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: February 7, 2022

Principal Investigator: Dr. Janet Smylie

Community Leads: Seventh Generation Midwives Toronto

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





Table 1: Proportion of Indigenous adults who have received first, second and third doses of COVID-19 vaccination as of February 7, 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	495	69.59 [63.63, 75.56]	1,976,326	82.64	10,268,816	83.99
Second Dose	460	63.84 [57.70, 69.97]	1,933,050	80.83	10,046,619	82.17
Third Dose	245	38.64 [32.41, 44.27]	1,195,802	50.00	6,214,182	50.82
Total	687		2,391,531		12,227,269	

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

Figure 1: Proportion of Indigenous adults who have received <u>first dose</u> 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.

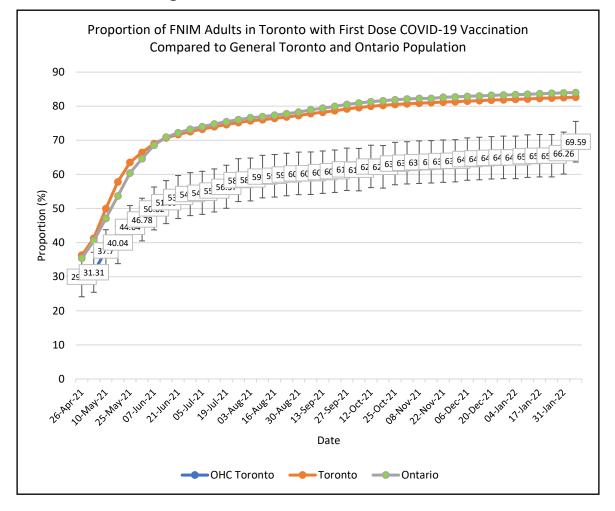


Figure 2: Proportion of Indigenous adults who have received <u>second</u> <u>dose</u> of COVID-19 vaccination over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data.

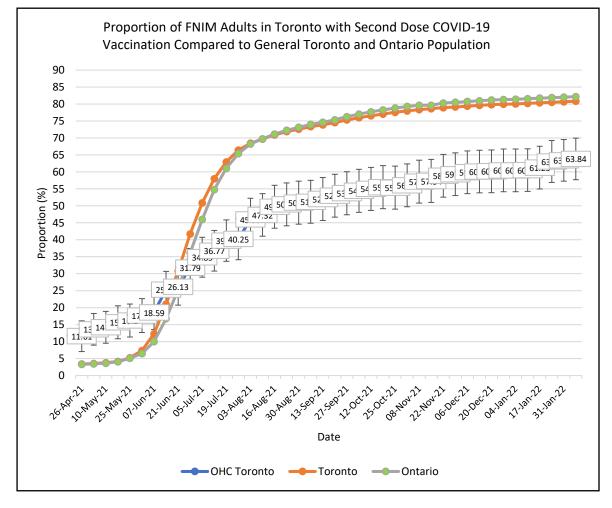
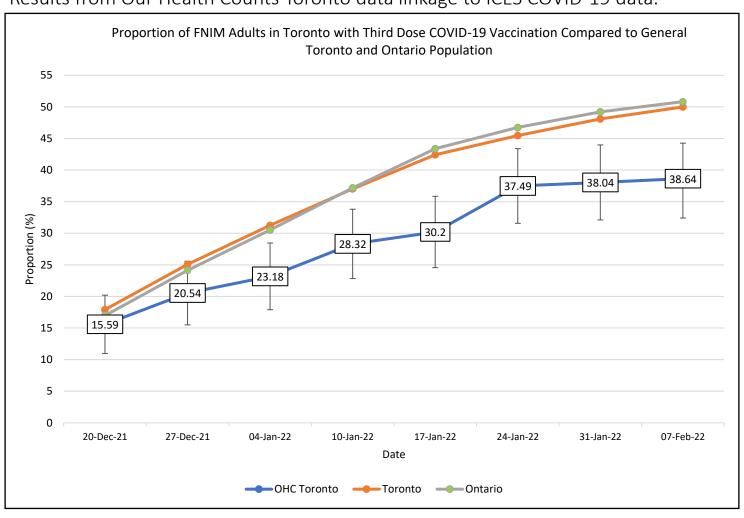


Figure 3: Proportion of Indigenous adults who have received <u>third dose</u> of COVID-19 vaccination over time in comparison to general Toronto and Ontario population. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data.



FIRST DOSE COVID-19 VACCINATIONS

Figure 3:RDS-II Adjusted Proportion of Indigenous adults who have received <u>first dose</u> of COVID-19, stratified by age

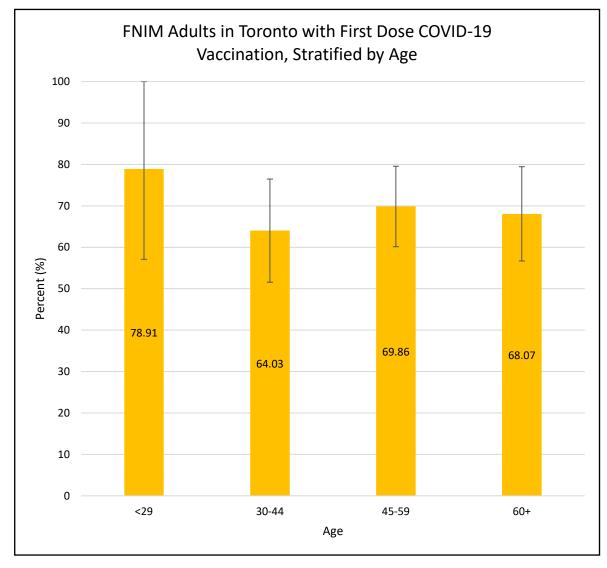
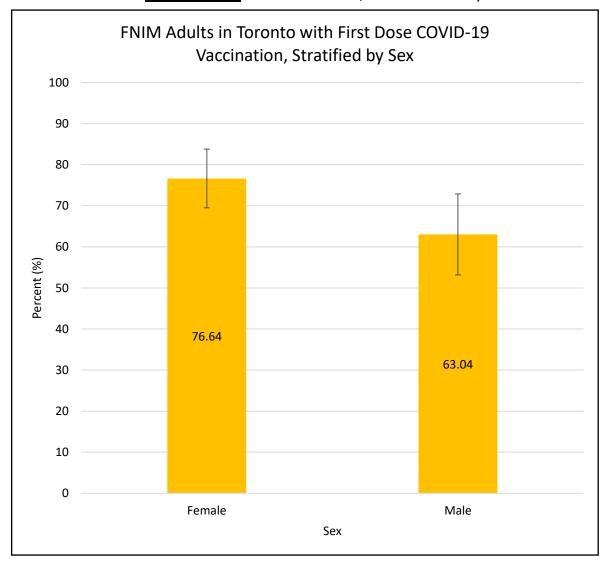


Figure 4: HCG Adjusted Proportion of Indigenous adults who have received <u>first dose</u> of COVID-19, stratified by sex



SECOND DOSE COVID-19 VACCINATIONS

Figure 5: RDS-II Adjusted Proportion of Indigenous adults who have received **second dose** of COVID-19, stratified by age

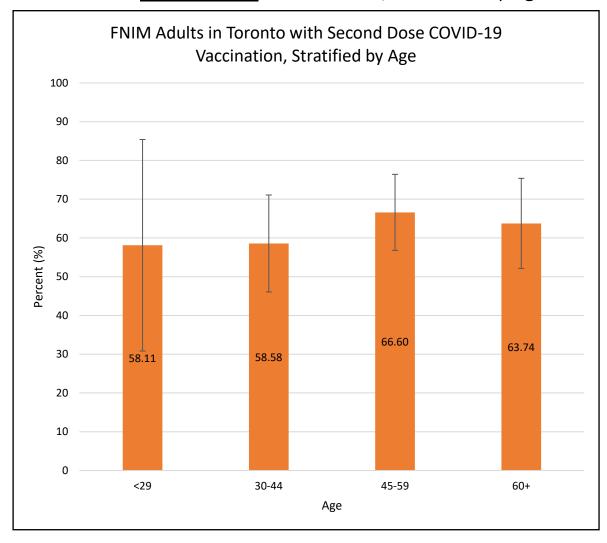
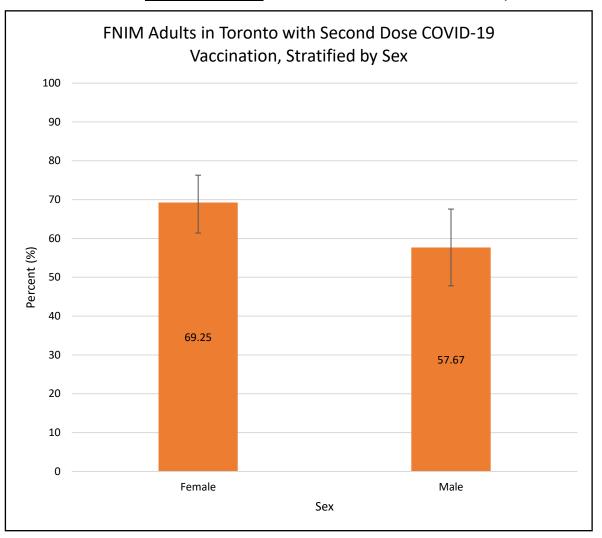


Figure 6: HCG Adjusted Proportion of Indigenous adults who have received <u>second dose</u> of COVID-19, stratified by sex



THIRD DOSE COVID-19 VACCINATIONS

Figure 7: RDS-II Adjusted Proportion of Indigenous adults who have received **third dose** of COVID-19, stratified by age

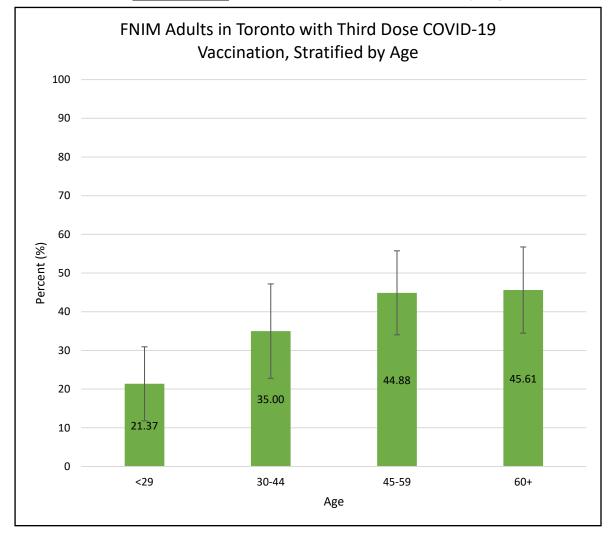


Figure 8: HCG Adjusted Proportion of Indigenous adults who have received **third dose** of COVID-19, stratified by sex

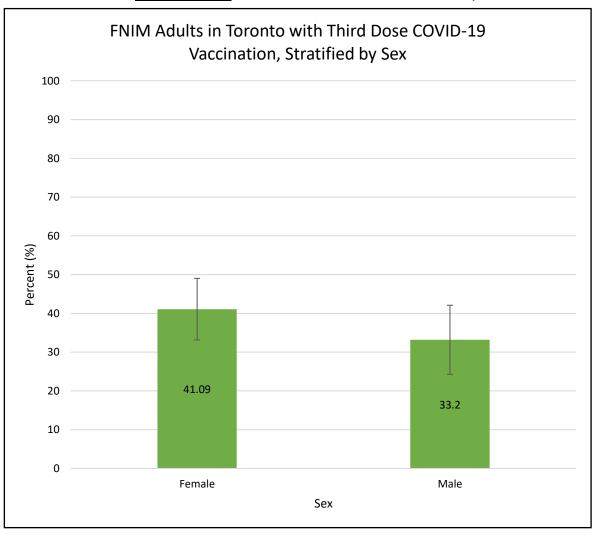


Table 2: Non-conservative 2021 Population Estimates for FNIM Adults in Toronto and Estimated Required Number of Vaccine Events to Fully Vaccination FNIM Adults in Toronto

Non-conservative population estimates for FNIM adults (15+) in Toronto in 2021	Estimated required number of vaccine events (FNIM population x 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 3: 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	69.59 [63.63, 75.56]	71,097	49,109	
Second Dose	63.84 [57.70, 69.97]	71,097	45,388	
Third Dose	38.64 [32.41, 44.27]	71,097	27,472	
Total			121,969	91,322

COVID-19 HOSPITALIZATIONS

Table 4: Proportion of Indigenous adults testing positive for COVID-19 and were hospitalized in comparison to general Toronto and Ontario population from January 2020 to February 7, 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.

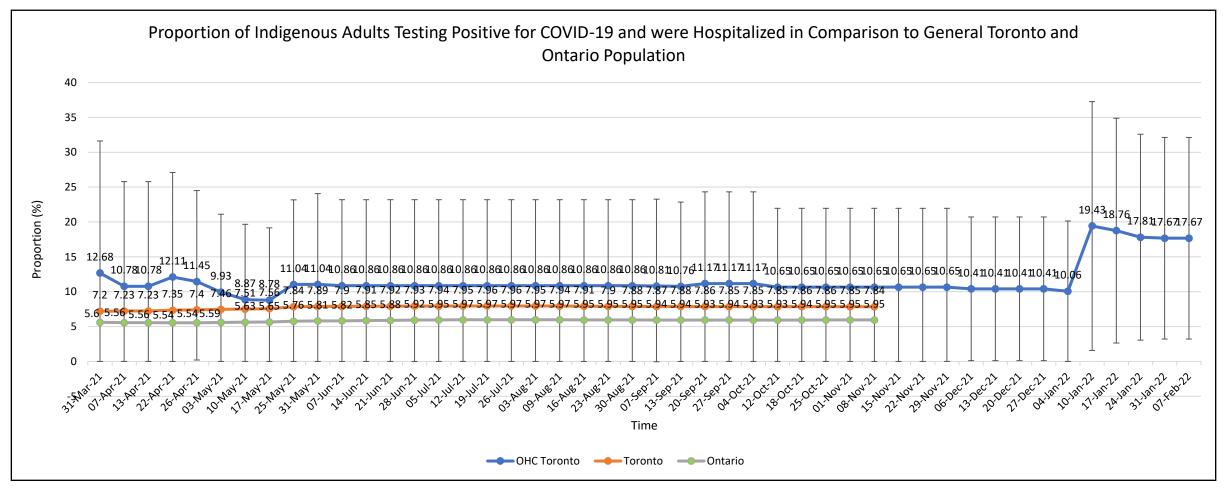
	FNIM Population in Toronto*		City of Toronto Population		Ontario Population	
	n	RDS-II Adjusted Proportion % [95% Confidence Interval]	n	Proportion %	n	Proportion %
Hospitalizations	12	17.67 [3.22, 32.12]	11,965	5.74	35,680	4.21
Total COVID-19 positive cases	77		208,373		846,779	

^{*}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 9: 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

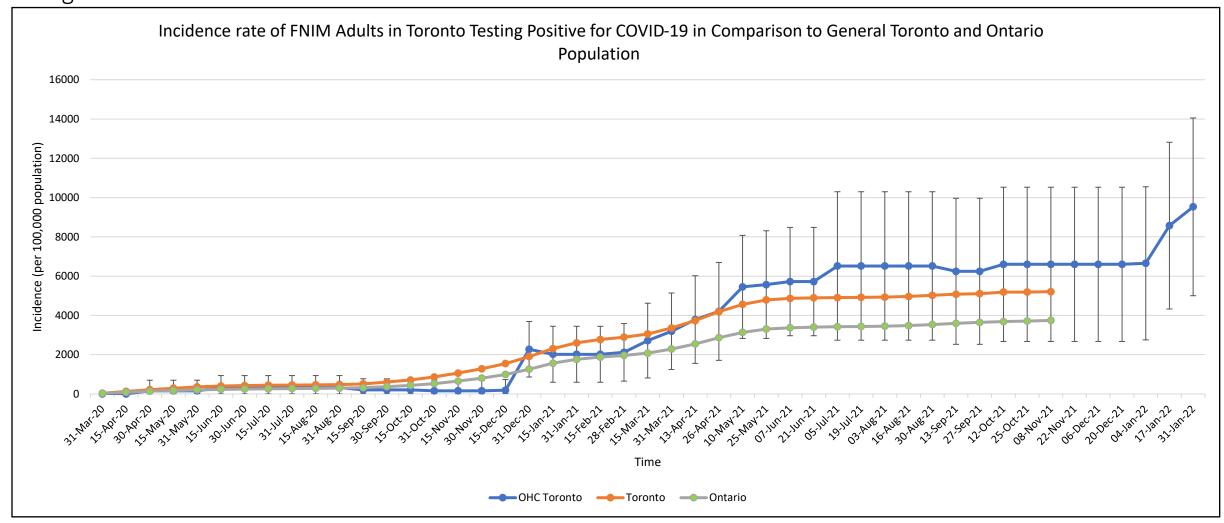
Table 5: Incidence rate of Indigenous adults testing positive for COVID-19 in comparison to general Toronto and Ontario population from January 2020 to February 7, 2022. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.

	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	77	9,532 [5,006, 14,059]	208,373	8,712.95	846,779	6,925.68
Total	687		2,391,513		12,226,661	

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

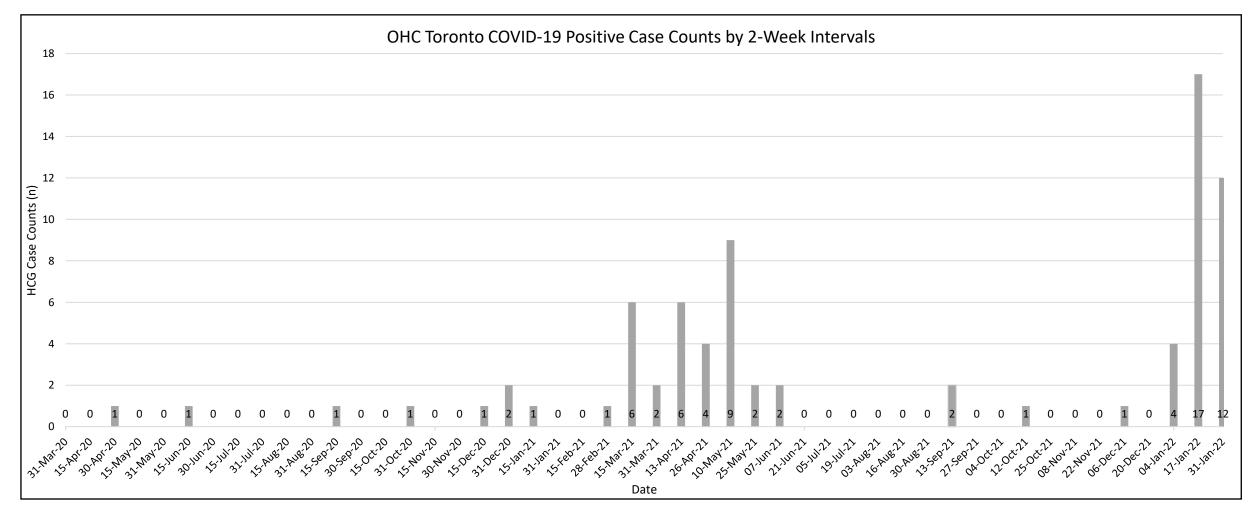
INCIDENCE OF COVID-19 POSITIVE CASES

Figure 11: 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 12: 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 6: Prevalence of COVID-19 testing among FNIM adults in Toronto in comparison to general Toronto and Ontario population from January 2020 to February 7, 2022. Results from Our Health Counts Toronto data linkage to ICES COVID-19 data holdings.

	FNIM Population in Toronto*		City of Tor	onto Population	Ontario Population	
	n	HCG-Adjusted Period Prevalence % [95% Confidence Interval]	n	Crude Period Prevalence %	n	Crude Period Prevalence %
Tested	446	56.14 [49.89, 62.39]	1,142,955	47.79	5,765,832	47.16
Not Tested	241	43.86 [37.61, 50.11]	1,248,576	52.21	6,460,829	52.84
Total	687		2,391,531		12,226,661	

^{*}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 March 31, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 April 13, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 April 22, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 April 26, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 May 3, 2021. Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences: 2021. 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 May 10, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 May 17, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 May 25, 2021. Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences: 2021. 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 May 31, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 June 7, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 June 14, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 June 21, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 June 28, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 5, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 12, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 19, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 26, 2021. Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences: 2021. 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 August 3, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 August 9, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000, Toronto; Institute for Clinical Evaluative Sciences; 2021. 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 August 16, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 August 23, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 August 30, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021

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 September 7, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 September 13, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 September 20, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 September 27, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 October 4, 2021, Applied Health Research Questions (AHRQ) #p0950,088,000, Toronto: Institute for Clinical Evaluative Sciences: 2021. 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 October 12, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 October 18, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 October 25, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 November 1, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 November 8, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000, Toronto; Institute for Clinical Evaluative Sciences; 2021. 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 November 15, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 November 22, 2021. Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 November 29, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 December 6, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 December 13, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021 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 January 4, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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 January 10, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021. 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-Undate to January 17, 2021, Applied Health Research Questions (AHRO) #p0950.088.000, Toronto: Institute for Clinical Evaluative Sciences: 2021. 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 January 24, 2021. Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences: 2021. 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 January 31, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021.

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 February 7, 2021, Applied Health Research Questions (AHRQ) #p0950.088.000. Toronto: Institute for Clinical Evaluative Sciences; 2021.