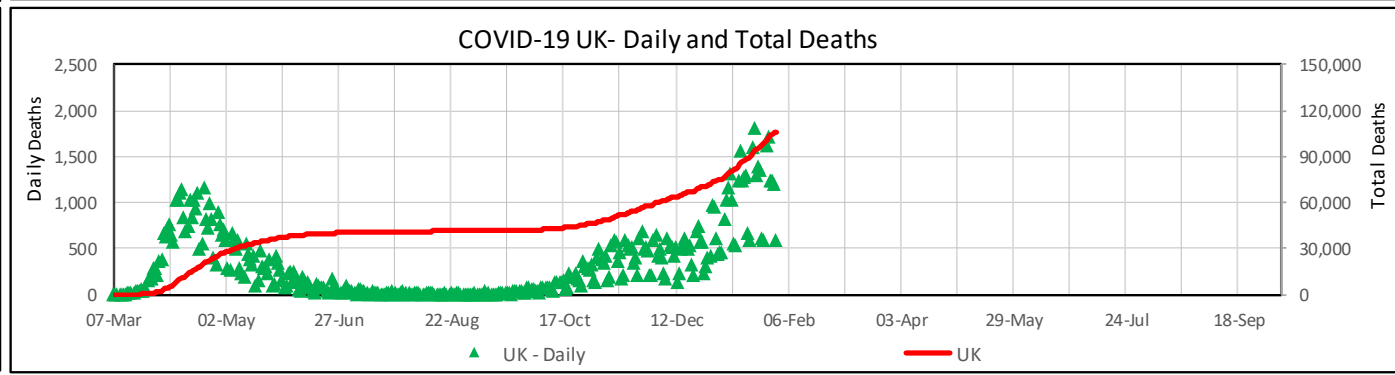
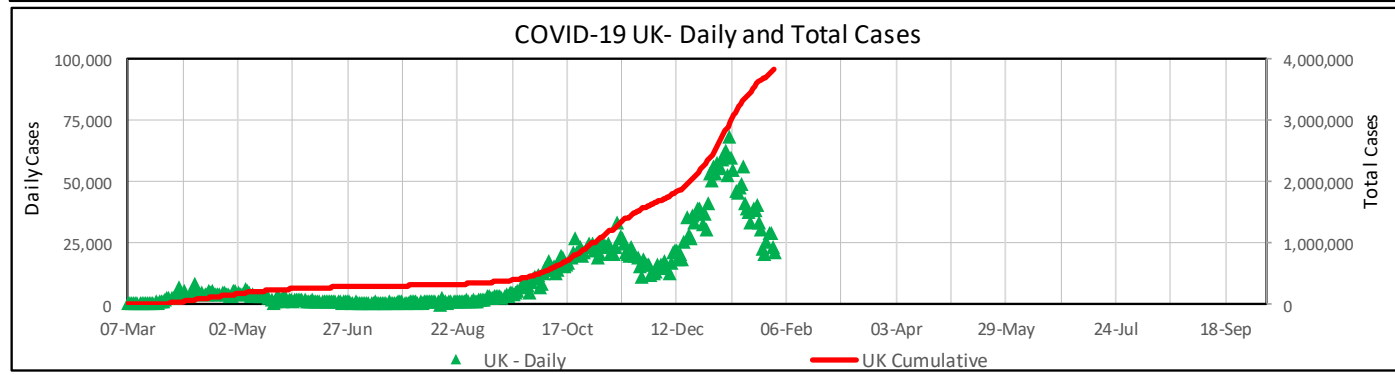
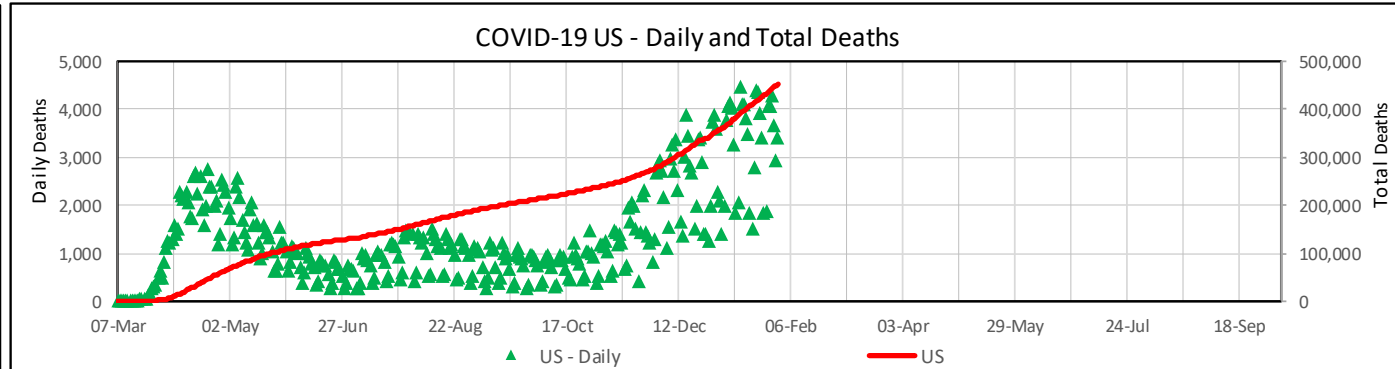
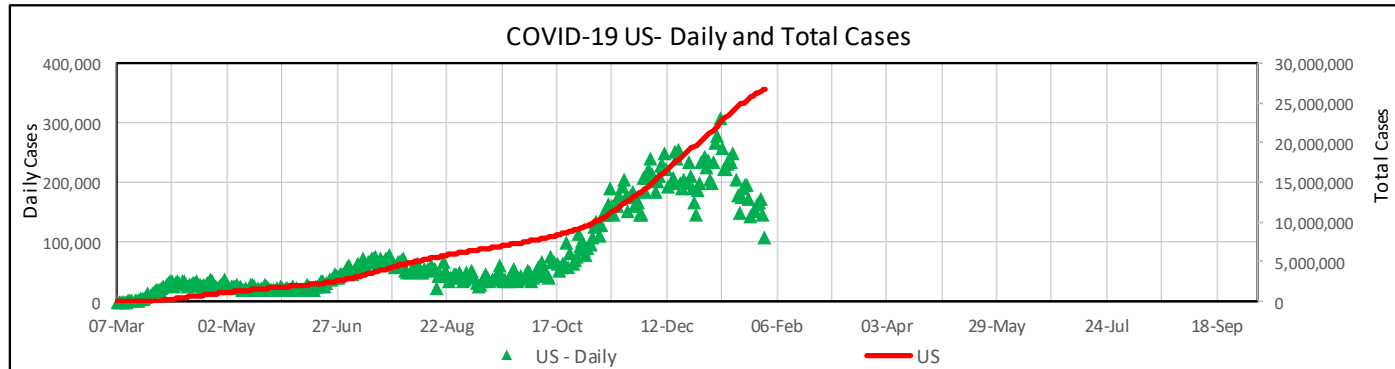
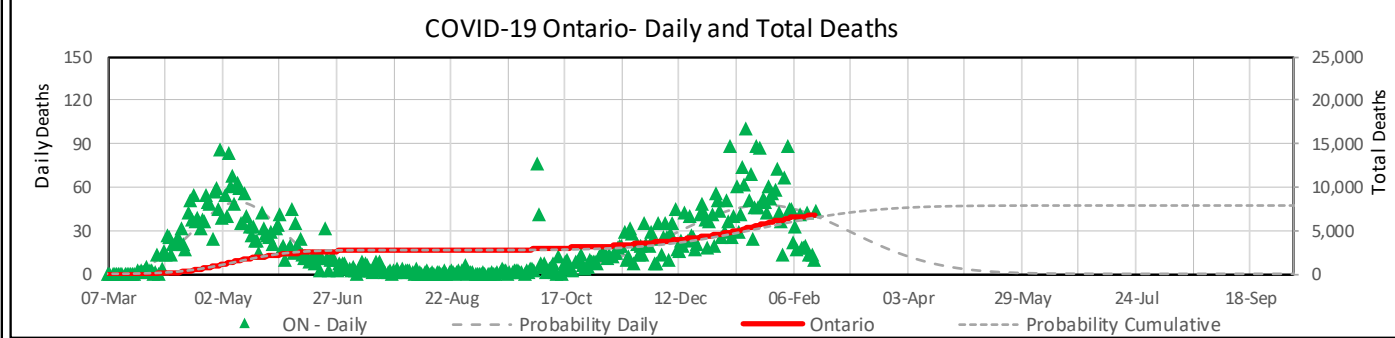
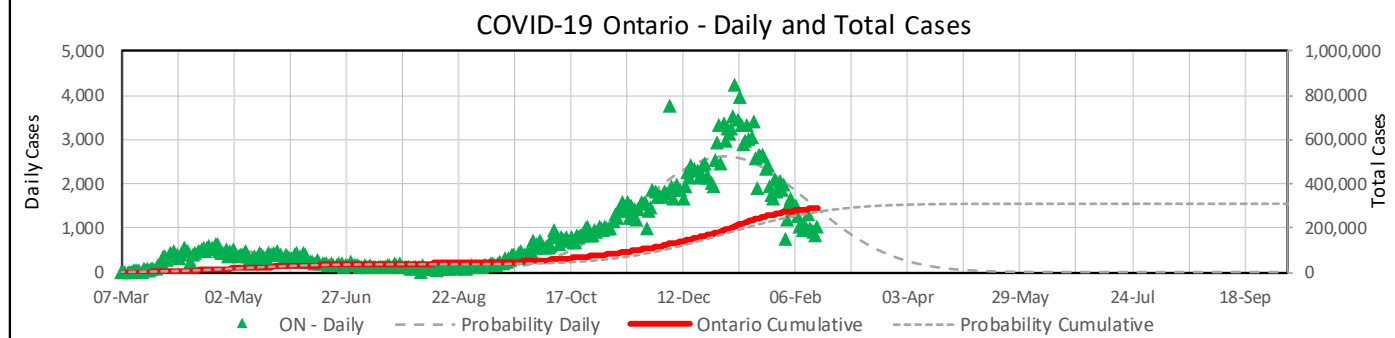
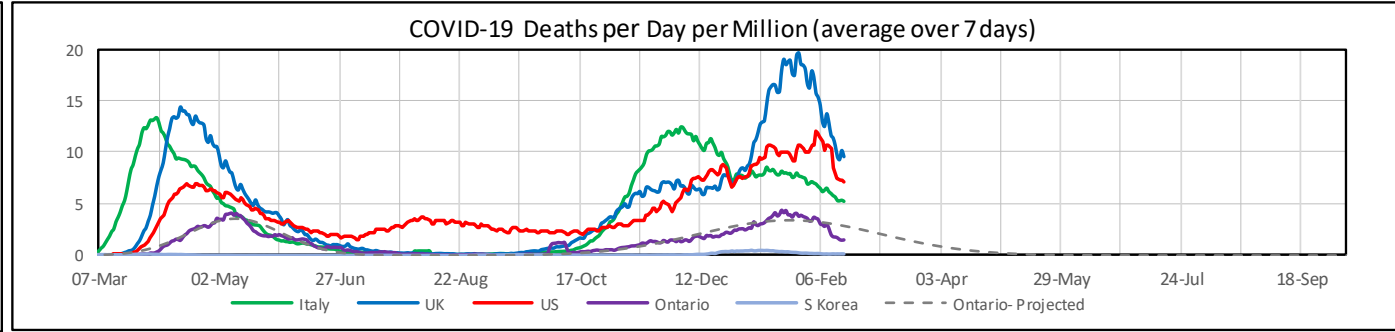
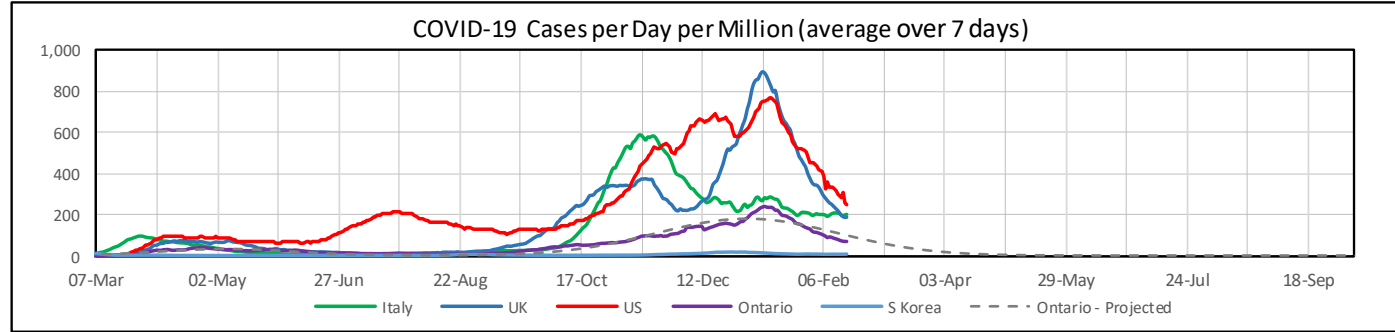
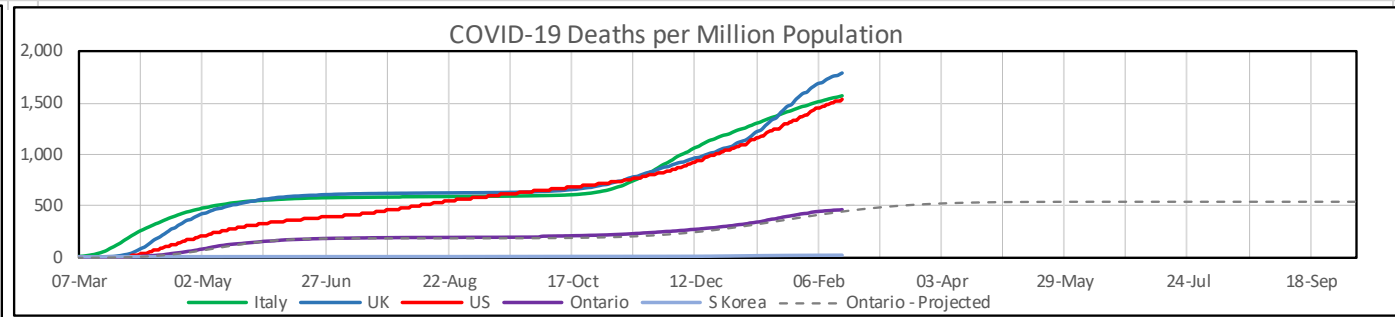
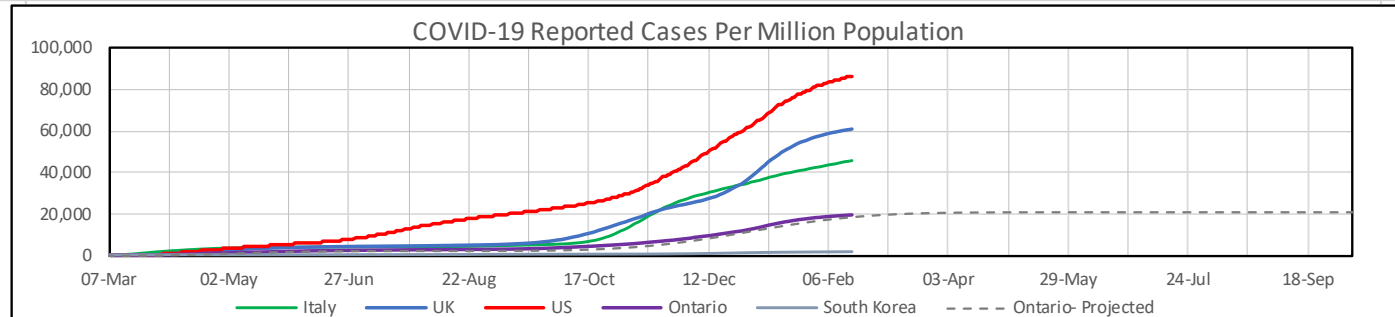


COVID-19 Observations – 18 February, 2021 – by Alex Harrington



Who would think I could have such an impact on things? Last week, in my frustration at the futility of our covid efforts, I wrote to the premier with my suggestions of how to get ahead of things. And the very next day a new testing program was announced. A program very much like the one I proposed. Is it the power of the pen? My lucid and cogent arguments? Or coincidence? Doesn't matter – something might happen to help us avoid, or at least minimize, a third wave.

This means we should get a whole bunch of rapid tests added to the mix. I don't know if these tests will be reported with the regular testing numbers. Our testing needs help, and it would be good to see if new tests impact case numbers. We'll only know if the tests are reported and we'll have to wait and see if that happens.

There's a very aggressive verbal vaccine campaign going on. Doesn't immunize anyone, but keeps us distracted. Our governments claim we'll be vaccinated by the end of September. It would be nice to see how we're doing with that, so I put some more target lines on the vaccination charts to the right. There's my original line assuming an end of October target, and I've added the new government line assuming an end of September target. They claim we'll start this effort in April, so the target line assumes we'll muddle along at the current rate until April. I won't be too harsh about our vaccination targets for a while since we know we'll have a vaccine shortage for a couple more weeks. In the interest of remaining completely apolitical, I'll say nothing about how our federal government's total incompetence got us into almost third world status when it comes to vaccinations. In contrast to our situation, the vaccination charts indicate how well the US and the UK are doing, in spite of all the moaning you hear from the US.

A couple of weeks ago I read that Ontario's vaccination capacity was 60,000 per day, just enough to reach the October target. I just read an interview with some government talking lips that said it was 40,000 per day – oops – try to get the numbers straight will you. They said when vaccines are available, capacity will get up to 150,000 per day or so. That's lots to meet the September target, but can it be done? We do 5 million in a month or so in flu season, so we should be able to do this. Except many of the people and resources needed are tied up with covid things, and covid restrictions slow everything down. I'll be positive to keep my editor happy, and assume things may be better by September. But I'll be watching.

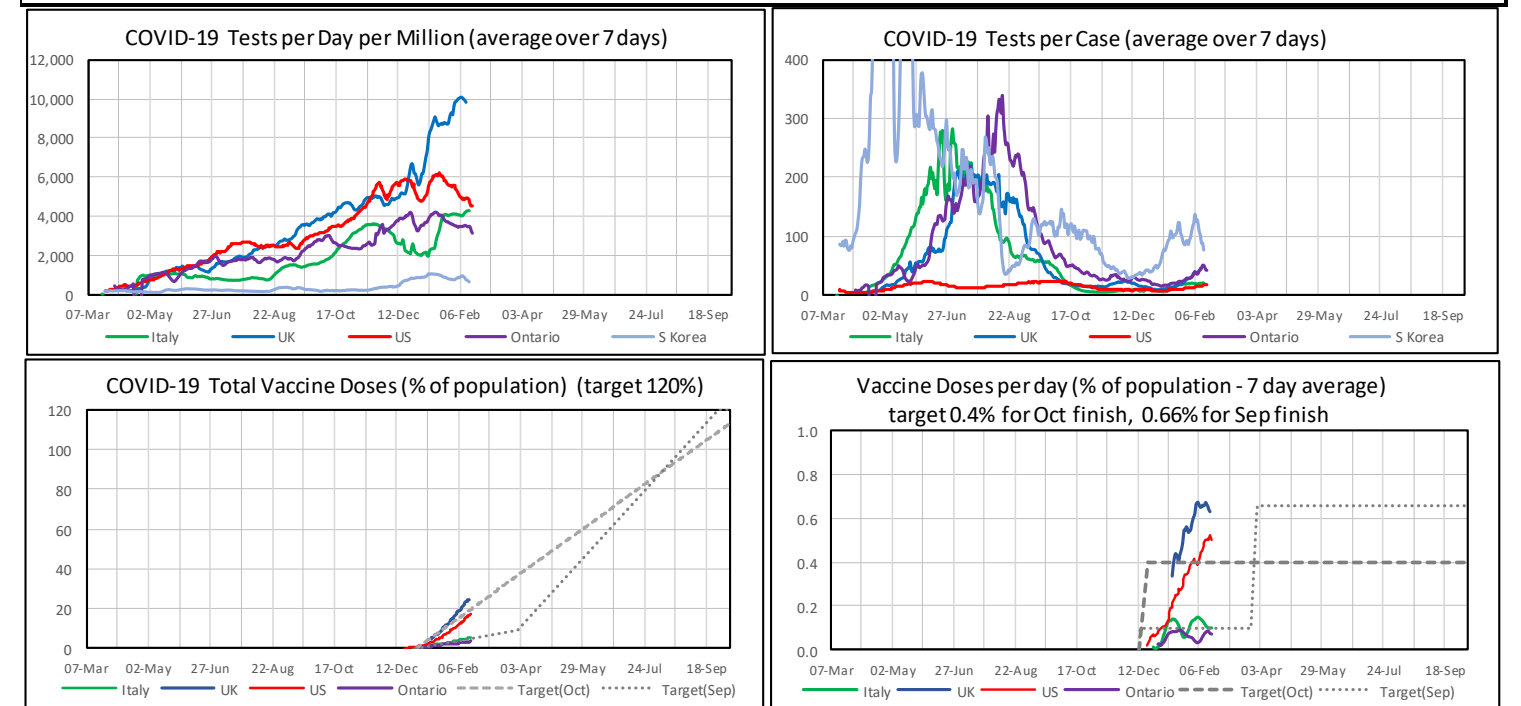
Some things are harder to be positive about. While we have been fortunate in Canada to have a low rate of covid infection (our infection rate is a quarter of the US's and about half of Europe's), it also means that only a small percentage of the population has developed immunity after being infected. Combined with our low vaccination rate (3% of the population compared to almost 20% in the US and UK), it means that a comparatively large proportion of our population provides a vulnerable, non-immune source of hosts for the virus, along with all its virulent cousins.

Just to complicate things, there is a question of exactly how effective the vaccines are. The rapid approval of vaccines led to optimism when trial efficacies of up to 90% were reported. But trials are not the real world, and the actual efficiency of the vaccines (as opposed to efficacy in clinical trials) is turning out to be well below 90%, sometimes even below 50%. Re-examination of trial data has shown that due to some errant record-keeping, even the trial efficacies of some are well below what was originally claimed. Being vaccinated does not stop you from transmitting the virus, and it is becoming clear that vaccination does not protect you from some of the different strains of virus. On top of all that cheerful news, it is still not known how long a vaccination provides protection – it certainly isn't permanent, and may be measured only in months.

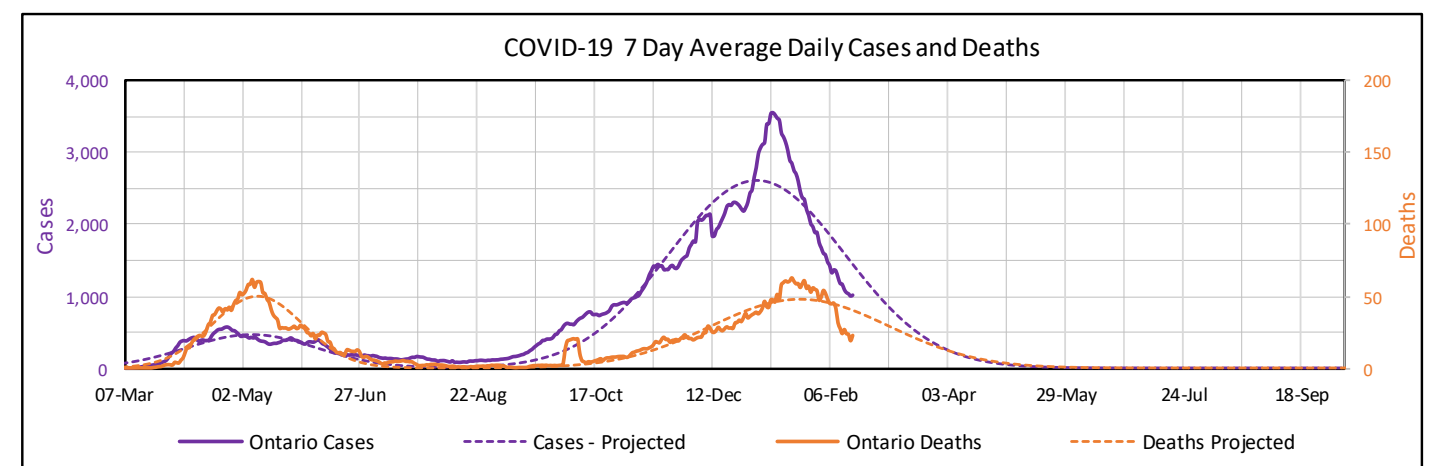
We are in one of the riskiest positions we've experienced so far. Cases and deaths are declining, restrictions are getting eased, and there seems to be a general feeling that we are turning the corner with our safety practices. There are vaccines on the horizon, so we now have license to be complacent, hopeful and cocky. But let's look at reality for a second - there are new viral strains that can infect with much shorter contact times, we don't currently have enough vaccinations for protection (never mind the lower-than-expected efficiency of the vaccines), and now we are barreling into closer contact situations. This is the most perfect state of affairs that any enterprising virus could hope for.

COVID-19 Summary Data										
	Tests per Million	Tests per Day		Tests per Reported Case		Cases per Million		Deaths per Million		Deaths Per Case
	Total to Date	Average over Last 7 days		Total	Last 7 days	Total to date	Average per day Last 7 days	Total to date	Average per day Last 7 days	Total to date (%)
South Korea	118,744	32,766	640	73	77	1,658	8.4	30	0.137	1.8%
Italy	597,333	257,979	4,261	13	22	45,444	199	1,561	5.2	3.4%
UK	1,171,924	654,962	9,858	19	45	61,276	186	1,790	9.6	2.9%
US	1,029,034	1,489,239	4,526	12	19	86,468	248	1,527	7.0	1.8%
Ontario	714,505	45,282	3,108	36	42	19,878	69	465	1.5	2.3%

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



Things could get very nasty again, very quickly.

Continue to mask and distance, the virus hasn't gone anywhere, and its nastier cousins are in town now.

Take care of yourselves and don't endanger others.