The Optimise Study: COVID-19 testing and vaccination

Report 11 | October 2021

Optimise

Burnet Institute
Medical Research. Practical Action.

Doherty Institute

REPORT 11 | OCTOBER 2021

The Optimise Study is a partnership between Burnet Institute and Doherty Institute in collaboration with University of Melbourne, Swinburne University of Technology, Monash University, La Trobe University, Murdoch Children's Research Institute, the Centre for Culture Ethnicity and Health, and the Health Issues Centre.

Optimise is a longitudinal cohort study that will follow up to 700 participants for a 12-month period. Study participants are not intended to be representative of the broader population but instead have been intentionally recruited from key groups who are considered to be:

- at risk of contracting COVID-19
- at risk of developing severe COVID-19 or,
- at risk of the unintended consequences of the restrictions

Participants are then asked to nominate people who play a key role in their lives, and where permission is given, these people are also invited to participate in the study. Establishing a map of social connections is important because it can be used to examine the influence of the social network on an individual or key groups 1) behaviour including adhering to government directions on COVID-19, 2) attitudes and level of engagement in key COVID-19 interventions such as testing and vaccination, and 3) experience of the unintended consequences of COVID itself, or the government restrictions imposed due to COVID-19. The resulting social map increases our understanding of the interplay between the individual, social and community-level impacts of COVID-19. For more detail on the Optimise study please visit https://optimisecovid.com.au/

COVID-19 testing and vaccination

This report explores participants'

- Testing patterns over time
- Patterns of testing when symptomatic
- Reasons for non-testing
- Expectations for future testing practices once vaccinated
- Questions and concerns about the use of rapid tests

665
SURVEY PARTICIPANTS

24
SEMI-STRUCTURED INTERVIEWS

1
COMMUNITY ENGAGEMENT GROUP MEETING

This report draws on the findings from a number of Optimise research activities. These include:

- responses from 665 participants who completed the Optimise baseline survey, follow up surveys and contact diaries between 14 September 2020 and 1 October 2021.
- phone-based semi-structured qualitative interviews (n=24) conducted with a subset of survey participants conducted in December 2020 (n=7), May 2021 (n=16), and June 2021 (n=1).
- a Community Engagement Group meeting facilitated by the Centre for Health Communication and Participation at La Trobe University on 19 October 2021.

OPTIMISE COHORT

SUMMARY AND IMPLICATIONS

Our findings show that over time the percentage of participants who got tested when they had COVID-like symptoms has increased. Participants most commonly reported symptoms of fatigue, headache and aches and pains. Across all age groups the percentage of people who tested when they had symptoms has increased over time. However older age groups were less likely to get tested when they had symptoms. People living in metropolitan Melbourne and healthcare workers were more likely to get tested than people living in regional areas and non-healthcare workers when they have symptoms. In September 2021 the percentage of participants who tested when they had symptoms was similar amongst vaccinated and unvaccinated participants. The most common reason for non-testing overall was people believing that their symptoms were unrelated to COVID-19 (91%). Most participants thought that even if fully vaccinated people should continue to be tested when they experience symptoms. However, participants of the Community Engagement Group reported a disconnect between people knowing they should get tested and actually getting tested. Participants of the Community Engagement Group discussed the use of rapid COVID-19 testing and had a range of questions relating to the purpose, benefit, cost, and implications of a positive result when using these tests. They also raised particular concerns about the interoperability of testing results with existing check-in apps, highlighting that they should be easy to use and do not put any undue stress on individuals and businesses seeking to comply with government requirements.

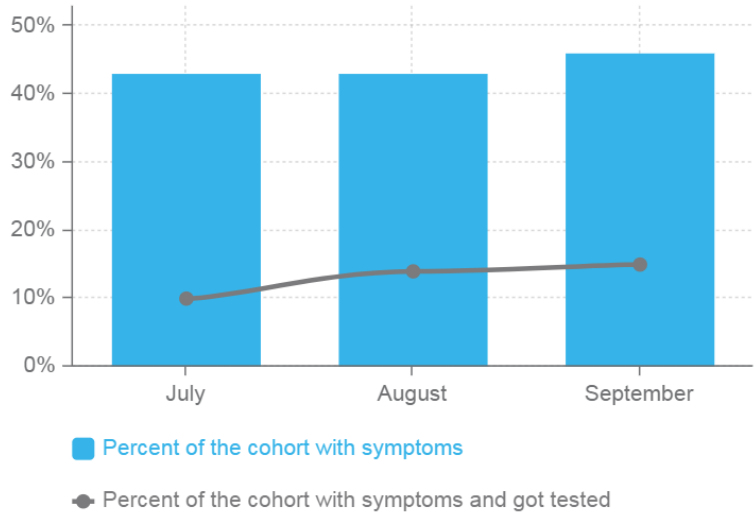
SYMPTOMS AND TESTING

Over time, there was an increase in the percentage of participants who got tested when they had COVID-like symptoms.

In September 46% (n=240) of participants reported having COVID-like symptoms. One third of those who had symptoms (33%, n=80) got a test for COVID-19; in other words, 15% of the total cohort had symptoms and got tested.

The most common symptoms participants reported were*:

1. fatigue
2. headache
3. aches and pains (39%)
4. runny nose (36%)



Fatigue (51%)

Headache (47%)

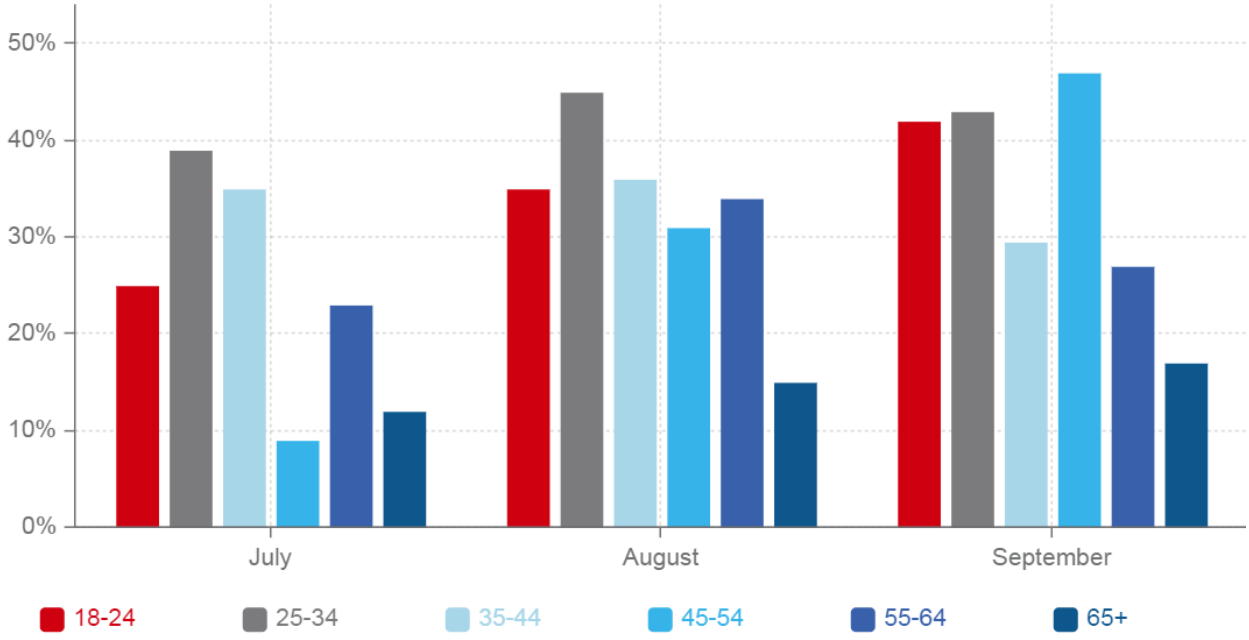
Aches and pains (39%)

Runny nose (36%)

*Participants could select more than one response

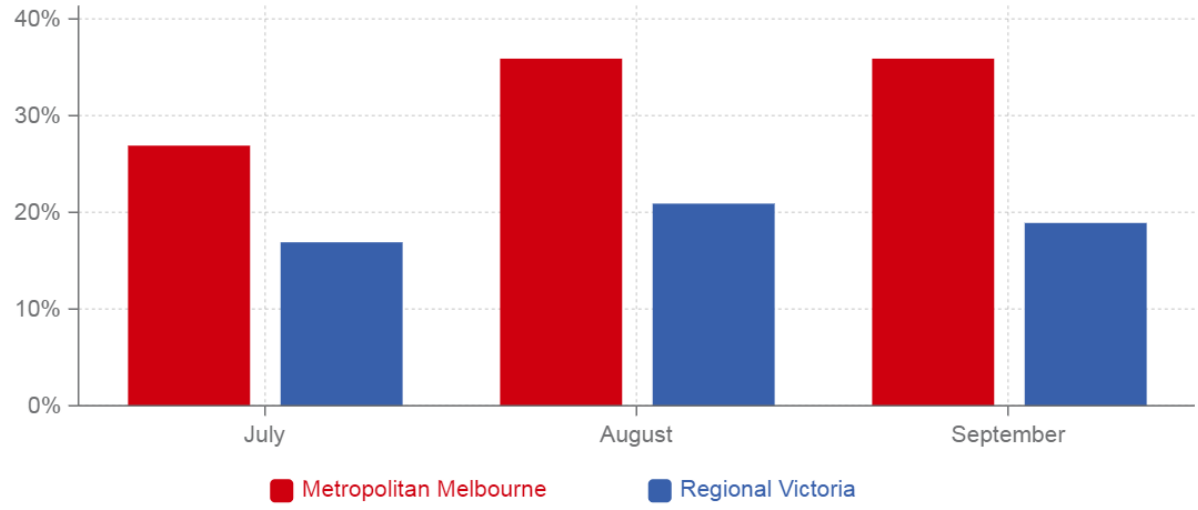
Between July and September 2021 there was an overall increase in the percentage of participants who got tested when they had COVID-like symptoms. In September 2021 older age groups (55+) were less likely than all other age groups to get tested when had symptoms (27% of people aged 55-64 and 15% of people aged 65+). People aged 45-54 were the more likely than all other age groups to get tested when they had COVID-like symptoms in September 2021 (47%).

Percent of participants who got tested when they had symptoms, by age



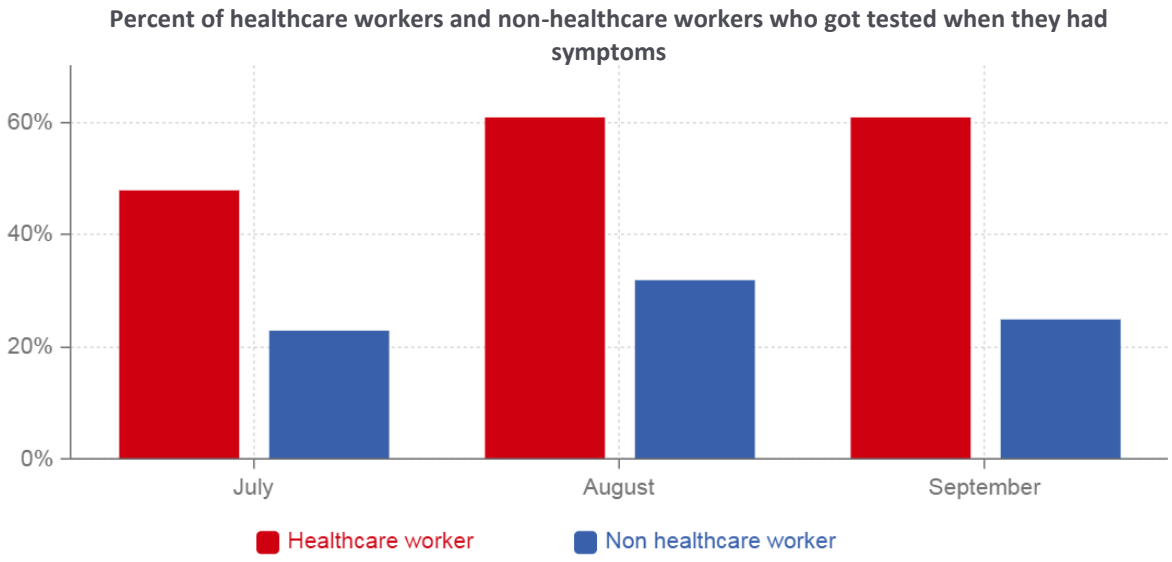
People in metropolitan Melbourne were more likely to get tested when they had symptoms compared to people in regional Victoria. In September 2021 36% of people living in metropolitan Melbourne got tested when they had symptoms compared to 19% of people living in regional Victoria.

Percent of participants who got tested when they had symptoms, by location



Healthcare workers were more likely to get tested when they had symptoms compared to non-healthcare workers. In September 2021 61% of healthcare workers got tested when they had COVID-like symptoms compared to 25% of non-healthcare workers. The percentage of healthcare workers who got tested when they had COVID-like symptoms has increased from 48% in July 2021 whereas the percentage of non-healthcare workers that did not test has been relatively stable between July and September 2021. One of the qualitative interview participants who was a healthcare worker acknowledged that testing had become easier and more comfortable than previously.

"...now it's a breeze like, especially the way they are doing the testing, it's not as invasive or not as painful, but at the very beginning, it was quite uncomfortable"



TESTING BY VACCINATION STATUS

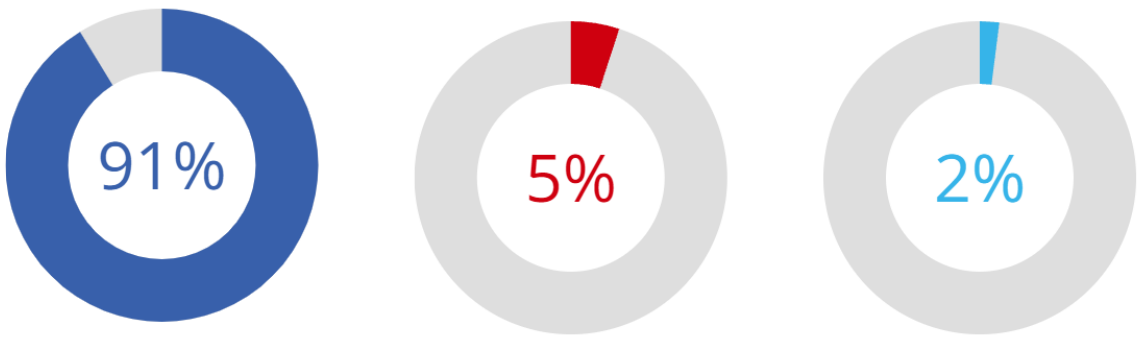
Across the cohort, 86% are vaccinated against COVID-19 with at least one dose. In September 2021 vaccinated participants were more likely to get tested when they had symptoms (34%) compared to unvaccinated participants (27%).

One of the qualitative interview participants felt that increased messaging and advice from the State Government might help to improve understanding and prevent complacency when it comes to testing after vaccination.

"…I really think that Dan's press conferences help people to go out there and get tested … I think, more coverage on that after the vaccine's rolled out, like, "you know, if you have symptoms get tested" yeah, I think it will need a lot more of that to encourage people, because they might become complacent and think, "well, I've had the vaccine and I haven't got COVID".

REASONS FOR NON-TESTING

In September 2021, amongst those who did not get tested, most participants (91%) considered their symptoms to be unrelated to COVID-19 and many used free text to further explain. Some believed they had been experiencing symptoms as a result of pre-existing conditions, allergies or medications. The Optimise study over-recruits people living with chronic health conditions, which may influence the proportion of people attributing their symptoms to existing conditions. Five percent considered their symptoms to be too mild and 2% chose to self-isolate instead of testing. This was consistent across demographic groups.



91% considered their symptoms to be unrelated to COVID-19

5% thought their symptoms were too mild to be COVID-19

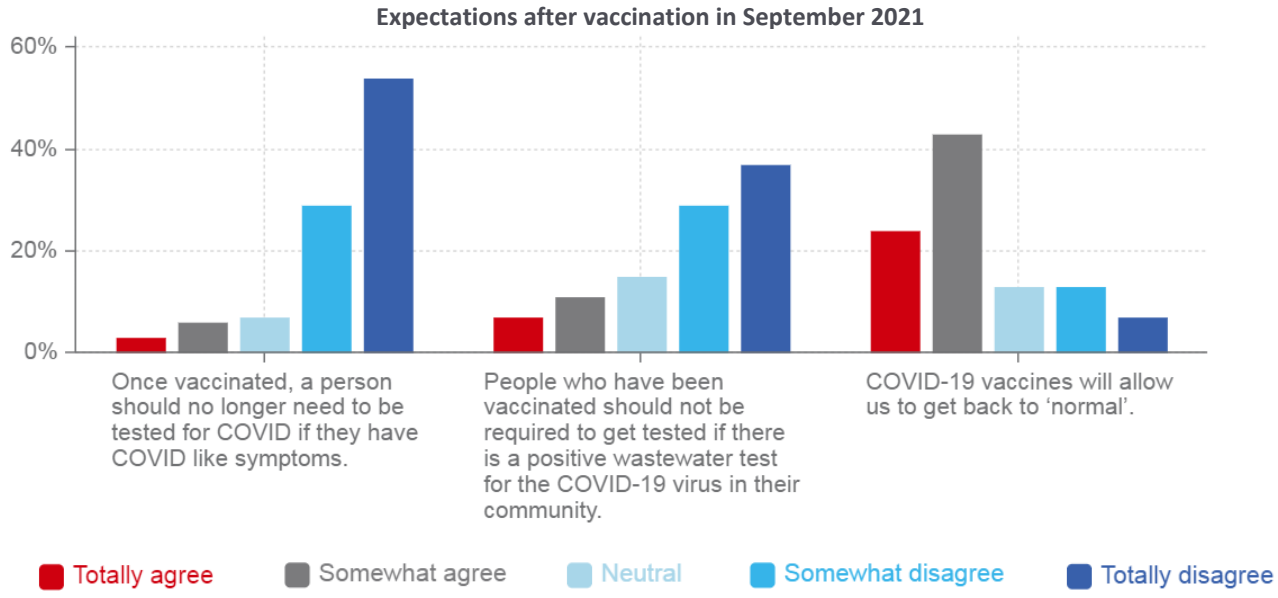
2% chose to self-isolate instead

EXPECTATIONS AFTER VACCINATION

Participants were asked their expectations of their testing behaviour once they had been fully vaccinated but if experiencing potentially relevant symptoms. The majority (83%) felt that fully vaccinated people should still get tested if they have symptoms.

When asked to consider the situation in which there is a positive wastewater detection for COVID-19 in the community, the majority (66%) felt that vaccinated people should get tested. However, a higher proportion of people felt that vaccinated individuals should be exempt from testing if there was wastewater detection (18%) than if they had symptoms (9%).

Twenty-four percent strongly agreed and 43% agreed that vaccination will allow us to get back to normal life.



In the Community Engagement Group, all participants understood that vaccinated people can still get COVID-19, and therefore testing is still required. However, **they reported there was a disconnect between people knowing they still need to get tested and actually getting tested.**

The group perceived the main benefits of getting tested in a mostly vaccinated population were:

- To avoid giving COVID to vulnerable individuals (e.g. young children, people with disabilities, people in aged care or hospital patients)
- To avoid spreading COVID to friends and family
- To be able to seek appropriate treatment if you have COVID. The participants said that COVID can still be harmful (or occasionally fatal) even if you are double vaccinated so it is important to check if you have the virus. Also, the vaccine may not protect you against new COVID strains.
- To keep track and control the movement of the virus (including new strains), particularly into vulnerable communities: "It only takes a couple of people and it affects the whole state"
- To avoid overloading the hospital system e.g. pre-emptive testing of large crowds at events will help to ensure the impact of new COVID outbreaks are minimised.

A couple of participants also noted that they had been able to do their own swab (for a PCR test) under supervision from health practitioners and felt it was more comfortable, and appealing, than a health practitioner doing it.

RAPID TESTING

The participants of the Community Engagement Group were asked what they wanted to know about rapid tests. They identified different potential purposes for rapid tests such as:

- being able to buy a test for personal use
- rapid testing in workplaces
- rapid testing to access a large venue or event.

Participants noted that if rapid tests could be purchased anonymously, an unanticipated benefit could be reaching those in the community who were resistant to testing because they didn't want government intervention in their lives. These people could then find out if they had COVID without the government knowing.

The representative for people with lived experience of COVID reported that in her sector of employment (events) in the US, only unvaccinated people were required to have daily rapid tests. She regarded this as a useful strategy for encouraging people to get vaccinated (to avoid the hassle of testing) but also as an alternative to mandating vaccination in the industry.

QUESTIONS ABOUT RAPID TESTING

Participants had a number of questions about rapid tests:

- How do rapid tests differ from other tests?
- When will they be available?
- Are they TGA approved?
- When will they need to be used (e.g. will I need a rapid test before I go to the supermarket)?
- Where can you get one? Can you buy tests in bulk?
- The cost and affordability of rapid tests particularly if regular tests were required? Would employees need to absorb the costs of rapid tests for work?
- Where do you send the result?
- If you get a positive result, what next? Do you need a PCR test?
- What happens if someone fails a rapid test to gain entry to an event? How would they be managed and the implications for staff? For example, if a person has paid $250 for a ticket and then returned a COVID-positive result, they could get aggressive if they're unable to attend.
- Will there be enough consistent supply to fill the need?
- The integrity of the rapid testing process and how a venue holder or employer can ensure people don't cheat? For example, if a person has COVID symptoms, how will they be stopped from submitting a friend's sample for testing?
- How will testing impact people's time? For example, will people need to arrive earlier for an event if the venue requires extra time to check people's test results?
- How will the government disseminate information about rapid testing so it reaches different communities (particularly culturally and linguistically diverse communities)?

CONCERNS ABOUT RAPID TESTING

Surveillance

Some participants of the Community Engagement Group expressed concern about the increasing surveillance that may accompany rapid testing. Examples included if people were required to upload test results to an app to gain entry to events or if they needed to register their details when they were buying a test. Participants agreed increased surveillance will be overwhelming for some in the community even though a lot of private information is already publicly available via people's digital footprints.

Interoperability with check-in apps

If people will be required to show proof of testing results for different purposes, the participants felt significant investment in technology will be required to ensure systems to upload test results are easy to use and reliable. Most participants reported difficulty uploading their vaccination certificates to the Service Victoria app. They felt the systems need to be much easier to use if testing certificates will be mandatory for accessing different places/services. One of the participants who educates local businesses on how to comply with their COVID requirements mentioned some staff at some businesses had experienced difficulties accessing their vaccination certificates (through no fault of their own) and were stressed about failing to comply with government requirements. He stated businesses are already having to manage customers not wearing masks or using QR codes and that additional barriers to comply with regulations (through difficulties with uploading certificates) were an unnecessary burden.

Individual responsibility

The participant representing people with chronic illness stated that rapid testing was another way the government was putting the onus for COVID management onto individuals, similar to home quarantine. He expressed concern that people would not comply to the same extent.

RECOMMENDATIONS

1

Continue to promote the importance of getting tested even when vaccinated
Continue to promote the importance of getting tested when someone has symptoms even after vaccination, with a clear rationale about the benefit and purpose of testing for individuals and the broader community.

2

Address questions and concerns about the use of rapid testing
Participants of the Community Engagement Group had many questions about the use of rapid testing. It is important that questions about the use, availability, cost and implications of a positive result using rapid tests are addressed. Participants also sought more information about how rapid testing will affect different industries e.g. this is what will happen at public events, hospitals. Similarly, concerns about surveillance and protections against the misuse of data should be allayed through open communication and information.

3

Ensure the interoperability of testing results into existing check-in apps
Participants of the Community Engagement Group felt that systems need to be simplified to use if testing certificates alongside vaccination certificates were made mandatory for accessing different places/services. Ensuring that these systems are interoperable will help increase the ease of use and reliability of the results.

4

Ensure that information is regularly updated and offers clarity to people who are both vaccinated and unvaccinated
It is important to continue to provide clear information on the Department of Health website and other sources that offers clarity to both people who are vaccinated and unvaccinated and ensure this this information is regularly updated.

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We have identified a need to further explore risk mitigation strategies that people can implement to reduce the risk of transmission at large community and family events and will offer advice on this in a future report.

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