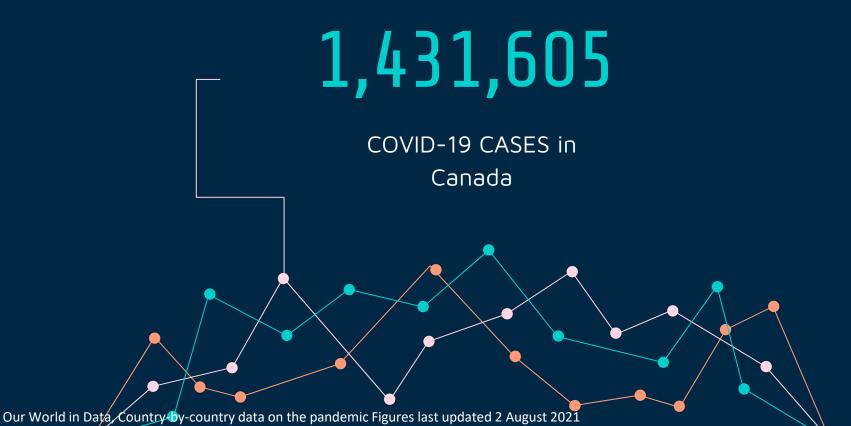
WHEN WILL EVERY CANADIAN BE VACCINATED?

SCIFAA DATA SCIENCE PRESENTATION

By: Juwairiah Zia

WHAT'S HAPPENING TODAY?



RESEARCH FOR DATA AND INSIGHTS

Data Source

- Our World in <u>Data</u>
- People_vaccinated_per_hundred : the number of people vaccinated in a group of 100 in a day

Time line

December 2020 to July 2021

Assumptions

- Age group of people: 12+ and 18+
- Dose: At least one COVID-Dose or both

Computation Software

R programming

					_
^	Number [‡]	Country	Code [‡]	people_vaccinated_per_hundred	Date [‡]
2812	1	Canada	CAN	0.00	2020-12-15
2813	2	Canada	CAN	0.01	2020-12-16
2814	3	Canada	CAN	0.02	2020-12-17
2815	4	Canada	CAN	0.03	2020-12-18
2816	5	Canada	CAN	0.03	2020-12-19
2817	6	Canada	CAN	0.03	2020-12-20
2818	7	Canada	CAN	0.06	2020-12-21
2819	8	Canada	CAN	0.07	2020-12-22
2820	9	Canada	CAN	0.09	2020-12-23
2821	10	Canada	CAN	0.12	2020-12-24
2822	11	Canada	CAN	0.12	2020-12-25
2823	12	Canada	CAN	0.13	2020-12-26
2824	13	Canada	CAN	0.14	2020-12-27
2825	14	Canada	CAN	0.16	2020-12-28
2826	15	Canada	CAN	0.19	2020-12-29
2827	16	Canada	CAN	0.22	2020-12-30
2828	17	Canada	CAN	0.26	2020-12-31
2829	18	Canada	CAN	0.27	2021-01-01
2830	19	Canada	CAN	0.29	2021-01-02

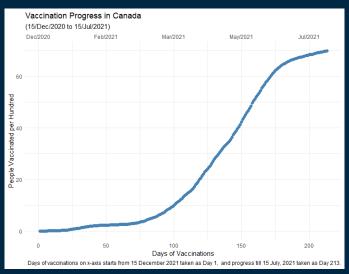
Data Index presenting people vaccinated in Canada from 15/Dec/2020 to 14/Jun/2021

Source: Share of people who received at least one dose or more doses of COVID-19 vaccine. (n.d.). Our World in Data. Retrieved July 12, 2021, from https://ourworldindata.org/grapher/share-people-vaccinated-covid

THE STORY DATA TELLS

THE PRESENT

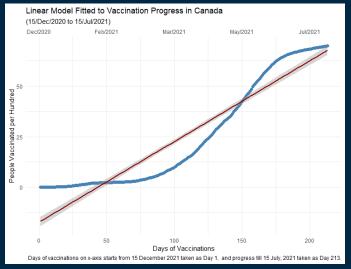
- The number of people vaccinated increases with time in Canada
- Linear relationship between people receiving vaccine and time and going strong



Scatter plot for linear relationship between people vaccinated per hundred in Canada with time (Dec 2020 to July 2021)

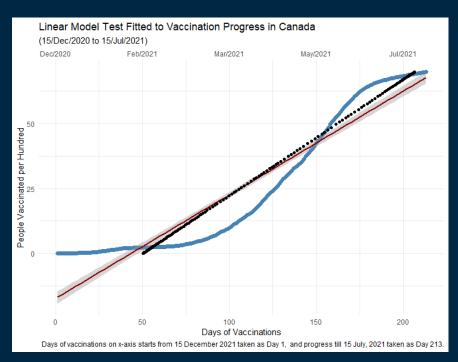
THE FUTURE

- Forecasting the future of vaccination progress next month
- Predicting time when people vaccinated per 100 reach to 100



Regression line (red) on the data (blue) to forecast future relationship between people vaccinated per hundred in Canada with time

PREDICTION When Will Canada be Vaccinated Completely?



ANSWER

14 September 2021

Model Accuracy is: 8 out of 10 times

Testing model with prediction and estimated results presented as scatter plot (black)

