# Aboriginal and Torres Strait Islander COVID-19 point-of-care testing program: Test positivity over time 2020-2022

<u>Hengel B<sup>1</sup></u>, Causer L<sup>1</sup>, Matthews S<sup>2</sup>, Applegate T<sup>1</sup>, Anderson L<sup>3</sup>, Patel P<sup>1</sup>, Smith K<sup>1</sup>, Andrewartha K<sup>2</sup>, Guy R<sup>1</sup> on behalf of the COVID-19 point-of-care testing program collaborators.

- <sup>1</sup> Kirby Institute, UNSW Sydney, NSW, Australia
- <sup>2</sup> Flinders University, International Centre for Point-of-Care Testing, Adelaide, Australia
- <sup>3</sup> Kimberley Aboriginal Medical Services, Broome, Australia,

### **Background:**

Indigenous people living in remote communities are vulnerable to the impact of COVID-19 due to high rates of chronic disease, overcrowding and limited access to tertiary care. The Australian Government funded the rapid establishment and scale-up of SARS-CoV-2 point-of-care (POC) nucleic acid testing (Xpert SARS-CoV-2 assay, Cepheid) in regional and remote communities to ensure access to accurate and rapid test results and prompt public health responses. The program was implemented under the guidance of the National Aboriginal and Torres Strait Islander COVID-19 Advisory Group, with a large network of national and jurisdictional partners. Here we present patient test positivity from the commencement of the program to date (May 2022).

#### Methods:

Using routinely collected de-identified POC testing data including patient demographics, test date, location, and result, we calculated test positivity rate stratified by age and sex. Quality assurance results were excluded.

### Results:

Between May 2020 – May 2022, 67446 patient POC tests (67% Indigenous, 56% women, mean age 36 years) were performed across 103 participating primary care services. Overall test positivity was 5.6% (n=3,793); no difference by sex; highest among <18-year-olds (7.3%), followed by 18-49 years (5.5%) and 50+years (3.4%). Test positivity increased over time across all jurisdictions from 0.3% in 2020 (31/10049), 1.8% in 2021 (815/43419) and 22.4% in 2022 (2947/10185).

## **Conclusion:**

Test positivity remained low from May 2020 to July 2021. Positivity increased in subsequent months, peaking in early 2022 mirroring the evolution of the pandemic in Australia. During the national peak, approximately one in five Indigenous people tested in the program were diagnosed with SARS-CoV-2 infection, demonstrating the significant burden in these communities.

#### **Disclosure of Interest Statement:**

The Aboriginal and Torres Strait Islander COVID-19 POC testing program is funded by the Indigenous Health Branch, Australian Government. Authors declare no conflicts of interest.