

THE IMPACT OF COVID-19 ON THE HIV EPIDEMIC AMONG MEN WHO HAVE SEX WITH MEN IN AUSTRALIA

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Background:

During the first two years of the COVID-19 pandemic, there was a large reduction in HIV notifications in Australia. This study aimed to understand this decrease among men who have sex with men in Australia and whether it was due to reduced HIV transmission, a decline in HIV testing, and/or the closure of international borders.

Methods:

Aggregated monthly data between January 2020 and August 2022 including sexual partnerships, condom use, HIV testing, and pre-exposure prophylaxis use were obtained from the Flux study and routine national HIV surveillance. A model was developed to estimate monthly HIV incidence given changes in these variables. Two scenarios were simulated: a COVID scenario with all changes in place and a no-COVID scenario where input parameters remained at pre COVID-19 values.

Results:

In the absence of the COVID-19 pandemic, the estimated number of cumulative infections from January 2020 to August 2022 would have been 1,303 [95% Percentile Interval (PI): 1,019–1,859] compared to (994, [95% PI: 781–1,404]) for the COVID-19 scenario (a 24% reduction). The largest reduction in infections (45%) occurred in 2020 with 275 (95% PI: 216–367) infections versus 496 (95% PI: 392–672) in the no-COVID scenario. There was a rebound with 419 infections (95% PI: 329–594) in 2021, followed by a reduction to a level by August of 2022 slightly lower than in the no-COVID scenario. Sexual partnerships were the leading factor in the change of HIV infections, accounting for a 34% decrease over the study period.

Conclusion:

COVID-19 resulted in a substantial reduction in new HIV infections in Australia, despite reductions in access to HIV testing and prevention services. Given the rebound in infections seen in 2021–2022, it is imperative to maintain vigorous response efforts and take advantage of the gains made to end HIV as a public health threat in Australia.

Disclosure of Interest Statement:

None.