$\mathbf{COVID} - \mathbf{19}$ **NOVEL CORONAVIRUS** Race, Ethnicity, Indigeneity (REI) Analysis Wave Three July 5, 2021 Manitoba



Distribution of COVID-19 by Ethnicity

Information from March 31, 2021 to June 7, 2021.



African Black Chinese Filipino South Asian Southeast Asian Latin American North American Indigenous White Others

18,808 individual cases during this period

Wave Three

14,408 (76.6 per cent) had race/ethnicity/Indigeneity information recorded (including those who declined to answer)

14047 (74.7 per cent) had race/ethnicity/Indigeneity information recorded (excluding those who declined to answer)



Distribution of COVID-19 by Ethnicity

Information from March 31, 2021 to June 7, 2021.

	Number of cases	% of cases	% of MB population	Case rate per 1,000 population	Age- standardized infection rate
African	1012	7.0	1.8	35.1	8.68
Black	237	1.6	1.8	7.6	5.68
Chinese	127	0.9	1.8	4.2	1.02
Filipino	1492	10.4	5.0	17.9	3.55
South Asian ¹	1803	12.5	2.6	41.8	8.03
South-East Asian ¹	991	6.9	0.6	98.1	21.72
Latin American	347	2.4	1.4	15.0	6.42
North American Indigenous	2402	16.7	13.3	10.7	2.08
White	5105	35.4	63.6	4.8	1.00 (ref)
Other	531	3.7	0.9	34.4	4.27
Declined to Answer	361	2.5	-	_	

Wave Three

The data shows over-representation in every community except the Chinese community.

Over-representation ranges from slightly above one to more than 11 times what would be expected based on population size alone.

Age standardized case rates are up to 21.7x greater, but there is significant variation among communities.



"Other" COVID-19 Case Identities

Information from March 31, 2021 to June 7, 2021.



Wave Three

Approximately 8.5 per cent of cases identify as belonging to some other category than the options listed.

Within this category the two most common responses include people who identify with more than one race/ethnicity/Indigenous identity or people who identify as Middle Eastern or a related ethnicity.



Distribution of COVID-19 Cases by RHA/Ethnicity

Information from March 31, 2021 to June 7, 2021.



Wave Three

In each population group except for North American Indigenous, most cases occur within the Winnipeg Regional Health Authority. For North American Indigenous peoples, there were also significant cases in NRHA and PMH, with a smaller proportion in SH-SS and IERHA.

Among people who identified as white, most cases occurred in WRHA and SH-SS. Some health districts in SH-SS have the lowest vaccine coverage rates in the province.



Distribution of COVID-19 Cases by Gender/Ethnicity



Information from March 31, 2021 to June 7, 2021.

Male Female

Wave Three

In most racial/ethnic groups cases were fairly evenly distributed among genders. However, in South Asian and South East Asian communities, there are more cases among males than females, likely related to occupational related exposures and risks.

Among North American Indigenous people, women experience a higher proportion of cases. This could be related to occupational risk or potentially caregiving exposures, such as taking care of children or elders who are unwell and thus being exposed.



Distribution of COVID-19 Cases by Acquisition/Ethnicity

Information from March 31, 2021 to June 7, 2021.



Wave Three

Most cases are acquired through close contact with a known case or through community spread.



Distribution of COVID-19 Cases by Outcome/Ethnicity

Information from March 31, 2021 to June 7, 2021.



Wave Three

Most cases are now recovered.



Distribution of Monthly COVID-19 Cases Between White/BIPOC Groups



■ White ■ BIPOC

Information from March 31, 2021 to June 7, 2021.

Wave Three

The gap in cases between all BIPOC communities combined and people who identify as white has grown since December. Effects on the diverse BIPOC communities include stress and grief for community members in isolation, in hospital or experiencing fatal outcomes.

This also further delays access to vaccination as people are asked to wait until they are recovered or finished isolating if they've been identified as a close contact before they schedule an appointment.



Distribution of COVID-19 Cases Between White/BIPOC Groups by Age

Information from March 31, 2021 to June 7, 2021.



Wave Three

Across most age groups BIPOC communities are overrepresented among COVID cases.

In the older age groups there are fewer cases among BIPOC individuals, but this is likely related to many BIPOC communities having lower life expectancy and thus having fewer members in older age groups.



Eligibility and Accessibility Timeline



Wave Three

This timeline highlights some key dates to be aware of as severe outcomes are compared for people who identify as white or as belonging to a BIPOC community. Some members of BIPOC communities have felt stigmatized by messages that people in hospital did something wrong by not following orders, not getting tested and/or not getting vaccinated. Moving forward, officials will be looking at key policy or program changes and vaccine accessibility to assess the accuracy of the messaging and focus on public health approaches.



Severe Outcome Data

Information from March 31, 2021 to June 7, 2021.

	White (64% of population)	BIPOC (36% of population)
Number of hospitalizations	325 (38.7% of hospitalizations)	515 (61.3% of hospitalizations)
Hospitalization rate	30/ 100,000	105/100,000
Mean Age	60	46
Date vaccine eligible for mean age	April 12	May 5
Date 1 st protection	April 26	May 19

Wave Three

Based on population size alone, about twice as many hospitalizations than expected occurred in people from BIPOC communities.

The hospitalization rate was 3.5 times what it was for people who identify as white. The mean age of hospitalization is also 14 years younger.

This means the average person from a BIPOC community admitted to hospital wasn't eligible for the vaccine until 23 days later than the average white person admitted to hospital.



Severe Outcome Data – ICU Admissions

Information from March 31, 2021 to June 7, 2021.

	White (64%)	BIPOC (36%)
Number of ICU Admissions	62 (33.5% of ICU Admissions)	123 (66.5% of ICU Admissions)
ICU Admission Rate	6/100,000	25/100,000
Mean Age	60	50
Date vaccine eligible for mean age	April 12	April 21
Date 1 st protection	April 26	May 5

Wave Three

When data on people admitted to ICU only was considered, the admission rate was over four times higher for BIPOC peoples than it was for white people, and the average age was 10 years younger.



Epi Curves – ICU Admissions

Information from March 31, 2021 to June 7, 2021.



Wave Three

Considering the timelines of admission to ICU allows health providers to mark the time when the average person would have been eligible for the vaccine and the first date they would have been protected if they were able to get the vaccine on that day. In most cases, people would have been booking appointments at least one week later.

Other accessibility challenges, such as language barriers, would also have increased difficulties in accessing vaccine.



Severe Outcome Data – Non-ICU Admissions

Information from March 31, 2021 to June 7, 2021.

	White (64%)	BIPOC (36%)
Number of non-ICU hospitalizations	263 (40.1% of non- ICU Admissions)	392 (59.8% of non- ICU Admissions)
Rate of non-ICU hospitalizations	24/100,000	80/100,000
Mean age	60	45
Date vaccine eligible for mean age	April 12	May 5
Date 1 st protection	April 26	May 19

Wave Three

This table examines only non-ICU hospital admissions. The rate of non-ICU hospital admission is 3.33 times greater for BIPOC peoples than it is for white people.

The mean age of hospitalization was 15 years younger for BIPOC peoples admitted to hospital.



Epi Curves – Non-ICU Admissions

Information from March 31, 2021 to June 7, 2021.



Wave Three

When comparing the vaccine eligibility timelines for these mean ages against the timelines of hospitalization, a majority of hospitalizations for white people could have been prevented if people had been vaccinated as soon as eligible.

For BIPOC Peoples, only a minority of hospitalizations would have been prevented if people had been vaccinated as soon as eligible.

White People

BIPOC Peoples



Epi Curves – Non-ICU Admissions

Information from March 31, 2021 to June 7, 2021.



Wave Three

Recognizing that eligibility is not enough for people who already face systemic barriers in accessing healthcare, this chart compares the vaccine eligibility and accessibility timeline with the timeline of hospitalizations for BIPOC individuals.

Most initiatives to increase access along the timeline, as well as more pop-up clinics and ongoing mobile outreach, occurred too late to significantly reduce the experience of severe outcomes in BIPOC communities during Wave Three.



Hospitalization Rates by Sub-Groups

Information from March 31, 2021 to June 7, 2021.



Wave Three

There are differences in age standardized ICU, hospitalization and severe outcome rates among diverse BIPOC communities. As with the case rate variations, there are also severe outcome rate differences.

In addition to factors such as housing and occupations, differences in underlying chronic disease rates and access to health care may also contribute to differences.



ICU Admissions – Race and Income

Information from March 31, 2021 to June 7, 2021.

	Percentage of ICU cases in White People	Percentage of ICU Cases in BIPOC Peoples
Q1	24.1%	35.8%
Q2	24.1%	19.5%
Q3	16.1%	17.9%
Q4	17.7%	12.2%
Q5	8.1%	4.1%
Unknown	9.7%	10.6%

Wave Three

There are complex interactions between race and income, and they are not independent variables. Racism has affected income through the opportunity (or lack thereof) to build intergenerational wealth, as well as through access to (or barriers to) education and employment.

While more cases admitted to the ICU are concentrated in the lowest income quintiles for white people and BIPOC Peoples, the risk is greatest in the lowest income quintile for racialized individuals.



Non-ICU Admissions – Race and Income

Information from March 31, 2021 to June 7, 2021.

	Percentage of non- ICU Admissions in White People	Percentage of non- ICU Admissions in BIPOC Peoples
Q1	27.0%	36.0%
Q2	18.6%	16.3%
Q3	19.8%	15.3%
Q4	19.4%	13.0%
Q5	8.7%	7.7%
Unknown	6.5%	7.1%

Wave Three

There are complex interactions between race and income, and they are not independent variables. Racism has affected income through the opportunity (or lack thereof) to build intergenerational wealth, as well as through access to (or barriers to) education and employment.

The same pattern is seen in non-ICU admissions, where risk concentrates most greatly for low-income, racialized individuals.



Acquisition Settings in Manitoba

Information from January 24, 2021 to June 12, 2021.



Wave Three

Lower income racialized people are most likely to live in overcrowded and/or inadequate housing, which is the most common acquisition setting. The data infers this is a significant contribution to this higher risk.

The second most common acquisition setting was the workplace. Earlier REI data released showed BIPOC individuals were more likely to be employed in higher-risk occupational settings, including food processing and food services, manufacturing and transportation.



Severe Outcomes: Chronic Disease and Race

Information from March 31, 2021 to June 7, 2021.

	% of ICU Cases in White People	% of ICU Cases in BIPOC Peoples	% of non-ICU Admissions in White People	% of non-ICU Admissions in BIPOC Peoples
With a chronic condition	72.6%	69.9%	74.5%	55.9%
With NO chronic condition	27.4%	30.1%	25.5%	44.1%
Pregnant	0	0.8%	1.9%	6.4%

Wave Three

The presence of underlying chronic conditions has been associated with higher risk of severe outcomes due to COVID-19. However, Third Wave data is showing the difference in severe outcomes in BIPOC Peoples is not due to differences in chronic conditions. In fact, a significantly higher proportion of BIPOC Peoples had no known underlying chronic condition, especially for non-ICU admissions. This would imply that BIPOC Peoples experiencing severe outcomes were both younger and healthier than white people experiencing severe outcomes. It would not be possible to tell from our current data what proportion of BIPOC Peoples had undiagnosed chronic conditions due to inequities in access to care.



Severe Outcomes: VOCs and Race

Information from March 31, 2021 to June 7, 2021.

	% of ICU Cases in White People	% of ICU Cases in BIPOC Peoples	% of non-ICU Admissions in White People	% of non-ICU Admissions in BIPOC Peoples
Non-VOC	14.5%	12.2%	25.1%	23.7%
VOC	85.5%	87.8%%	74.9%	76.3%

Wave Three

The proportion of cases due to VOCs and non-VOCs is roughly equal among white people and BIPOC Peoples.



Key Takeaway Messages

- A reliance on age-based vaccination restrictions likely contributed to the 10+ year differences in the mean ages of hospitalizations between white and BIPOC Peoples
- Low-income status compounds risk for BIPOC Peoples
- BIPOC peoples are less likely to have a known underlying chronic condition, especially for non-ICU hospitalizations
- REI data from consent forms need to be collected and inputted consistently to have an accurate understanding of vaccine coverage for different BIPOC communities and to inform further partnershipbased interventions



Key Takeaway Messages

- Vaccination efforts and resources should be concentrated on areas where coverage is the lowest, with appropriate community partnerships and clinical/operational/logistic support
- Although equitable vaccine access should be prioritized, vaccination alone is not sufficient to address gaps in health that are rooted in structural causes (e.g. employment and housing related)
- Fourth Wave planning needs to prioritize public health interventions that address structural barriers to minimize the disproportionate impact of COVID-19 on BIPOC Peoples