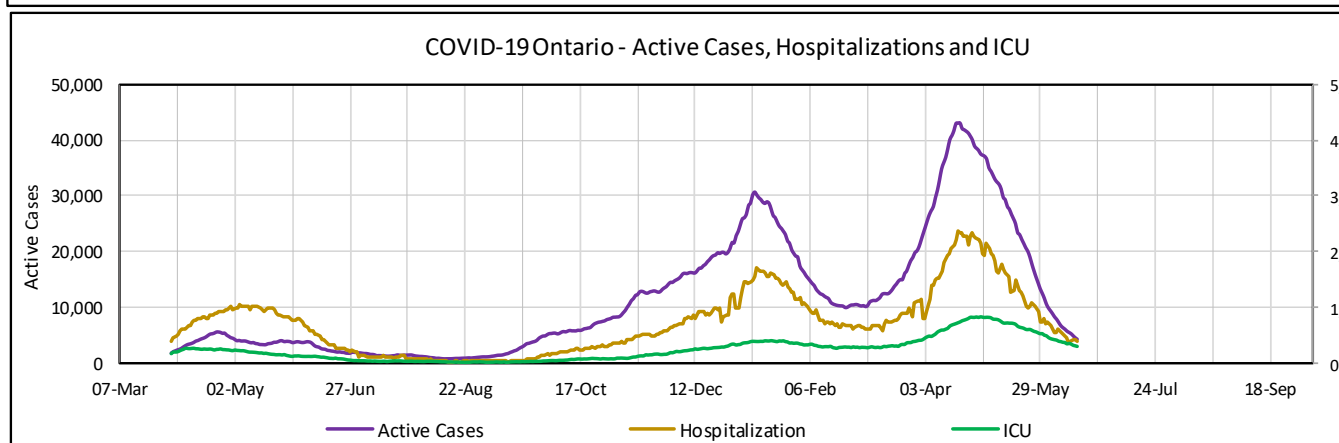
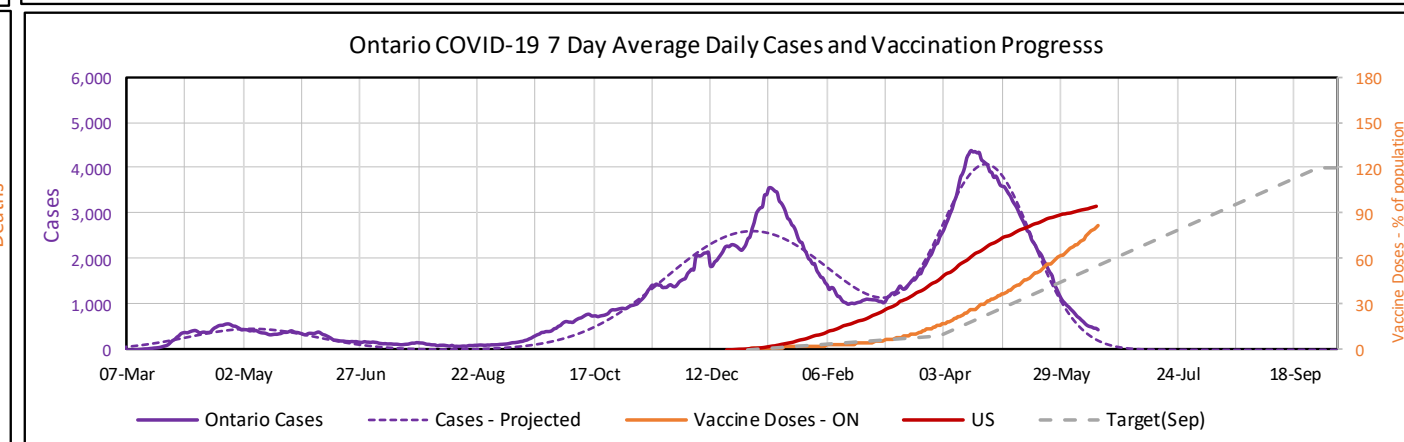
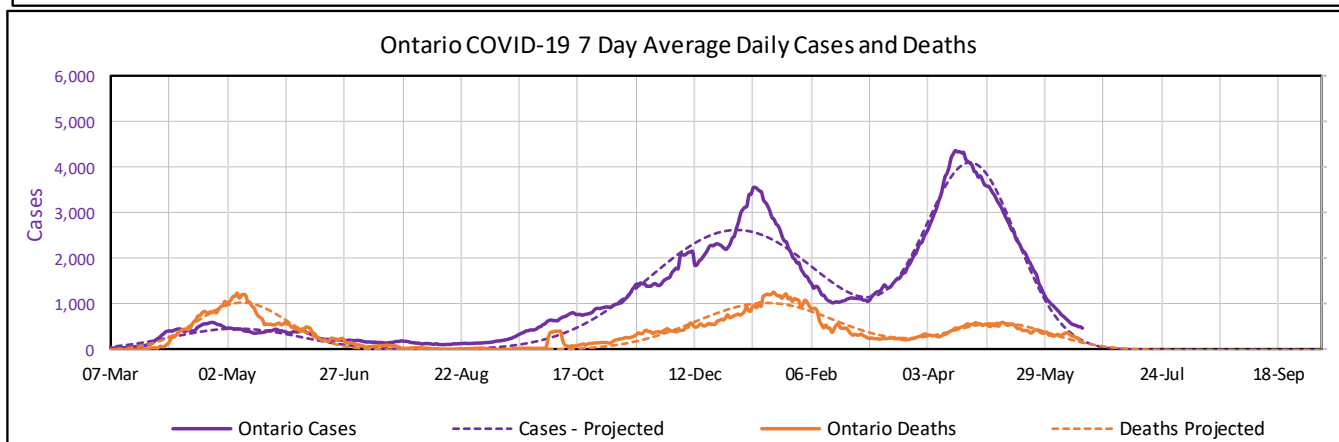
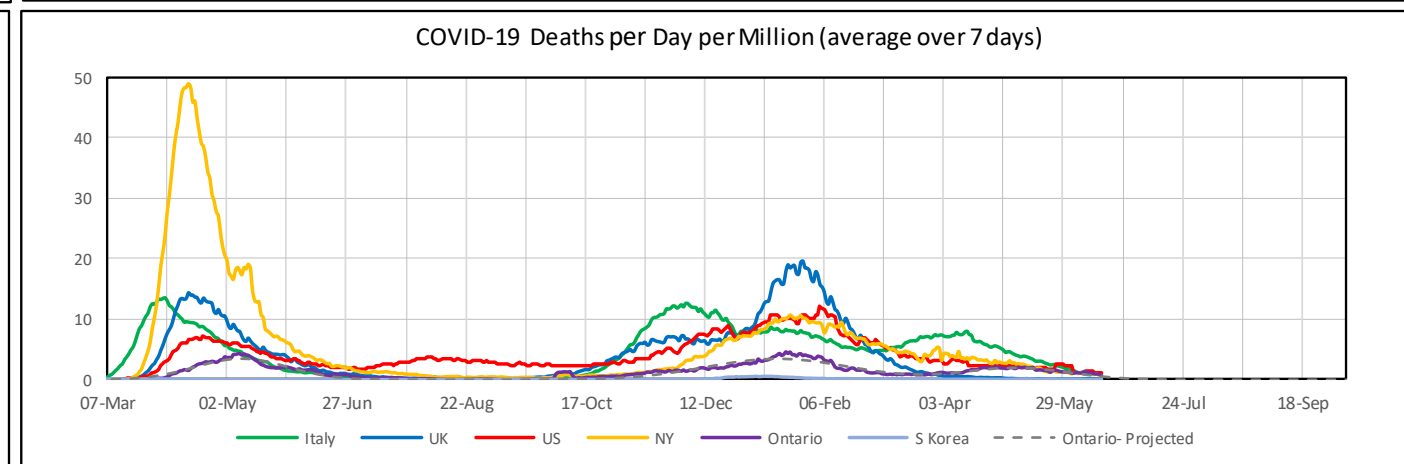
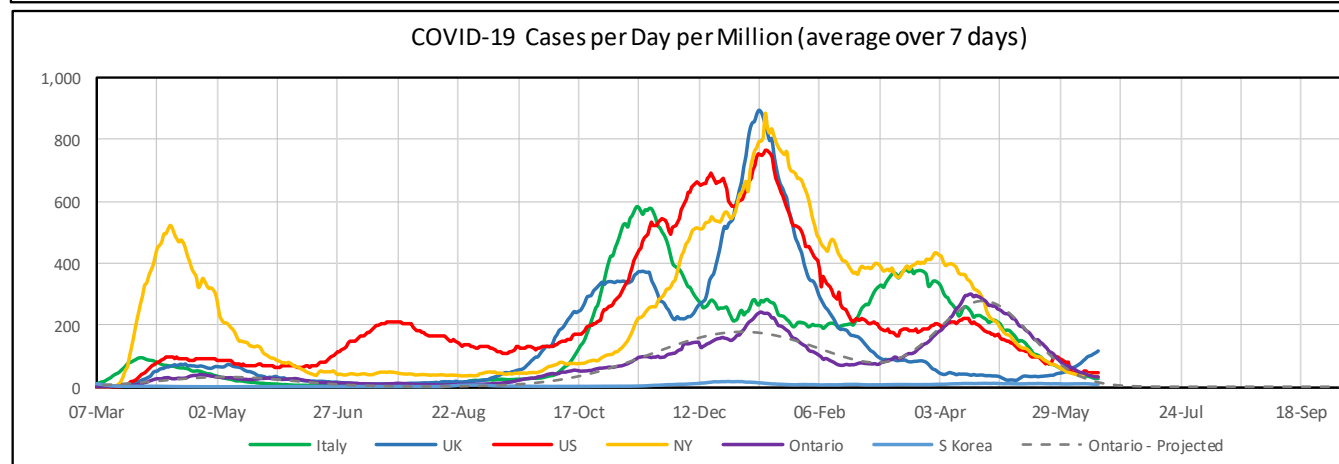
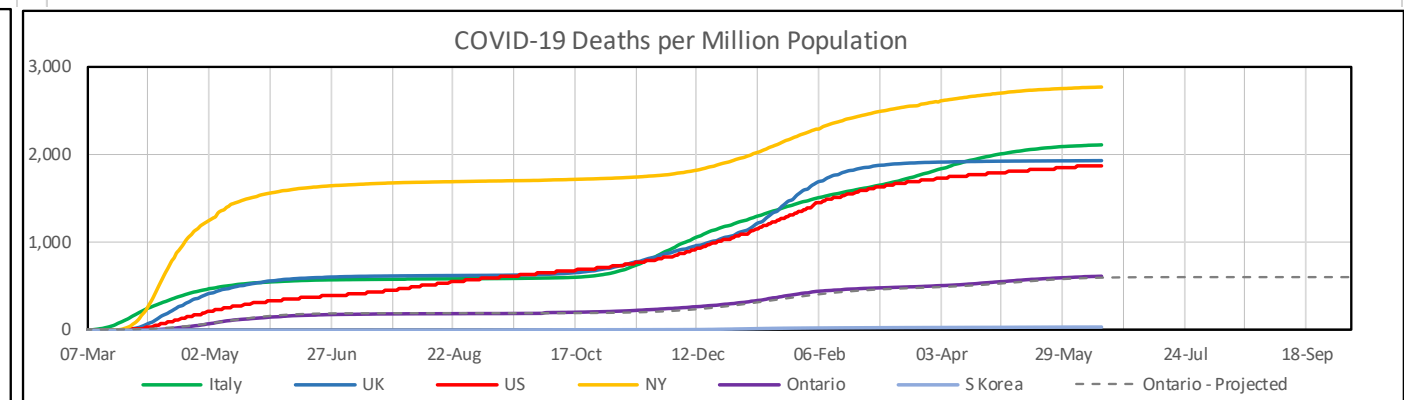
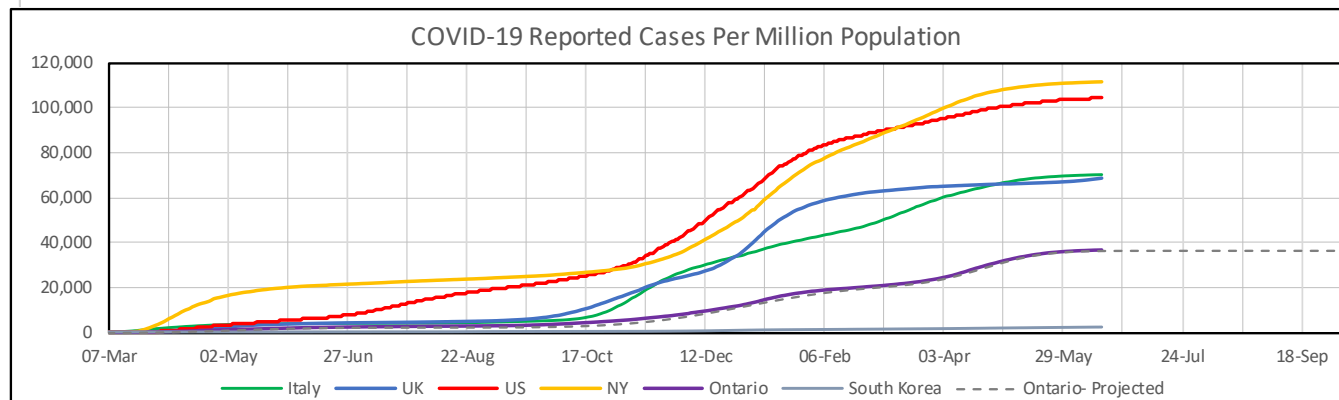


COVID-19 Observations – 17 June, 2021 – by Alex Harrington



We've started to re-open and it doesn't feel hugely different from the week before. Maybe because I've stocked up on almost everything Amazon has to sell and there's no need for me to go out for the next 5 months. People are savouring the first week of Step 1 re-opening. The most interesting part of this exercise is seeing what people will offer hair dressers and barbers for an early appointment in the next re-opening step.

Our vaccinations rates are beyond what I would ever have thought – we've surpassed the peak rates of the US and the UK – two countries who had a stranglehold on vaccines at the beginning of the inoculation drive. Full credit to the Health Units, drug stores and hospitals who have pulled this off. At these rates, by the end of the month we'll have surpassed the US in vaccine delivery as a percentage of population, and be approaching the level the UK has reached.

People seem willing to give the federal government some credit for this success. Don't. We could have been in this position months earlier if feds had done their job. They have botched this at every step along the way.

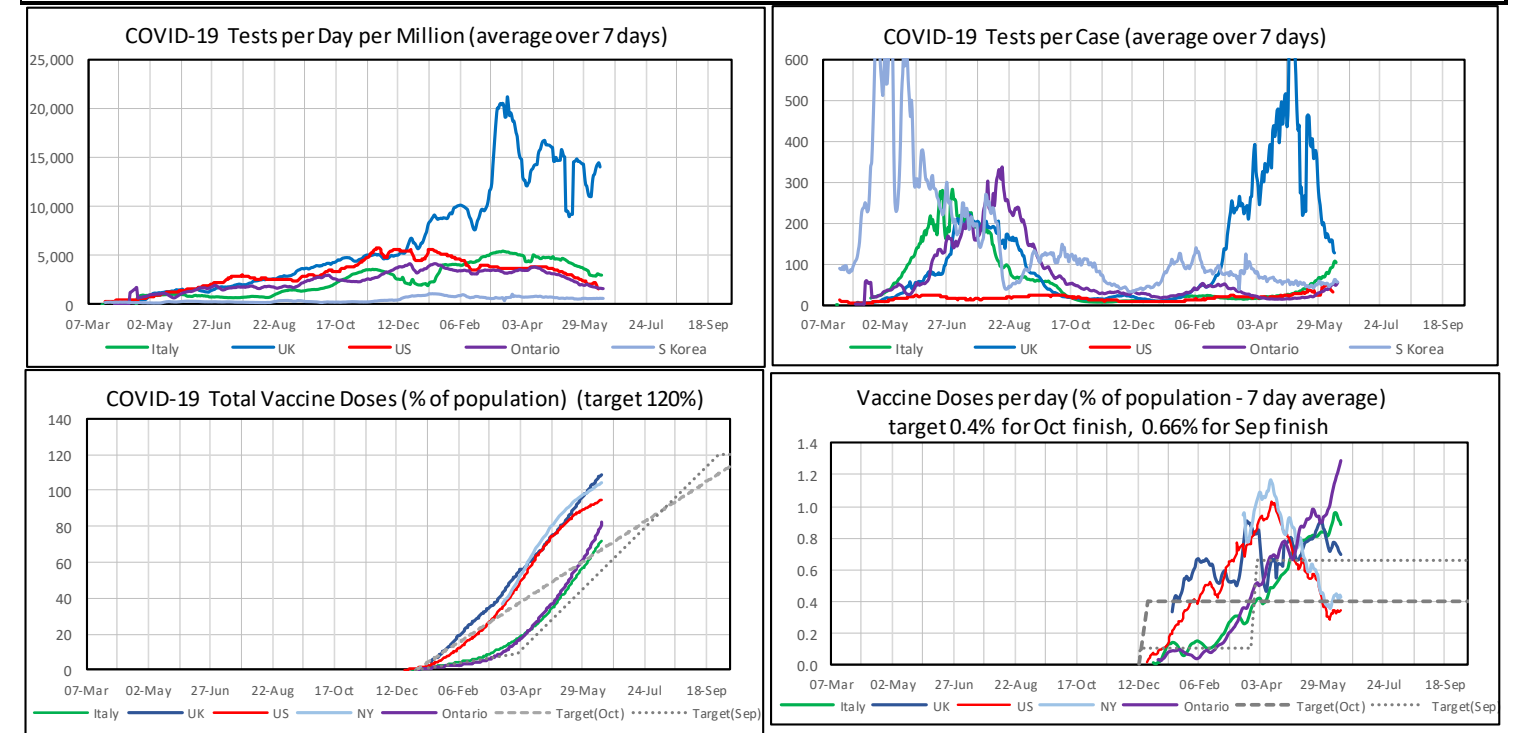
The UK is delaying the next step in its re-opening plan by one month because of the rise in cases due to the delta variant. Meanwhile, New York State, at about the same immunization level as the UK, is lifting all covid restrictions. New York does not have a delta variant outbreak yet, but it is probably inevitable, given New York's plummeting vaccination rates and the flattening of its immunization curve. More wait and see situations – will the outbreaks be contained, will there be more? This virus has provided plenty of these questions over the last year and more.

What seems clear to me is that vaccination alone is not yet enough to keep things under control. We should still wear masks in confined spaces, limit crowds and practice distancing.

Take care of yourselves and don't endanger others.

COVID-19 Summary Data										
	Tests per Million Total to Date	Tests per Day Average over Last 7 days		Tests per Reported Case Total Last 7 days		Cases per Million Total to date Average per day		Deaths per Million Total to date Average per day		Deaths Per Case Total to date (%)
		Total	Per Million	Total	Last 7 days	Total to date	Average per day Last 7 days	Total to date	Average per day Last 7 days	
South Korea	196,637	29,069	567	68	54	2,912	10.0	39	0.044	1.3%
Italy	1,134,335	181,716	3,001	16	103	70,164	27	2,100	1.0	3.0%
UK	2,884,944	932,568	14,036	42	126	69,082	116	1,925	0.1	2.8%
US	1,388,732	524,329	1,593	13	31	104,435	47	1,872	1.2	1.8%
Ontario	1,074,082	23,294	1,599	29	53	37,143	32	617	0.6	1.7%

South Korea and Canada report people tested. The others report total tests. Total tests can be 10-50% higher than people tested



Vaccination charts assume half the people require 2 shots and half require 1 shot, so 1.5 doses per person on average.
 Assume 80% of population needs vaccination for it to be effective, 80% of 1.5 = 1.2 doses per person on average, so total doses = 120% of population.
 Assume vaccination program completed in October - 300 days from January, so 1.2 / 300 or 0.004 doses per day, or dosing rate = 0.4% of population per day
 To start on Apr 1 and finish by Sep 30 (180 days), dosing rate = 1.2 / 180 or 0.0066 doses per day, or dosing rate = 0.66% of population per day