

Melbourne's stage 3 lockdowns have prevented thousands of infections

August 5 2020



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Victoria's COVID-19 control measures have reduced the reproduction ratio of the virus from 1.75 to 1.16 and averted between 9000 and 37 000 infections between 2 and 30 July, according to new research published online today by the *Medical Journal of Australia*.

Researchers from the Burnet Institute, Monash University and the Peter Doherty Institute for Infection and Immunity examined the daily diagnosed COVID-19 cases in Victoria (excluding cases in travellers in quarantine) as reported by the Victorian Department of Health and Human Services to estimate infection growth rates pre- and post-introduction of the Stage 3 measures in 10 postcodes in Melbourne on 1 July 2020.

"We expected to see a time lag between the intervention being introduced and detecting its effect due to both the generation interval for the [infection](#) (estimated as four days), and delays in testing and reporting (estimated as 3 days). Hence, we regarded 14 June to 7 July inclusive as the pre-intervention period," the authors wrote.

"We assumed that the initial growth rates would have continued, unchanged by the Stage 3 restrictions, until the cases reported on the 7 July 2020. We then measured the impact of the Stage 3 restrictions from 10 July, and thus the post-intervention period was from the 10 July to present (30 July 2020).

"The model projected 27 000 cases would occur from 1 July to 30 July if the [growth rate](#) had continued unchanged (R_0 1.75), as opposed to the 8314 cases diagnosed in Victoria during this period."

Despite this reduction, there remains significant ongoing growth, with an estimated further 14% reduction in transmission required to control the epidemic, they wrote.

"The [control measures](#) introduced in Victoria from 1 July reduced the transmission of COVID-19, averting 9000–37 000 infections between 2 and 30 July," they concluded.

"Importantly, however, there remains small but significant ongoing

growth with further work needed to bring the Victorian epidemic under control. A broader and sustainable effort, involving community and government together is needed to optimise the uptake of all of the non-pharmaceutical interventions available to us."

More information: Victoria's response to a resurgence of COVID-19 has averted 9,000-37,000 cases in July 2020,

[www.mja.com.au/journal/2020/vi ... 7000-cases-july-2020](http://www.mja.com.au/journal/2020/vi...7000-cases-july-2020)

Provided by Medical Journal of Australia

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