Melbourne's stage 3 lockdowns have prevented thousands of infections
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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 (R0 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

Provided by Medical Journal of Australia

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