



# Our Health Counts Toronto linkage to Institute of Clinical and Evaluative Sciences (ICES) COVID-19 data holdings

Incidence of positive COVID-19 cases and proportion of COVID-19 tests, hospitalizations and vaccinations among First Nations, Inuit, and Métis (FNIM) living in Toronto.

Data reported as of: **Sept 27, 2022**

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**Community Leads:** Seventh Generation Midwives Toronto

**Presentation prepared by:** Stephanie McConkey & Raman Brar (Well Living House)



Well Living House

# COVID-19 VACCINATIONS

Table 1: Proportion of Indigenous adults who have received first, second and third doses of COVID-19 vaccination as of September 27, 2022 in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data.

	FNIM Population in Toronto*		City of Toronto Population		Ontario Population	
	n	HCG-Adjusted Proportion % [95% Confidence Interval]	n	Proportion %	n	Proportion %
First Dose	508	71.47 [66.55, 76.39]	1,988,873	84.89	10,477,933	85.88
Second Dose	476	65.00 [59.84, 70.15]	1,953,837	83.39	10,292,296	84.36
Third Dose	313	44.18 [38.61, 49.75]	1,358,450	57.98	6,973,961	57.16
Fourth Dose	115	16.31 [11.92, 20.69]	413,723	17.66	2,165,731	17.75
Total	689		2,342,938		12,200,840	

\*Our Health Counts FNIM adult (15+) population living in Toronto as of December 31, 2019, excluding seeds

# COVID-19 VACCINATIONS

Figure 1: Proportion of Indigenous adults who have received first dose of COVID-19 vaccination over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data.

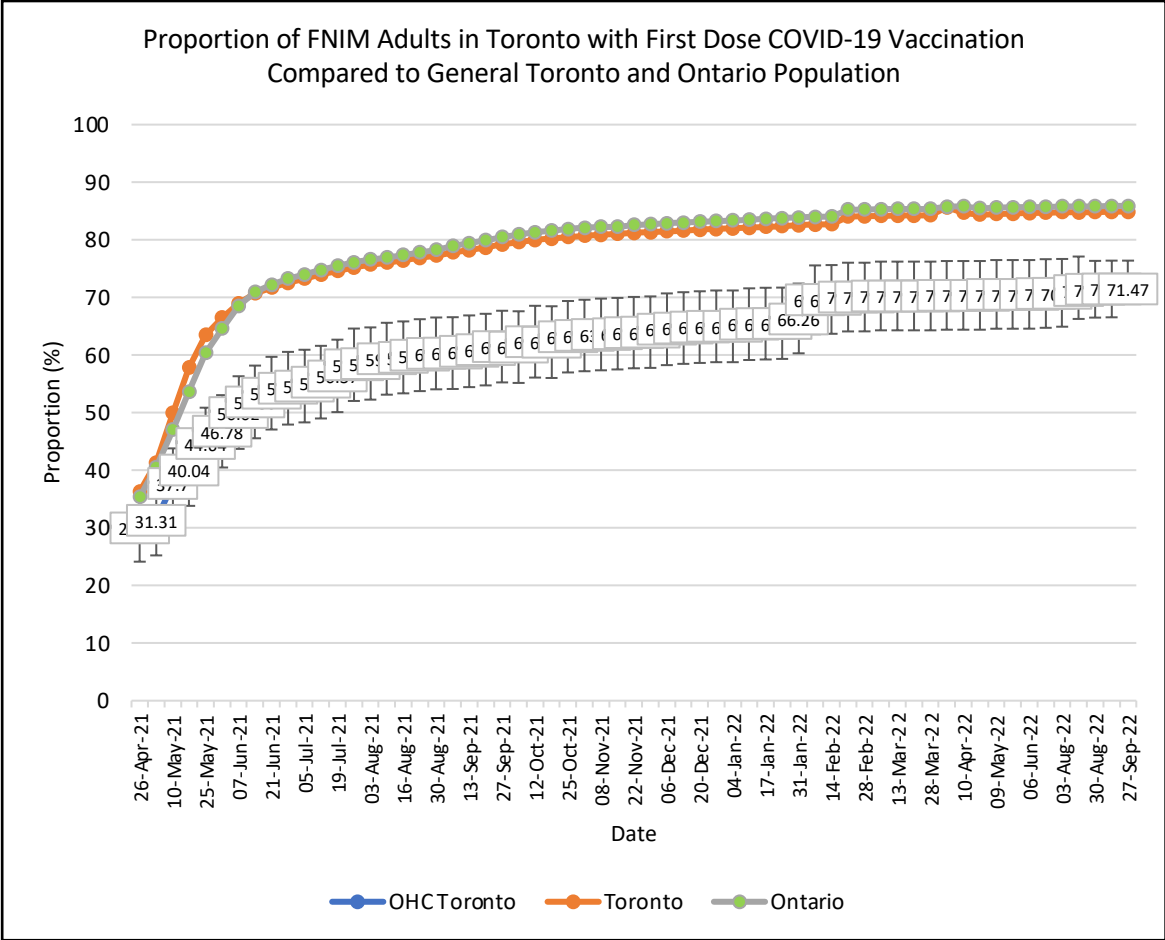
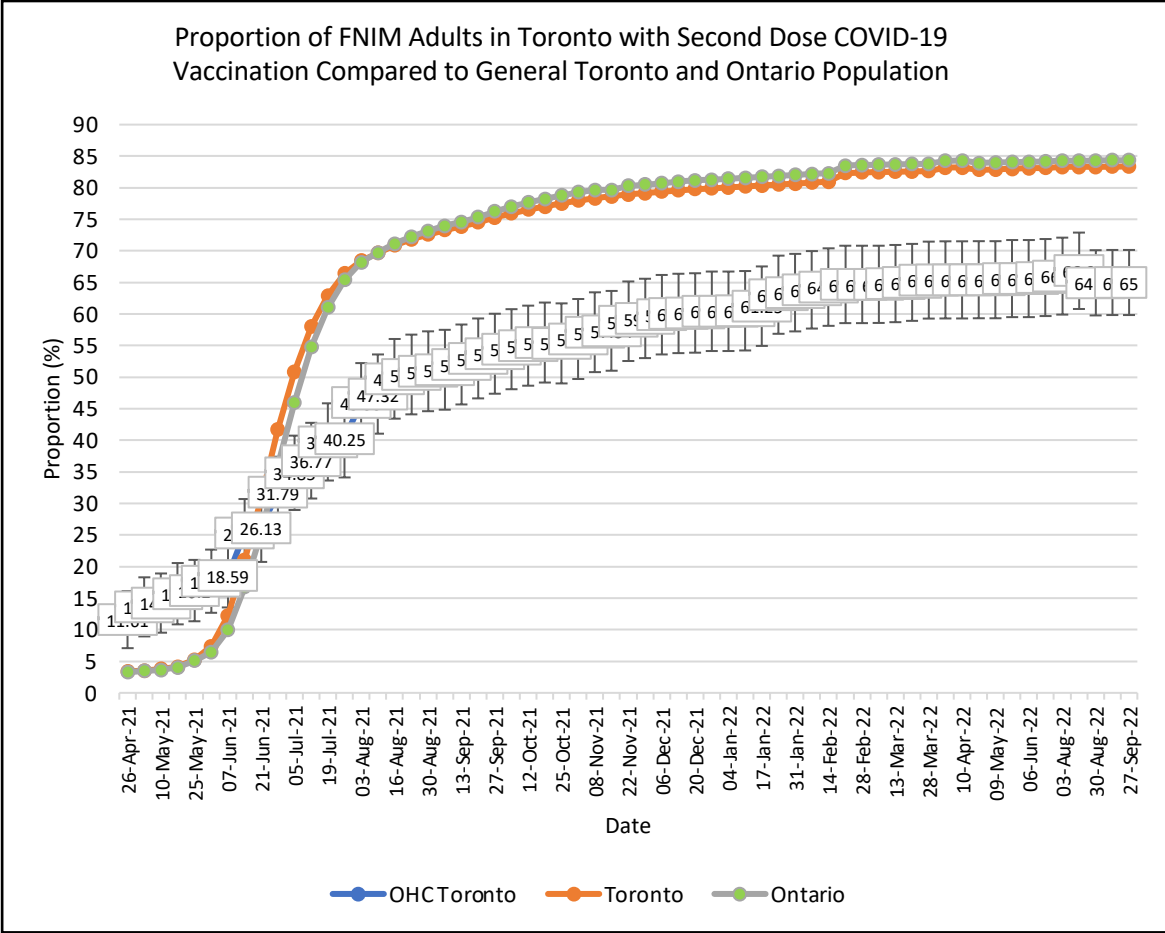


Figure 2: Proportion of Indigenous adults who have received second dose of COVID-19 vaccination over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data.



# COVID-19 VACCINATIONS

Figure 3: Proportion of Indigenous adults who have received third dose of COVID-19 vaccination over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data.

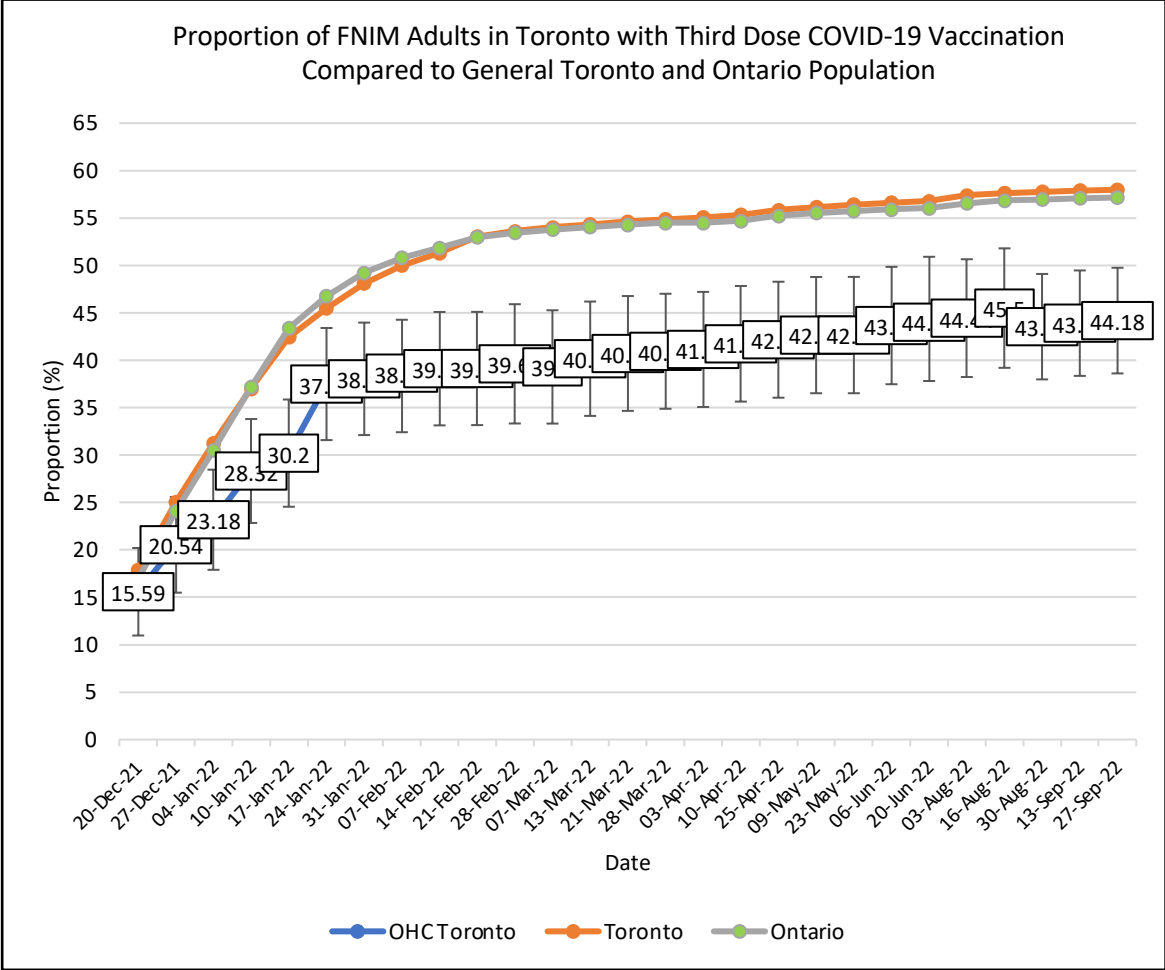
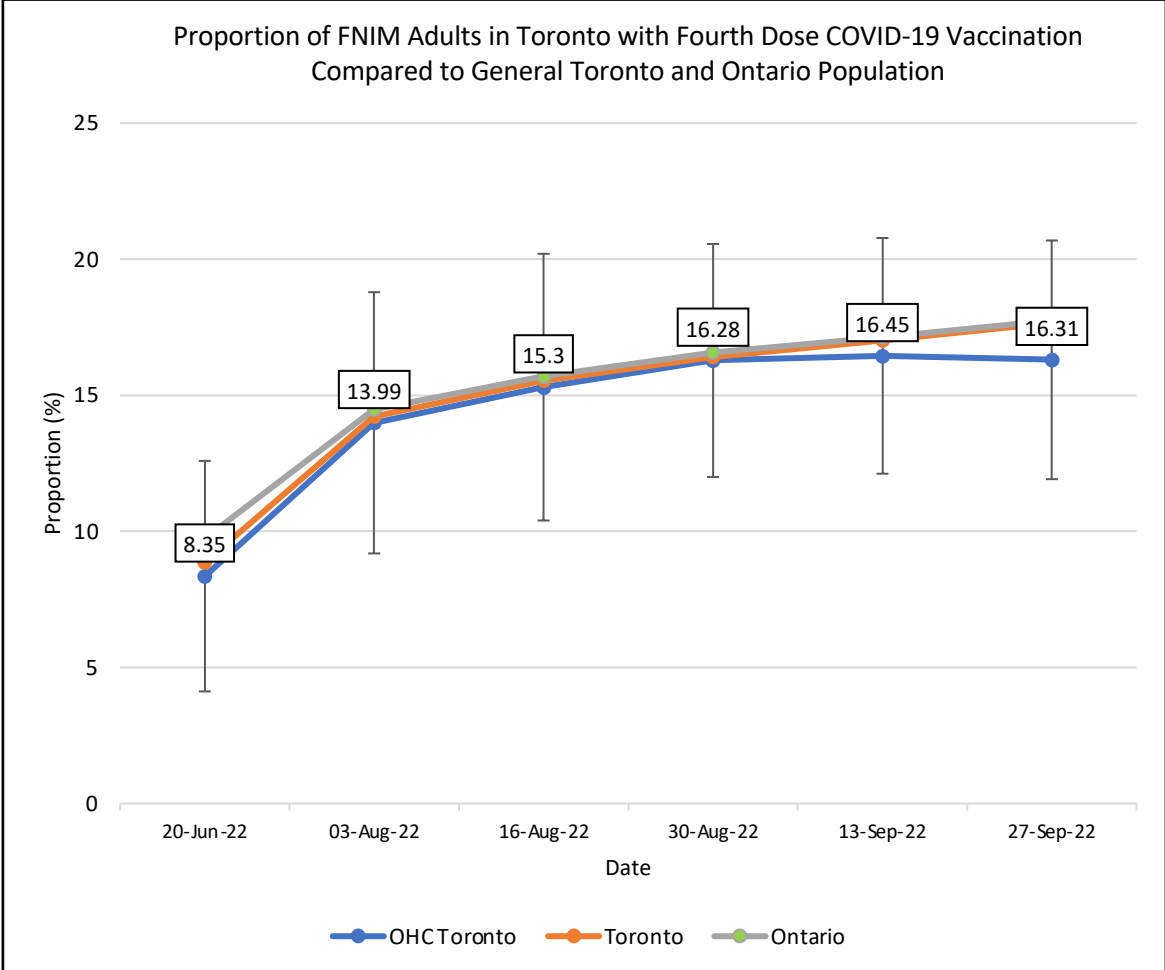


Figure 4: Proportion of Indigenous adults who have received fourth dose of COVID-19 vaccination over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data.



# FIRST DOSE COVID-19 VACCINATIONS

Figure 4: RDS-II Adjusted Proportion of Indigenous adults who have received first dose of COVID-19, stratified by age

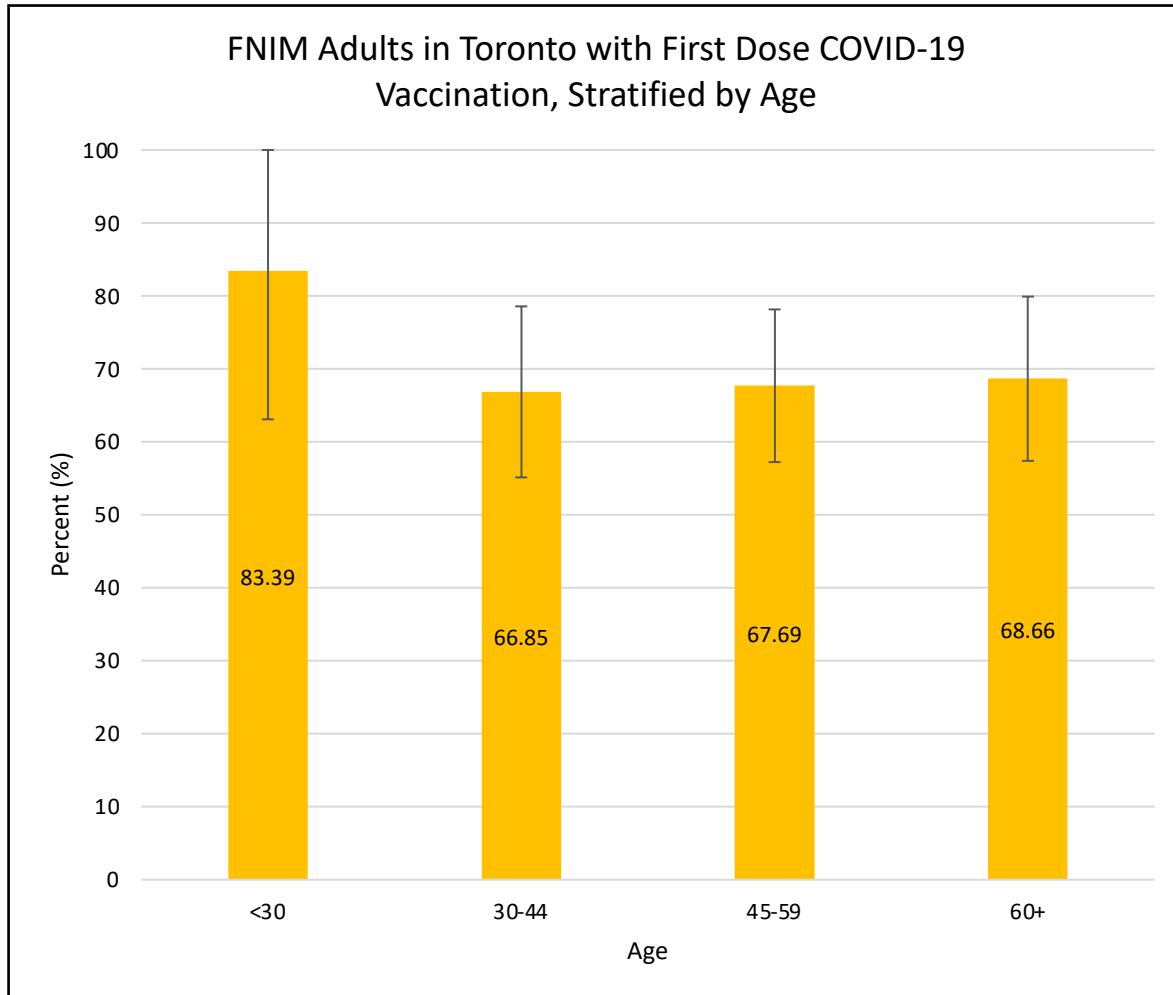
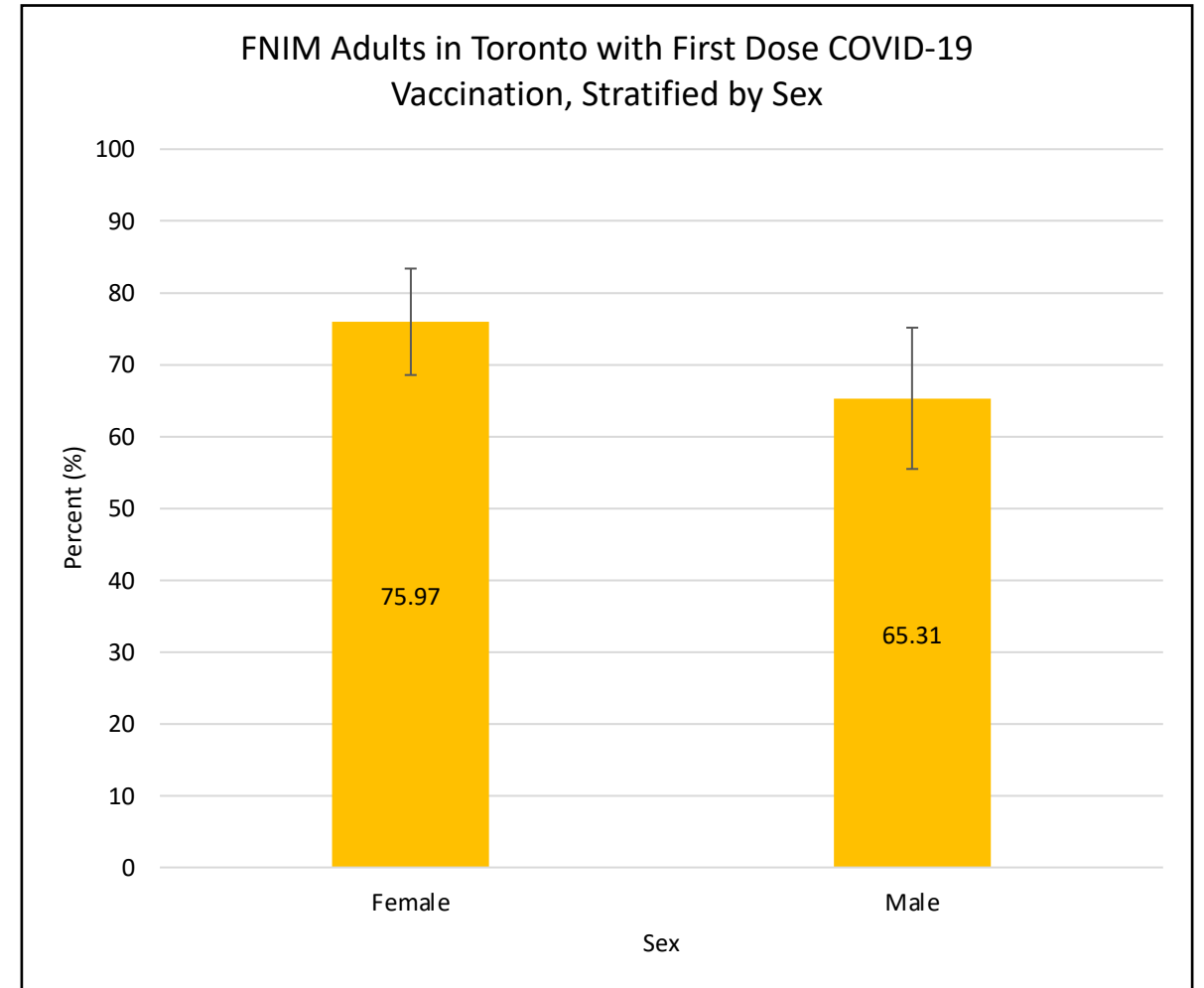


Figure 5: HCG Adjusted Proportion of Indigenous adults who have received first dose of COVID-19, stratified by sex



# SECOND DOSE COVID-19 VACCINATIONS

Figure 6: RDS-II Adjusted Proportion of Indigenous adults who have received second dose of COVID-19, stratified by age

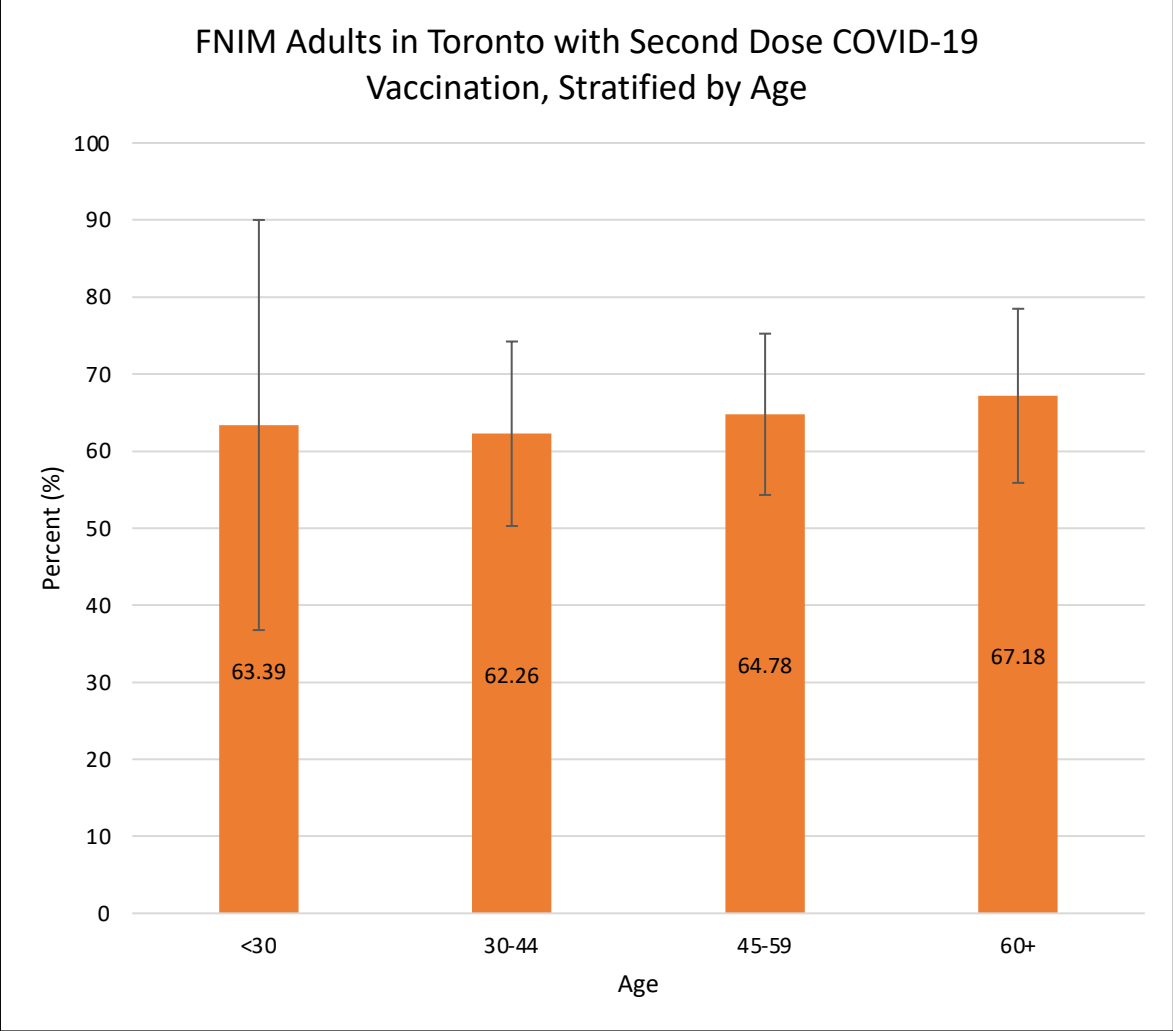
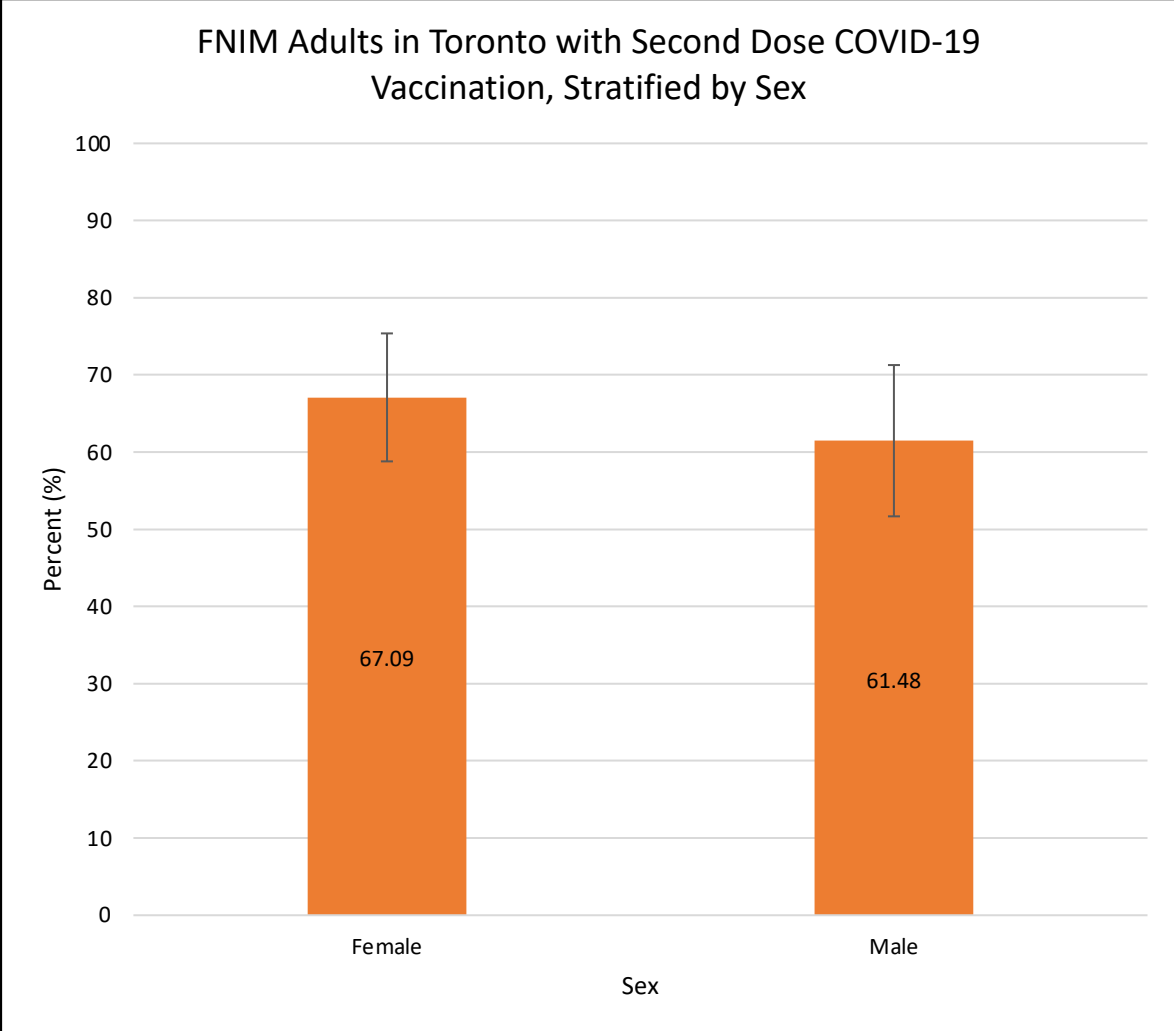


Figure 7: HCG Adjusted Proportion of Indigenous adults who have received second dose of COVID-19, stratified by sex



# THIRD DOSE COVID-19 VACCINATIONS

Figure 8: RDS-II Adjusted Proportion of Indigenous adults who have received third dose of COVID-19, stratified by age

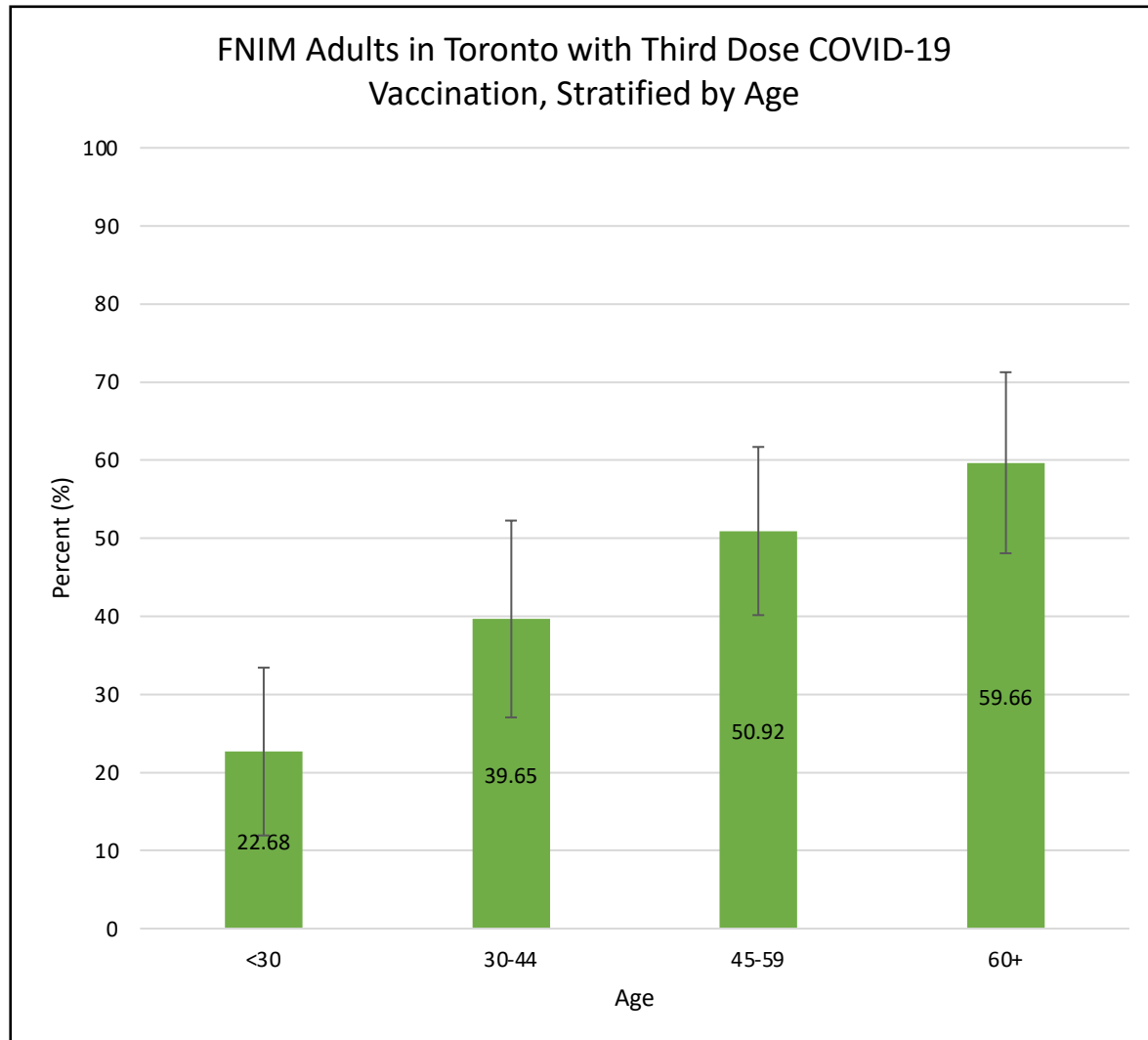
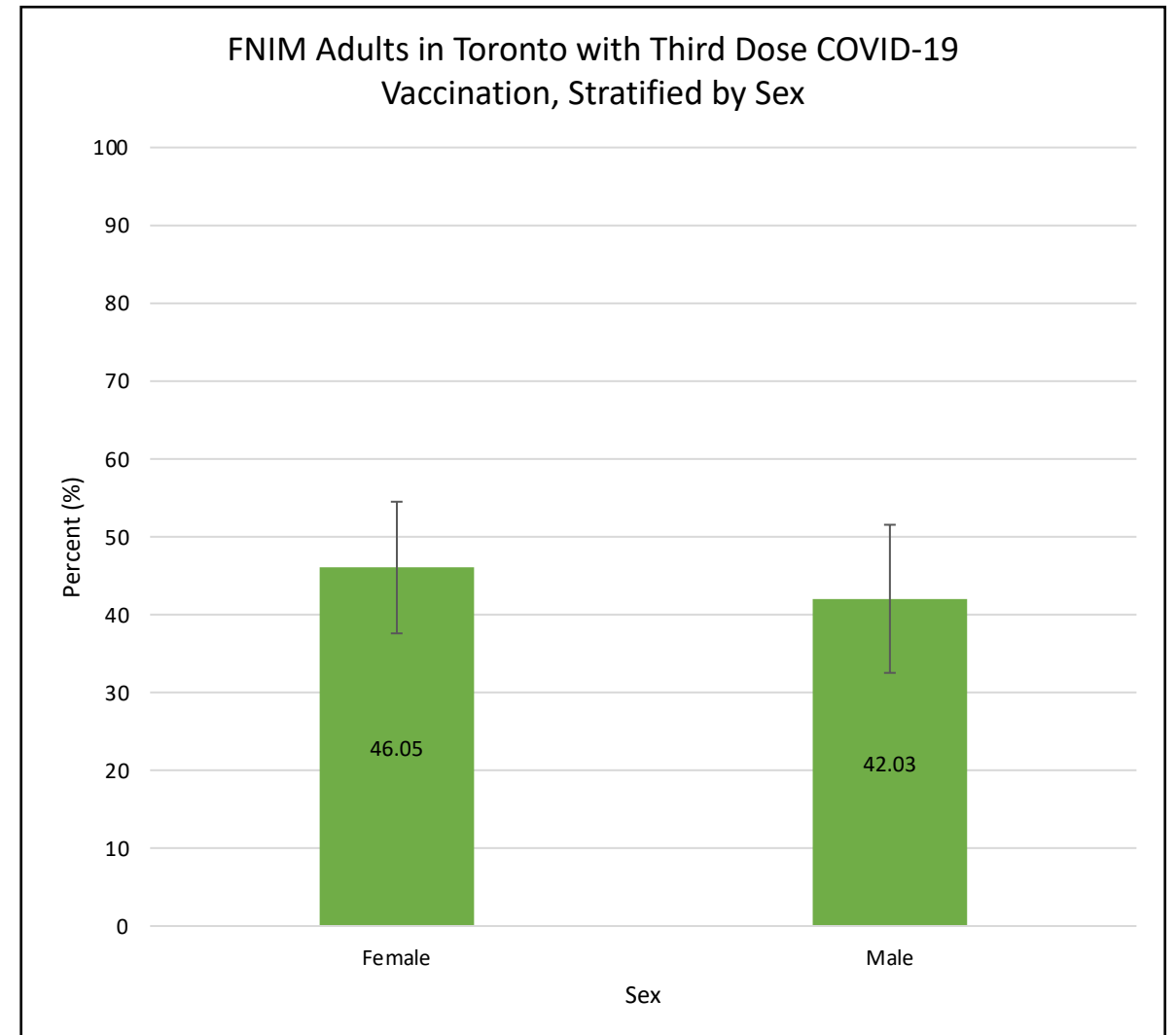


Figure 9: HCG Adjusted Proportion of Indigenous adults who have received third dose of COVID-19, stratified by sex



# FOURTH DOSE COVID-19 VACCINATIONS

Figure 10: RDS-II Adjusted Proportion of Indigenous adults who have received fourth dose of COVID-19, stratified by age

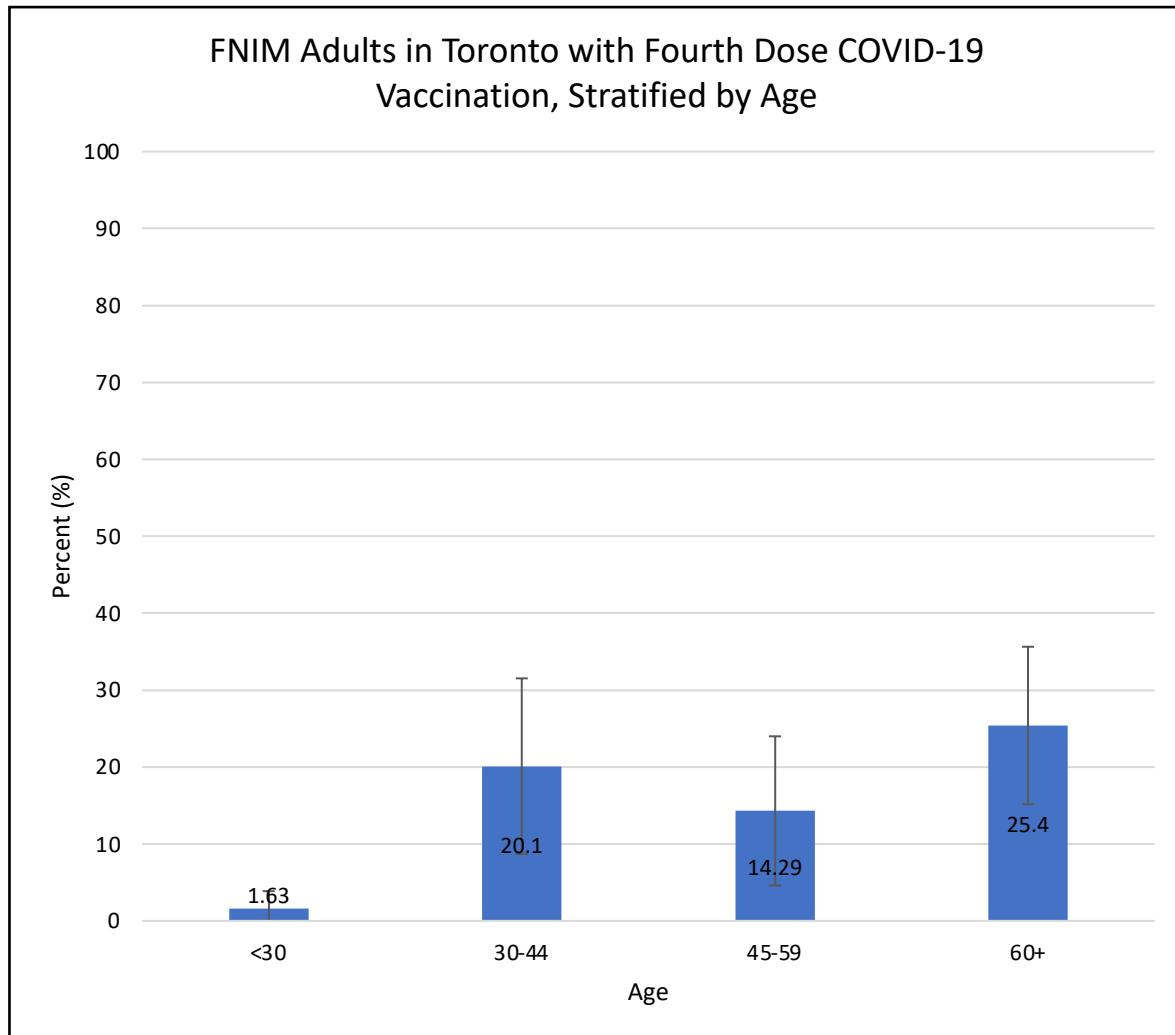
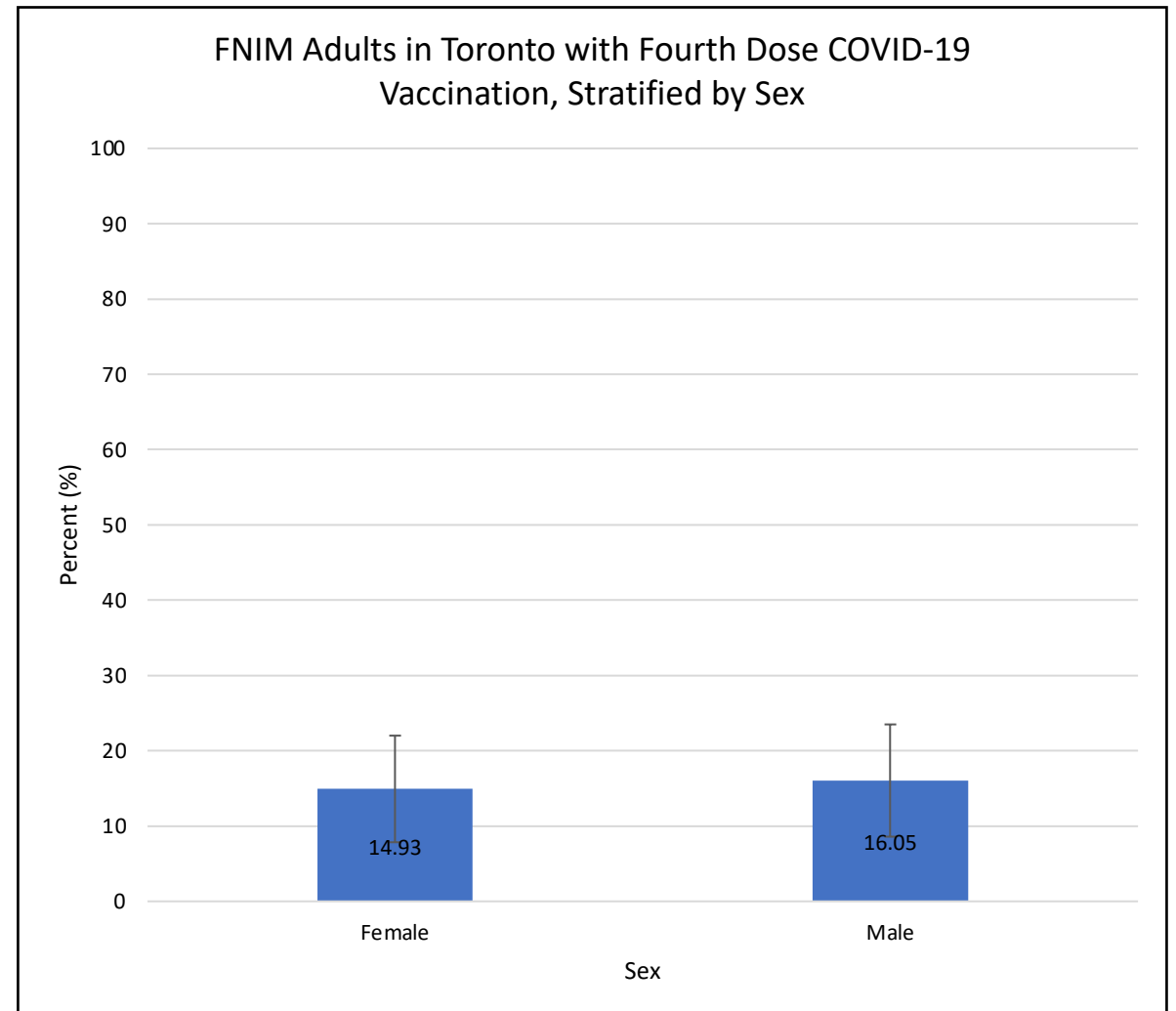


Figure 11: HCG Adjusted Proportion of Indigenous adults who have received fourth dose of COVID-19, stratified by sex





# COVID-19 VACCINATIONS

Table 2: Non-conservative 2021 Population Estimates for FNIM Adults in Toronto and Estimated Required Number of Vaccine Events to Fully Vaccinate (2 Doses) FNIM Adults in Toronto

Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021	Estimated required number of vaccine events (FNIM population x 2 doses)
71,097*	142,194

\*Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021. Estimate includes assumption that Indigenous population has grown by 5% since 2016

Table 3: Estimated number of FNIM vaccination events required for complete vaccination (2 doses) FNIM adult population in Toronto.

Vaccination	HCG-Adjusted Proportion of First & Second Dose Vaccinations Administered to FNIM OHC Toronto Adults (%)	Non-conservative 2021 population estimates for FNIM adults (15+) in Toronto	Estimated # of Vaccinations Given (FNIM population x % vaccines administered)	Estimated # of Vaccinations Required (Estimated required number of vaccine events - Estimated # of Vaccinations Given)
First Dose	71.47 [66.55, 76.39]	71,097	50,813	
Second Dose	65.00 [59.84, 70.15]	71,097	46,213	
<b>Total</b>			<b>97,026</b>	<b>45,168</b>

# COVID-19 VACCINATIONS

Table 4: Non-conservative 2021 Population Estimates for FNIM Adults in Toronto and Estimated Required Number of Vaccine Events to Fully Vaccinate FNIM Adults in Toronto, Including Third Dose of Booster

Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021	Estimated required number of vaccine events (FNIM population x 3 doses)
71,097*	213,291

\*Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021. Estimate includes assumption that Indigenous population has grown by 5% since 2016

Table 5: Estimated number of FNIM vaccination events required for complete vaccination, including third dose booster of FNIM adult population in Toronto.

Vaccination	HCG-Adjusted Proportion of First & Second Dose Vaccinations Administered to FNIM OHC Toronto Adults (%)	Non-conservative 2021 population estimates for FNIM adults (15+) in Toronto	Estimated # of Vaccinations Given (FNIM population x % vaccines administered)	Estimated # of Vaccinations Required (Estimated required number of vaccine events - Estimated # of Vaccinations Given)
First Dose	71.47 [66.55, 76.39]	71,097	50,813	
Second Dose	65.00 [59.84, 70.15]	71,097	46,213	
Third Dose	44.18 [38.61, 49.75]	71,097	31,411	
<b>Total</b>			<b>128,437</b>	<b>84,854</b>

# COVID-19 VACCINATIONS

Table 6: Non-conservative 2021 Population Estimates for FNIM Adults in Toronto and Estimated Required Number of Vaccine Events to Fully Vaccination FNIM Adults in Toronto, Including Fourth Dose of Booster

Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021	Estimated required number of vaccine events (FNIM population x 4 doses)
71,097*	284,388

\*Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021. Estimate includes assumption that Indigenous population has grown by 5% since 2016

Table 7: Estimated number of FNIM vaccination events required for complete vaccination, including fourth dose booster of FNIM adult population in Toronto.

Vaccination	HCG-Adjusted Proportion of First & Second Dose Vaccinations Administered to FNIM OHC Toronto Adults (%)	Non-conservative 2021 population estimates for FNIM adults (15+) in Toronto	Estimated # of Vaccinations Given (FNIM population x % vaccines administered)	Estimated # of Vaccinations Required (Estimated required number of vaccine events - Estimated # of Vaccinations Given)
First Dose	71.47 [66.55, 76.39]	71,097	50,813	
Second Dose	65.00 [59.84, 70.15]	71,097	46,213	
Third Dose	44.18 [38.61, 49.75]	71,097	31,411	
Fourth Dose	16.31 [11.92, 20.69]	71,097	11,596	
<b>Total</b>			<b>140,033</b>	<b>144,355</b>

# COVID-19 HOSPITALIZATIONS

Table 8: Proportion of Indigenous adults testing positive for COVID-19 and were hospitalized in comparison to general Toronto and Ontario population from January 2020 to September 27, 2022. Total sample n= 687, representing n=71,096 FNIM in Toronto\*\*. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.

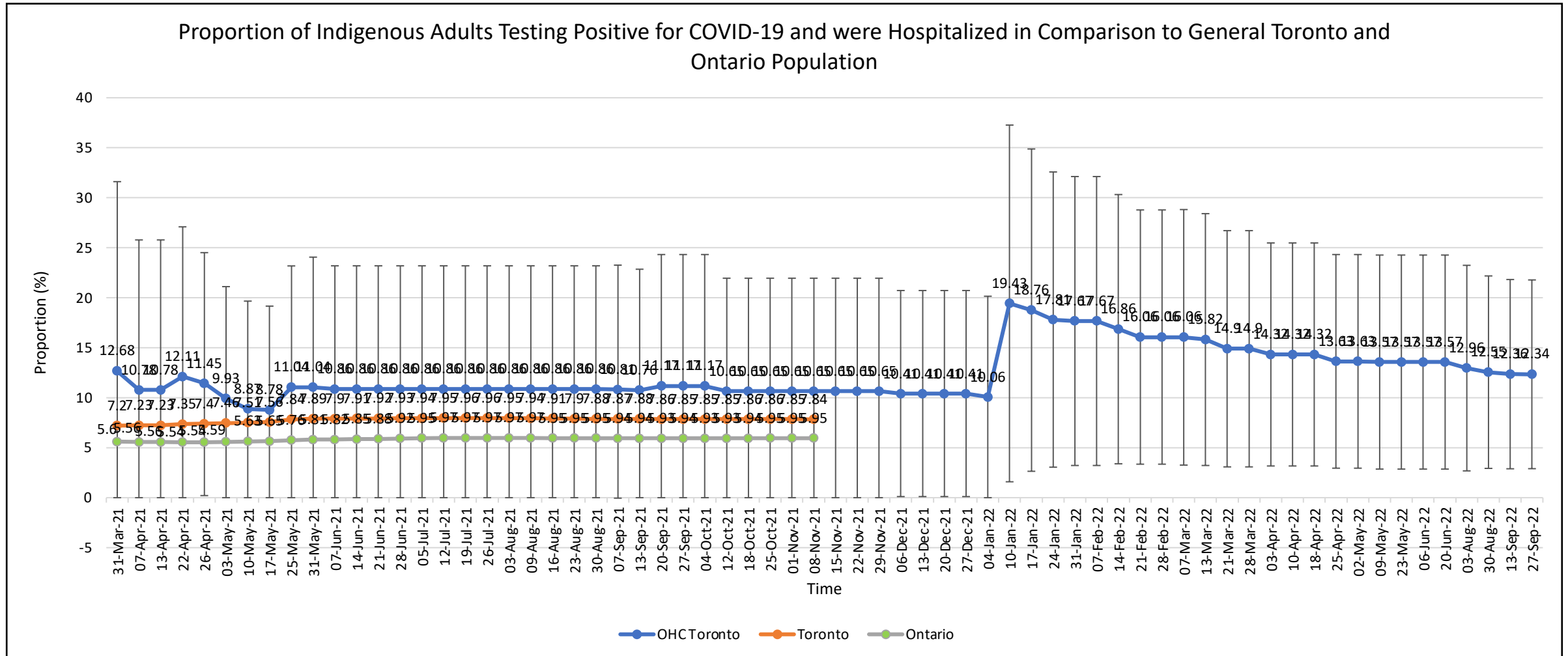
	FNIM Population in Toronto*		City of Toronto Population		Ontario Population	
	n	RDS-II Adjusted Proportion % [95% Confidence Interval]	n	Proportion %	n	Proportion %
Hospitalizations	12	12.34 [2.90, 21.78]	13,242	5.05	48,257	4.10
Total COVID-19 positive cases	111		262,440		1,176,899	

\*Our Health Counts FNIM adult (15+) population living in Toronto as of December 31, 2019 and have tested positive for COVID-19, excluding seeds

\*\*Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021

# COVID-19 HOSPITALIZATIONS

Figure 12: Proportion of Indigenous adults testing positive for COVID-19 and were hospitalized over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.



# INCIDENCE OF COVID-19 POSITIVE CASES

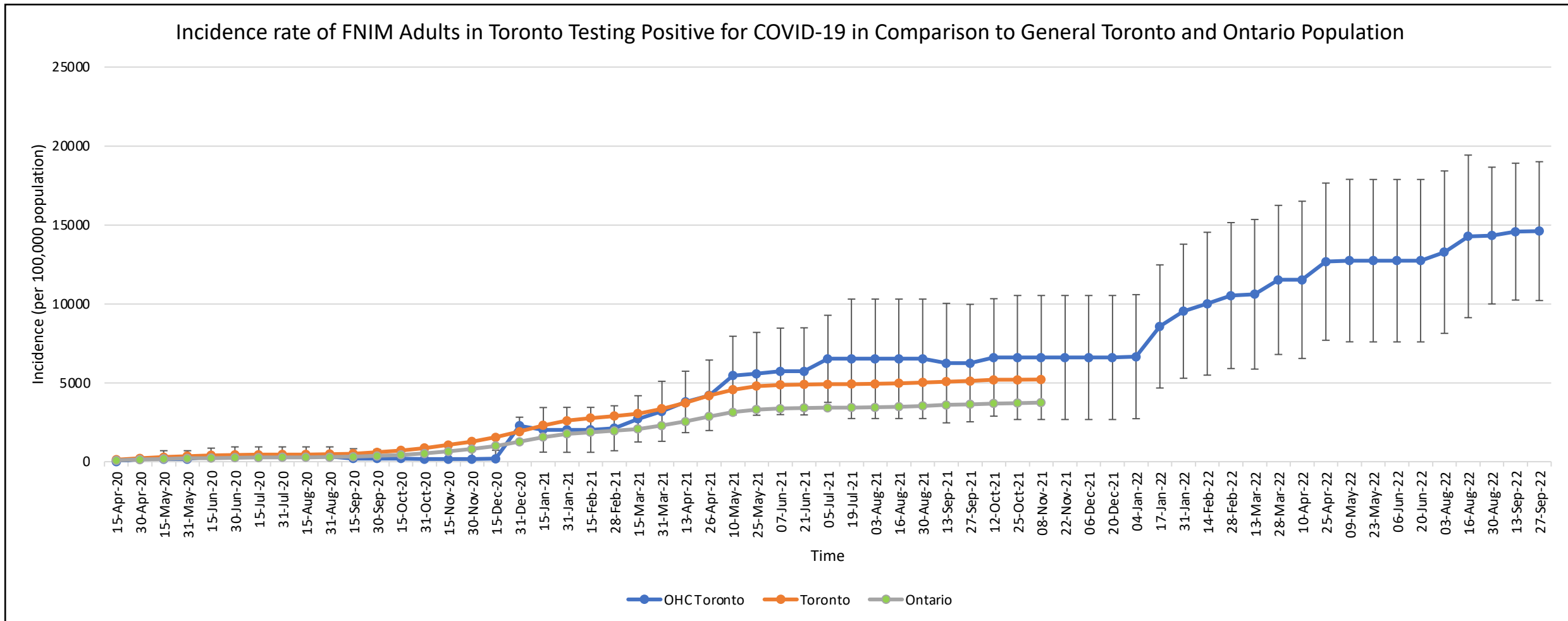
Table 9: Incidence rate of Indigenous adults testing positive for COVID-19 in comparison to general Toronto and Ontario population from January 2020 to September 27, 2022. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.

	FNIM Population in Toronto*		City of Toronto Population		Ontario Population	
	n	HCG-Adjusted Incidence Incidence per 100,000 FNIM population [95% Confidence Interval]	n	Crude Incidence Incidence per 100,000 population	n	Crude Incidence Incidence per 100,000 population
Positive COVID-19 test	111	14,607 [10,208, 19,006]	262,440	11,201	1,176,899	9,646
Total	689		2,342,938		12,200,840	

\*Our Health Counts FNIM adult (15+) population living in Toronto as of December 31, 2019, excluding seeds

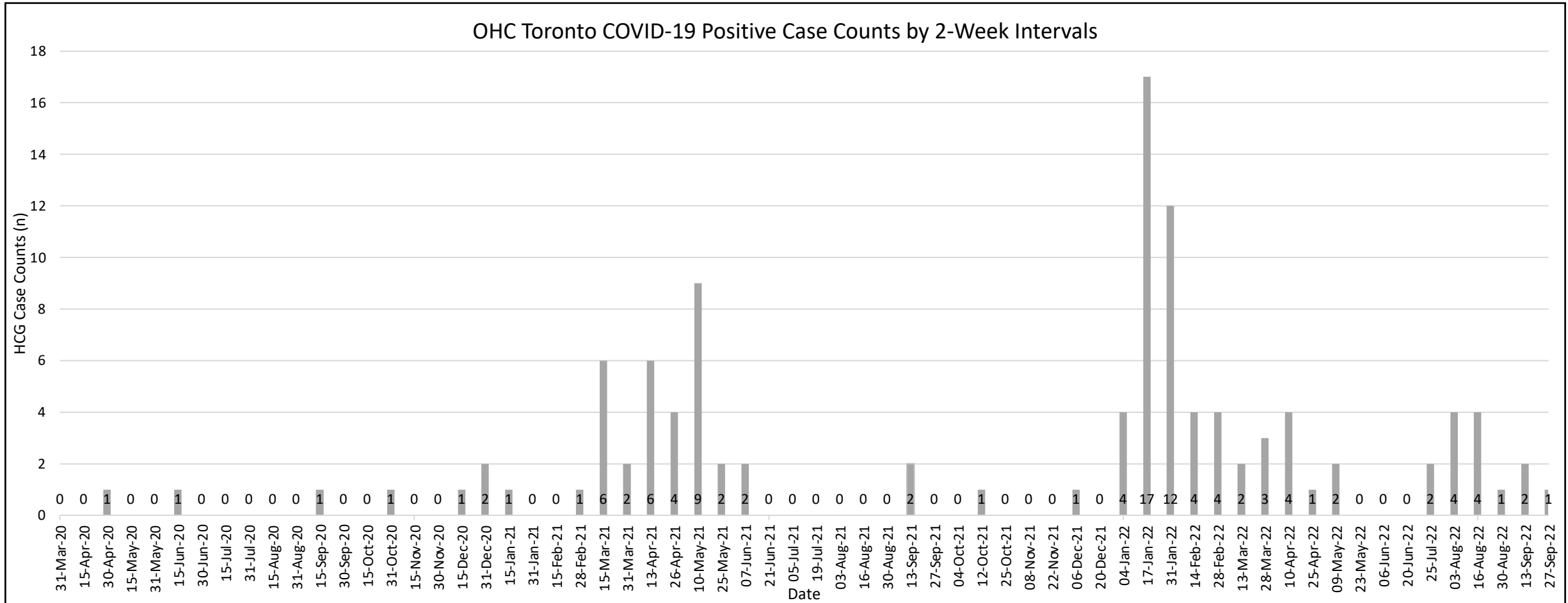
# INCIDENCE OF COVID-19 POSITIVE CASES

Figure 13: Incidence rate of Indigenous adults testing positive for COVID-19 over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.



# COVID-19 POSITIVE CASES

Figure 14: Indigenous adult COVID-19 positive case counts by two-week intervals. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.





# COVID-19 TESTING PREVALENCE

Table 10: Prevalence of COVID-19 testing among FNIM adults in Toronto in comparison to general Toronto and Ontario population from January 2020 to August 3, 2022. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.

	FNIM Population in Toronto*		City of Toronto Population		Ontario Population	
	n	HCG-Adjusted Period Prevalence % [95% Confidence Interval]	n	Crude Period Prevalence %	n	Crude Period Prevalence %
Tested	467	59.28 [53.19, 65.37]	1,203,485	51.10	6,182,624	50.38
Not Tested	220	40.72 [34.63, 46.81]	1,151,556	48.90	6,088,536	49.62
Total	687		2,355,041		12,271,160	

\*Our Health Counts FNIM adult (15+) population living in Toronto as of December 31, 2019, excluding seeds





# References

- Rachlis B, Schultz S, Mecredy G, Avery L, McConkey S, Rotondi M, Smylie J. COVID-19 in First Nations, Métis and Inuit communities in Toronto, Ontario-Update to July 25, 2022, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021.
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- Rachlis B, Schultz S, Mecredy G, Avery L, McConkey S, Rotondi M, Smylie J. COVID-19 in First Nations, Métis and Inuit communities in Toronto, Ontario-Update to Sept 27, 2022, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021.