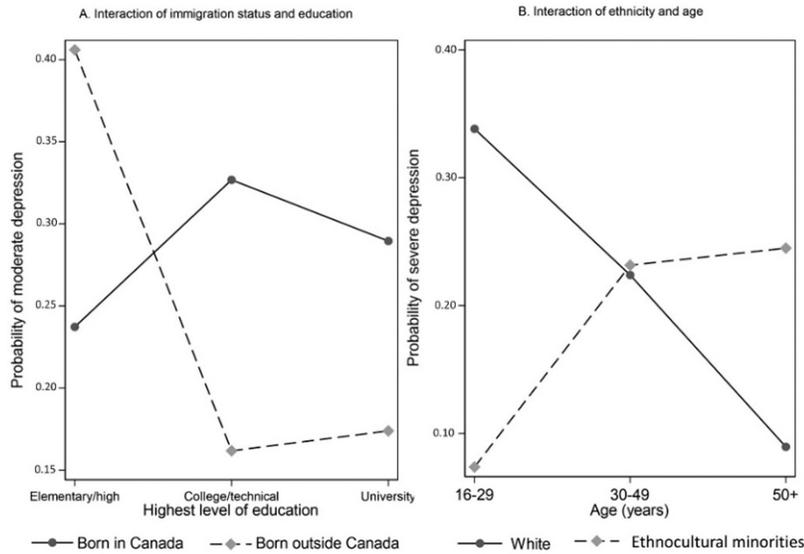


4. The effect of low income and low education on moderate and severe anxiety, respectively, were higher for those born outside of Canada versus born in Canada.



- Among immigrants, at each increment of income level measured, the probability of moderate anxiety decreased, linearly.
- Those who were born outside Canada and had the lowest level of education (i.e., elementary/secondary education) reported highest probability of severe anxiety, whereas for Canadian born individuals, those who had college/technical education reported higher probability of severe anxiety.

5. The effect of low education on moderate depression was higher for immigrants and the effect of younger age on severe depression was heightened for White respondents.



- Among immigrants, those who had elementary/secondary education reported the highest probability of moderate depression.
- For those who indicated they were not a minority group (i.e., Whites), the highest probability of severe depression was observed among the youngest age group, 16–29 years.
- Among those who identified as visible minority, the highest probability of severe depression was for those 30 years and older.

6. Age and low household income were common risk factors for mental health outcomes. Retired/student status and lower educational status (i.e., elementary/secondary) were protective factors for severe depression and moderate anxiety, respectively.

Association of socio-demographic characteristics with different level of depression, anxiety, and treatment seeking behavior

		Moderate depression	Severe depression	Moderate anxiety	Severe anxiety	Needed & received	Needed but no access
Age	16-29y vs. 50+y	3.69	4.38		6.02		
	30-49y vs. 50+y	3.79	6.79	2.67	3.47	4.21	
Gender	Women vs. Men			1.73	2.31		
Employment	Retired/Student vs. Employed		0.38				
Household composition	Live alone vs. Live with others				2.25		
	<\$20K vs. ≥\$100K		7.09		3.57	2.48	
Income	\$20K-\$49K vs. ≥\$100K	3.2	9.82	3.81	2.75		
	\$50K-\$99K vs. ≥\$100K		3.31				
Education	Elementary/high vs. University		0.47				
Immigration status	Born outside Canada vs. Born in Canada					0.14	

Legend: Risk factor (orange), Less risk (green)

Note: Results were drawn from multivariable logistic regression models after adjusting for age, household composition, parental status, employment, income, education, physical disability, immigration status, ethnicity, and interactions: age*immigration status, income*immigration status, education*immigration status, age*ethnicity. [only significant (p<0.05) relative risk ratios were reported]

- Respondents between 30-49 years were 6.70 times and 3.47 times more likely to report severe depression and severe anxiety, respectively, compared to those 50 years and older.

- Women were more likely to report anxiety than men.
- Those who reported annual household income of <\$20K and \$20K-\$49K were 7.09 times and 9.82 times more likely to report severe depression, compared to those who reported household income greater than \$100K.
- Those who were retired/student were 62% less likely to report severe depression compared with those employed.
- Participants who completed elementary/secondary education, compared with those completing university, were 53% less likely to report moderate anxiety.

Policy Dialogue

Thirty individuals from the mental health sector convened in a World Café dialogue to discuss the impacts of these findings and their implications for post-pandemic mental health services. Community mental health agencies, health organizations, front line service providers, service users and their advocates, and individuals working in policy and program development for the Saskatchewan Health Authority and Ministry of Health identified some key themes:

- There is a need to keep breaking down silos inside government (e.g., between departments) and between the government, health system, and communities.
- It should be recognized that there were some innovative partnerships that arose during the pandemic to overcome some of the barriers and challenges. These partnerships need to be sustained.
- There is a need for 'flexibility' and 'innovation' as key elements of any service redesign or reform to ensure the right service at the right time

Intersectoral collaboration to improve mental health service access and delivery must include a shift of focus to patient/client from the current focus on agency/provider. This client-centered focus will address the unequal impacts of the pandemic and recognize the need to address the intersectionality of economic and social determinants of mental health.

Methodological note: We present descriptive and inferential analyses of data collected by [Mental Health Research Canada \(MHRC\)](#)'s ongoing national surveys. Since April 2020, MHRC has been leading a study to gauge the effect of COVID-19 on mental health outcomes among Canadians. This study used cycle 2 (**August 2020**, N=567), cycle 5 (**February 2021**, N=577), and cycle 7 (**June 2021**, N=590) data, specifically focusing on adults 18 years and over in Saskatchewan. To identify the factors associated with anxiety and depression, cycle 5, February 2021 (Alpha wave), dataset was used. Immigrant status, ethnocultural minority, and physical disability status of the respondents were considered as equity identifiers. Respondents were asked: "Please rate your level of anxiety and depression since the Coronavirus (COVID-19) outbreak in Canada." A ten-point (0-10) Likert scale ("extremely high" anchor set at 10 and "none" at 0) was provided. Based on pre-defined, literature-based criteria, the severity of mental health outcomes (anxiety and depression) was categorized as mild (a 0-4 rating), moderate (5-7 rating) and severe (8-10 rating). Mental health support was categorized based on perceived mental health needs and access to care (grouped into three categories: not needed and did not access support, needed support and received, needed support but no access). Using Stata™ version 17.0, multinomial logistic regression models were fitted and Relative Risk Ratios with 95% Confidence Interval were reported. Data were collected from a randomly selected sample of adult Canadians via an online platform, with a sample size equivalent to a probability sampling of ±1.5% margin of error. To generate a representative sample of the Saskatchewan population, the samples were weighted based on age, gender, and location of residence as per Canada Census 2016.

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*These results are part of a series of analysis and reporting on mental health impact of COVID-19 in Saskatchewan conducted by the SPHERU research team. **For more on the [Social Contours and COVID-19 and Mental Health Saskatchewan projects](#)**, email social.contouring@usask.ca or visit <https://spheru.ca/covid-19/mainpage-covid-19.php>.*

COVID-19 and Mental Health in Saskatchewan

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