

COVID-19 Oz Genetics RESEARCH UPDATE

A message from Professor Naomi Wray

In 2020 the world experienced COVID-19 pandemic. At the beginning we knew so little about that we, as did many researchers from around the world responded to the call to ask questions about COVID-19 started our study with limited funds not knowing what the future held but knowing that we would need to secure long-term funding. Here, In Australia our levels of infection were low compared to rates worldwide, and this has likely contributed to us being unable to secure grant funding to take the study forward. Without additional funding we must close recruitment into the COVID-19 Oz Genetics research project.

The project to date has recruited 273 participants and the detailed questionnaire responses and longitudinal blood samples makes our study relatively unique and hence useful for research. What you have already provided will be analysed and the results will contribute to the world's knowledge of COVID-19. We will provide an update of research publications resulting from the study in the future.

We like to send our heartfelt thanks to you for your participation and support with our research into host genetics for COVID-19 and we wish you all the best for the future.

As always, you can withdraw your consent for participation at any time. We will keep that information securely on file (under the governance of the University of Queensland Human Research Ethics Committee) in case we are funded at a future time to continue this study or to investigate if there are very long-term impacts of infection.

Kind Regards



Professor Naomi Wray
Institute for Molecular Bioscience, The University of Queensland

Project summary

We recruited 273 participants to the COVID-19 Oz Genetics study. People participated from across Australia, with most residing in Queensland. For each participant, we collected survey data and biological samples at baseline, and 3, 6 and 12 month follow up timepoints.



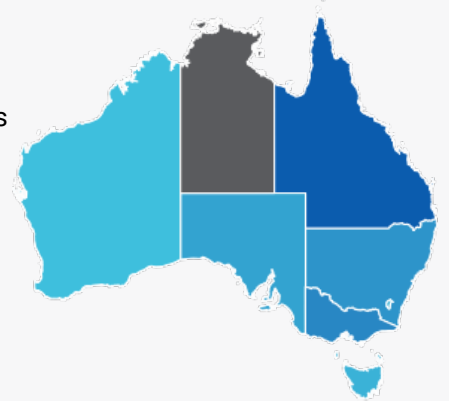
273
participants



429
samples



561
surveys



The Oz Genetics team

Queensland Health assisted in recruiting Queensland residents who had a confirmed diagnosis of COVID-19 prior to June 2021.

This project was developed, supported and coordinated by the Human Studies Unit at the Institute for Molecular Biosciences, University of Queensland.



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Donate to COVID Oz Genetics

Your donation will ensure that we keep working towards understanding COVID-19.
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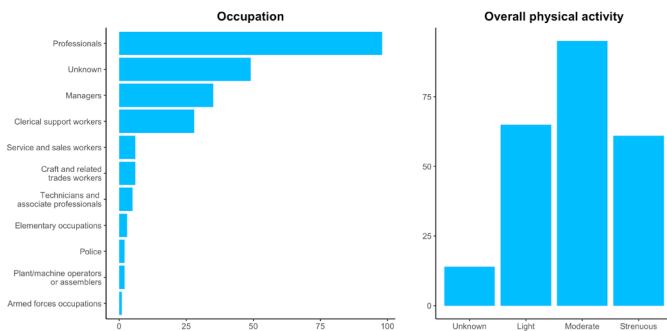
COVID-19 IN OUR COHORT

Our cohort

Our cohort represents a diverse group of individuals who reported contracting COVID-19 between February 2020 and April 2022. Participants spanned a wide range of ages from 19 to 84, with majority of people in their 60s.

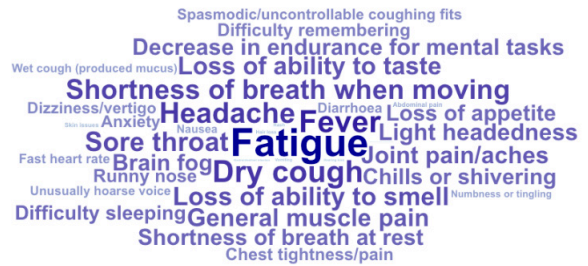


Participants completed a lifestyle and environmental risk factor survey which asks questions surrounding occupation, diet, physical activity and lifestyle behaviours e.g. smoking and alcohol. Collecting this information helps us to understand the impact of COVID-19 on everyday life.

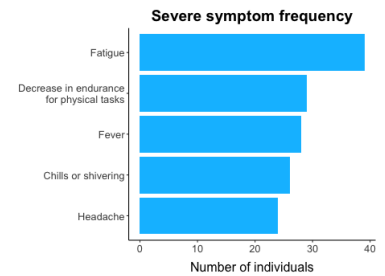


What symptoms did our cohort experience?

We asked participants to report on the symptoms they experienced throughout their COVID-19 infection. The below wordcloud represents the symptoms experienced across the cohort, with text size indicating how often that symptom was reported. For example, many people reported fatigue, with very few people reporting hoarse voice.



We then asked participants to describe the severity of the symptoms they experienced ranging from mild to very severe. The graph to the right shows the symptoms that were most commonly reported as severe or very severe in the initial week of disease.



Long COVID

Some people continue to experience health problems long after contracting COVID-19. These ongoing health problems are sometimes called post-COVID-19 syndrome, post-COVID conditions or Long COVID.

A person is usually considered to have Long COVID if their symptoms have continued for longer than 12 weeks after their initial infection.

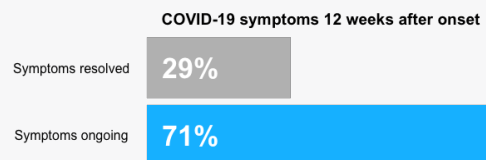
Studies have shown that people are at higher risk of Long COVID if they:

- ▶ Had severe illness during the acute illness phase
- ▶ Have underlying conditions or diseases (e.g. respiratory disease, obesity, diabetes)
- ▶ Are older
- ▶ Are female

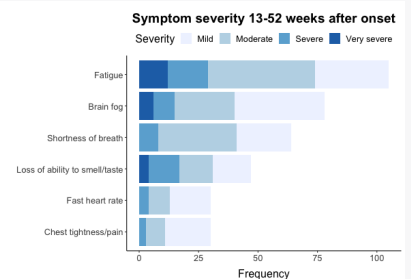

More information on Long COVID from the Australian government can be found here: <https://www.health.gov.au/sites/default/files/documents/2021/08/covid-19-vaccination-long-term-effects-of-covid-19.pdf>

In our cohort...

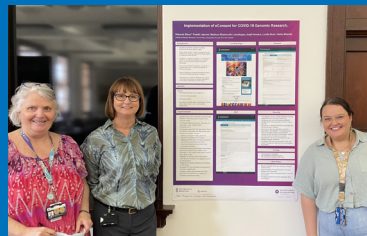
We collected information about symptoms experienced more than 12 weeks after the onset of COVID-19. 71% of the cohort reported symptoms in this Long COVID time window.



The figure on the right shows COVID-19 symptoms that persisted after 12 weeks. Although the symptoms persisted for 12 weeks, the severity of the symptoms still varied between individuals.

Dr Kirsty Short (pictured) and Dr Emma Gordon recently received a NHMRC grant to look at COVID-19 - induced vascular complications: mechanisms and potential therapies. This research uses COVID-19 Oz Genetics samples and data to look at whether complications are associated with a particular group (i.e. healthy, recovered or long COVID).



Lorelle, Deborah and Hailey - Our COVID-19 Oz Genetics research interviewer team who are part of the Human Studies Unit.

