



#### **MEDIA RELEASE**

Under strict embargo: 1.00am AEST, Wednesday 27 July 2022

# By June, almost half of Aussies had recently had COVID-19

- Almost half (46.2%) of adults in Australia are estimated to have had SARS-CoV-2 by early June 2022.
- Based on comparison with the previous survey, more than a quarter of the population was infected in the previous three-month period.
- The highest SARS-CoV-2 antibody positivity was in the 18-29 year old age group, at 61.7%.
- Antibody prevalence was similar across all states and territories, including Western Australia, which saw an increase from 0.5% to 37.5% over the three-month period since the last survey.

(SYDNEY Wednesday 27 July 2022) It is estimated that by early June, at least 46% of the adult Australian population had acquired infection <sup>1</sup> with SARS-CoV-2, the virus that causes COVID-19, according to results released today from Australia's most recent serosurvey of antibodies to the virus in blood donors.

The serosurvey, the second in the series of four rounds this year, was conducted by the <u>Kirby Institute</u> at <u>UNSW Sydney</u> and the <u>National Centre for Immunisation Research and Surveillance</u> (NCIRS) in collaboration with <u>Australian Red Cross Lifeblood</u>, Royal Melbourne Hospital's <u>Victorian Infectious Diseases Reference</u> <u>Laboratory</u> at the <u>Doherty Institute</u>, <u>NSW Health Pathology's Institute of Clinical Pathology and Medical Research (ICPMR)</u>, <u>Westmead</u> and other research partners.

The 46.2% prevalence is almost triple what was reported in the <u>previous survey</u>, which estimated that around 17% of the Australian population had been infected by late February.

"While we know there is a lot of virus circulating in the community, we can't rely on testing data alone to understand how many people have been infected, as some may experience only mild symptoms, or none at all, and they may not always have a test to detect the virus. There is also high use of rapid antigen tests, which don't always get reported," says Dr Dorothy Machalek from the Kirby Institute.

"These serosurveys provide a more complete picture of how much COVID-19 is out there because they measure antibodies to the virus, created when the body's immune system responds to infection, that remain present for many months afterwards."

Evidence of past infection was highest among donors in the 18-29 year age group, at 61.7%, declining with increasing age to 25.7% in donors aged 70–89 years across Victoria, NSW, Queensland and Western Australia. In WA, evidence of past infection in blood donors jumped from 0.5% to 37.5% over a three-month period.

The researchers examined 5,139 de-identified samples from Australian blood donors aged 18–89 years for evidence of COVID-19-related antibodies. Two types of antibody to SARS-CoV-2 were tested for: antibody to the nucleocapsid protein of the virus provides an indication of infection in the past few months, while antibody to the spike protein can indicate past infection and/or vaccination. The blood samples were collected between the 9-18 June 2022.

<sup>&</sup>lt;sup>1</sup> The test used in this study measures antibody to the nucleocapsid protein of the virus as an indication of past infection. This test will pick up the body's response to a SARS-CoV-2 infection, particularly if recent (i.e. 3-6 months).

The researchers noted that the best protection against serious illness from COVID-19 was to be up to date with vaccinations and boosters, in line with <u>current recommendations</u>.

"We are seeing new variants of the Omicron version of the virus that causes COVID-19 in circulation in Australia, and that can lead to reinfection even in people who have been infected with an earlier variant" says Professor Kristine Macartney, Director of NCIRS and Professor at the University of Sydney, who is an investigator in the serosurvey program. "Vaccination reduces the risk of severe disease if you get COVID-19, whether it is your first time or a repeat infection".

Professor Paul Kelly, Australia's Chief Medical Officer, says that "data collected from these surveys is crucial for informing our pandemic response."

### How are serosurveys conducted?

The ongoing blood donor survey co-led by the Kirby Institute and NCIRS in collaboration with Australian Red Cross Lifeblood also involves investigators at the Victorian Infectious Diseases Reference Laboratory at the Doherty Institute, NSW Health Pathology Institute of Clinical Pathology & Medical Research (ICPMR), the University of Sydney and Murdoch Children's Research Institute.

The residual blood donation samples used in the survey are obtained from Lifeblood's processing centres across the country and are delinked from any identifying information apart from age, sex and post code. Individual results can therefore not be provided back to blood donors.

"Australian Red Cross Lifeblood encourages anyone wanting to contribute to this type of research to become a regular donor. There are many benefits to donating, including finding out your blood type," says Professor David Irving, Director of Research and Development at Australian Red Cross Lifeblood.

The next (third) 2022 round of the Lifeblood donor survey will commence around the end of August. Data is provided to all state and territory governments, and the Commonwealth Government under the <u>Australian National Disease Surveillance Plan for COVID-19</u>.

#### Media contact

Luci Bamford | Kirby Institute | 0432 894 029 | <a href="mailto:lbamford@kirby.unsw.edu.au">lbamford@kirby.unsw.edu.au</a>

**Declaration**: This study has been published in an online report by the researchers. It has not undergone academic peer-review; changes may be made before final publication.

The work was funded by the <u>Australian Government Department of Health</u>, the <u>SNOW Medical Research Foundation</u>, and the <u>NHMRC</u> under the <u>APPRISE CRE</u>. Australian governments fund <u>Australian Red Cross Lifeblood</u> for the provision of blood, blood products and services to the Australian community.

### **Kirby Institute**

The Kirby Institute is a world-leading health research organisation at UNSW Sydney working to eliminate infectious diseases, globally. We put communities at the heart of our research. That way, we are better able to design tests, treatments and cures that have the greatest chance of success, helping us to eliminate infectious diseases globally. kirby.unsw.edu.au | facebook.com/KirbyInstitute | twitter.com/KirbyInstitute

## National Centre for Immunisation Research and Surveillance (NCIRS)

The National Centre for Immunisation Research and Surveillance (NCIRS) is the leading research organisation in Australia working to support evidence-based policy development for the National Immunisation Program and surveillance of vaccine preventable diseases, vaccine coverage and vaccine safety. This work is funded through agreements with the Australian Government Department of Health. ncirs.org.au | twitter.com/NCIRS