Australia seems to be keeping a lid on covid-19 – how is it doing it?

From The New Scientist

There are early signs that Australia is starting to beat the coronavirus, with the rate of new infections slowing for more than a week. How is it achieving this and will the trend continue?

Australia has recorded just more than 6000 confirmed cases of covid-19 to date, with 50 people dying from the virus so far and another 40 currently on ventilators. The number of new confirmed cases per day has been trending downwards for the past 10 days, from 460 new cases on 28 March to 119 on 7 April.

Bondi Beach in Sydney, Australia is closed

The country's chief medical officer Brendan Murphy said in a press conference on 7 April that the current situation in Australia is even better than the best-case scenario predicted by government modelling done in January. However, he stressed that it "could all come undone" if Australians flout the rules put in place to contain the virus.

Australia's response to the pandemic has largely centred on shutting its borders, limiting public gatherings and conducting large-scale testing and contact tracing.

Travelling overseas is banned, foreigners aren't allowed to enter the country, and Australians who return from other countries are kept in mandatory quarantine at specially designated hotels for two weeks.

Social gatherings of more than two people are also forbidden and leaving the house is permitted only for essential reasons like buying food and exercising.

Australia has so far tested more than 310,000 people for covid-19. When someone tests positive, their close contacts are tracked down and ordered to self-isolate for two weeks.

The main reason for Australia's success is probably its strict travel restrictions, says Adam Kamradt-Scott at the University of Sydney. About 70 per cent of Australians who have tested positive for covid-19 picked it up while they were overseas, making it important to stem this flow, he says, and being an island nation has made it easier for Australia to rapidly shut its borders.

Social distancing, testing and contact tracing have added to the success of travel bans, says Kamradt-Scott. Plus, there may be cultural factors that have limited the spread of the virus, like the fact that most Australians choose to live in separate dwellings rather than apartment buildings and older people who require care tend to live in care homes rather than with their families, he says.

Unlike many other countries, Australia has kept schools open, but they don't appear to have been drivers of virus spread so far, says Kathryn Snow at the University of Melbourne.

Despite these successes, Australia has also committed some major blunders. For example, it allowed 2700 passengers to disembark from the Ruby Princess cruise ship on 19 March, even though many were showing covid-19-like symptoms. More than 600 cases have now been linked back to the ship. Some Australians have also ignored social distancing recommendations and crammed into beaches and parks.

The Australian government says it is looking at ways to ease restrictions but won't make any decisions until it sees how the coming weeks pan out. One option being considered is lifting restrictions in individual states or territories on a trial basis before applying the changes nationally.

At the moment, about 10 per cent of Australians who have caught the virus don't know how they got it, which is a sign of community spread. Although this is a small proportion, it could easily spiral out of control if restrictions are lifted too early and people are allowed to mix freely, says Hassan Vally at La Trobe University in Melbourne. "We cannot relax yet."