

# TORONTO STAR

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## STAR EXCLUSIVE

# Enjoy it while it lasts. Modelling warns another mass lockdown may be needed to control Ontario's looming third wave

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Ontario could soon be headed into a third lockdown to rein in a third wave of [COVID-19](#) driven largely by variants of concern, new projections show.

In the worst-case scenario, Ontario could see as many as 5,000 cases per day by early April, mostly made up of new variants, according to modelling by [Scarsin Corporation](#), a Markham, Ont.-based company specializing in disease forecasting for global pharmaceutical companies such as Gilead, Bayer and Jansen.

In this scenario, the modelling assumes the population has a high level of pandemic fatigue, leading to more community and workplace spread. This could result in a full or partial lockdown for 45 days or more and stay-at-home orders in some areas as cases increase rapidly in mid-April, said Scarsin CEO Paul Minshull.

“In addressing this worst-case scenario, there’s a joint responsibility between how people behave as they go back into red or orange in their local area, and the speed with which the public health units take actions to suppress further acceleration,” Minshull said.

In performing its forecasts, Scarsin considers close to 90 factors, such as business restrictions, school openings and community mobility in addition to variants of concern and citizen behaviour.

Scarsin’s base forecast, which it considers more likely, projects daily cases to rise to around 3,000 in early April as a result of different regions reopening their economies and the growth in more transmissible variants, which could make up 95 per cent of all cases by May 17.

On Wednesday, the province [reported](#) 958 new COVID-19 cases, bringing the rolling, seven-day average down to 1,084 cases per day. Most cases were in Toronto (249), Peel (164) and York (92). Ontario’s highest daily case count for new infections was 4,249 on Jan. 8.

A potential lockdown of about 45 days beginning around March 30 could help reduce cases to around 1,500 per day by early June before the hot weather and further vaccinations result in fewer cases through the fall.

In this scenario, the company predicts that vaccinations of elderly populations in long-term-care and retirement homes prevents

the kinds of outbreaks in these settings seen in the first and second waves. Notably, the company forecasts that even with the vaccine rollout throughout the remainder of 2021, the province could still see a few hundred cases a day by mid-December.

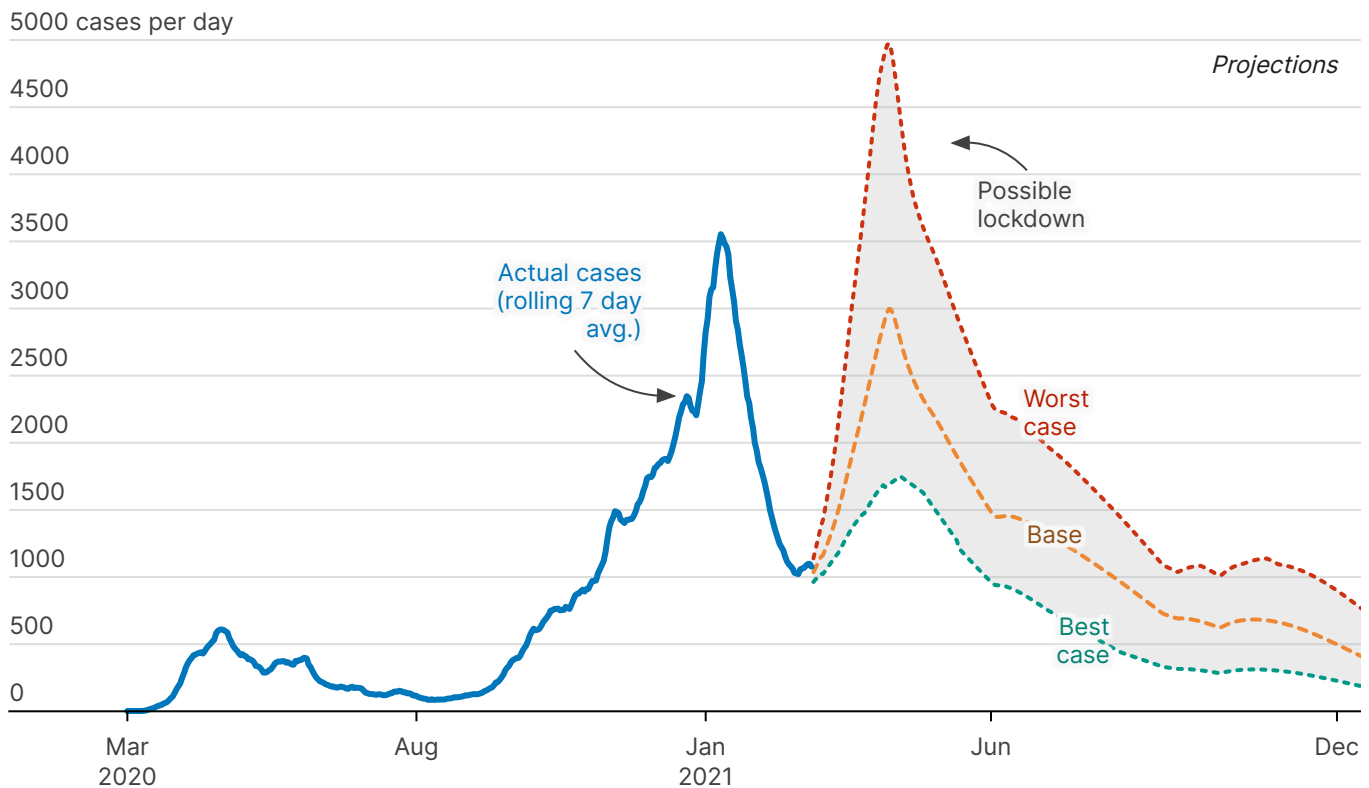
“The reason why there’s still probably going to be a couple of hundred cases is...a combination of hesitancy and I believe things probably won’t go as perfect as they think,” Minshull said.

Scarsin, which is working with York and Hamilton to provide local forecasts to help better inform planning decisions, assumes in all scenarios that about 10 per cent of the population 70 years of age and older will have vaccine hesitancy, while about 15 per cent of those between the ages of 20 and 69 will not get immunized. This means about 11.7 million Ontarians would be willing to get the vaccine, the company predicts. Children are currently not approved to receive any COVID-19 vaccine.

Minshull noted that by the end of the year, about 9.2 million Ontarians will likely have received the vaccine. However, he projects the slow rollout in the first quarter of 2021 will result in these vaccinations having a limited impact to the overall transmission of the virus in the third wave.

Close to 277,000 people have received two doses of the vaccine in Ontario to date.

## Projections show another lockdown is possible as variant cases grow



SOURCE: SCARSIN CORPORATION • [GET THE DATA](#)

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In Scarsin’s best-case scenario, diligent social distancing and quick action by public health units blunts the spread of variants of concern, leading to about 1,700 daily infections in mid-April before a gradual decline throughout the year. In this projection, there is no need for province-wide lockdown.

“The big wild cards are Toronto and Peel,” Minshull said. “The question is, do they open up? Best case is they stay in lockdowns, they don’t open up. And anybody else who starts to grow shuts down quickly.”

Colin Furness, an infection control epidemiologist at the University of Toronto, said a third wave is likely in April, but it will probably be shorter than the previous two as the weather gets warmer and vaccinations continue. He noted that while the existing variant of majority – what some are now calling “classic COVID” – is falling, the number of positive cases for newer, more

“It can look like numbers are really low but that doesn’t mean that you’re not at significant risk. If a lot of us are almost getting infected but we’re not getting enough viral dose — we weren’t on the bus for long enough, we weren’t close to that person long enough — that’s good,” Furness said. “But if you take then a variant that’s more contagious, that means less exposure time, it means less viral dose, so the bar moves.”

On March 1, of 1,078 COVID-19 cases screened for the variants of concern spike gene (a mutation known as N501Y), 323 came back positive, for a [daily positivity rate of 30 per cent](#). The weekly per cent positivity on a rolling, seven-day basis is 24.6 per cent.

To date, three variants of concern have been detected in Ontario: the B.1.1.7 strain, estimated to be up to 70 per cent more infectious and which accounts for most of the province’s variants of concern cases; B.1.351, a strain that first emerged in South Africa; and P.1, thought to have originated in Brazil.

“Will this peak be higher or lower than the one in January? I’m tempted to say higher because of the contagiousness but if the so-called emergency brake gets pulled aggressively, it may not be,” Furness added. “We are still taking a lot of precautions, but a lot depends not just on policy and not just on the variant, but what individuals decide to do in terms of being careful or not careful.”

Indeed, if there are fewer public health measures in place and people are deciding to have more contact with each other, particularly indoors or in the absence of masks, there’s no reason to expect there won’t be a resurgence in cases, says Ashleigh Tuite, infectious disease epidemiologist and researcher at the University of Toronto’s Institute for Pandemics.

Scarsin and the institute recently [announced a collaboration](#) to support public health officials with pandemic-response tools, reporting and research, among other things.

“I think that as the new variants establish a foothold, we do expect to see increases in cases,” Tuite said, noting that she believes it’s hard to predict whether the province would go into another full lockdown given that public health units can enact more localized measures.

“I think the intuitions that you’re seeing in these forecasts align with what I would expect, but there’s always the unknowable, which is how do we respond to that either individually or policy wise? Would the province tolerate another lockdown? I don’t know.”

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