

Statement from the COVID-19 delegation to Israel

A delegation of Australian COVID-19 experts, led by Professor Sharon Lewin from the Doherty Institute, visited Israel from 5-8 September, 2022. We were sponsored by AUSiMED, a not-for-profit organisation that encourages medical exchanges and collaboration between Australia and Israel. During our visit, we met with officials and experts from the Ministry of Health, research institutions, hospital and primary care clinicians, and health maintenance organisations.

While the strengths and challenges of Israel's response to the COVID-19 pandemic were broadly familiar to us, we gained additional insights behind these events. We were particularly impressed with the pioneering approach to using health data and the established digital health infrastructure, a culture of innovation that encourages basic and clinical research, commercialisation, and rapid publication to inform local public health action and the international community. There was also a strong culture of emergency response capability amongst Israel's people and institutions, with capacity for government, hospitals, primary care services and the community to mobilise when required.

Despite very different contexts, many of the public health issues were remarkably similar to those that we have encountered in Australia. Issues such as managing the population impact of public health interventions, balancing rapid policy development and decision making with consultation of diverse groups of experts and stakeholders, ensuring appropriate communication was undertaken with culturally and linguistically diverse groups and issues related to timeliness of sharing public health data and challenges to rapidly mobilize research funding were evident. Overall, the capacity and willingness of the Ministry of Health to share data and collaborate with academics in real time resulted in substantial benefits. These included very significant advances in knowledge needed for the pandemic response, specifically in relation to the use of mRNA vaccines, boosters, breakthrough infections and more recently antiviral efficacy. The high value placed by government on rapidly publishing work in peer reviewed journals was emphasised as not only improving the research itself but critically important for informing clinical practice and public health policy both in Israel and globally.

The integration of data systems across primary, specialist and hospital care was a critical enabler of both high quality research and clinical care. Innovations were readily adopted to enhance healthcare delivery. Real time analysis of large data sets from health maintenance organisations significantly informed strategies for healthcare prioritisation. This was relevant to COVID but also to prevention of many other diseases. Real time innovation also included the rapid development and local manufacture of technologies to aid medical care (eg devices to facilitate remote physical examination), as well as different models of care (eg home based care). These are highly relevant to Australia given our rural and remote populations.

Israel is giving Australia a glimpse of the future where their population is currently substantially protected from severe COVID-19 by multiple doses of vaccines and several waves of infection in 2020 and 2021. At this point in time, hybrid immunity is providing robust population protection against severe disease. At least with current SARS2 variants, the case fatality risk of COVID-19 is continuing to decrease

and is approaching that of influenza. However, successive waves have varied in scale and timing, even after vaccination. Given the dynamic nature of SARS-CoV-2 infection and immunity, the implications of the changing epidemiology will need to be considered carefully over time. Public health measures will need to be proportionate to the risk to populations at risk of severe disease, and the impact of COVID-19 on health services and the broader community.

We thank people at all the institutions we visited for their hospitality, openness and candour in sharing their successes and challenges during the COVID pandemic. The trip has provided us with an opportunity to reflect on Australia's responses now and in the future, and will help establish collaborations with Israeli public health authorities, researchers and clinicians that will hopefully benefit both countries.

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