

## **The importance of an optimal strategy when responding to the Covid-19 pandemic: The NZ and Asia-Pacific Experience**

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**Background/Purpose:** High-level pandemic response strategies can be broadly classified as elimination, suppression, and mitigation. Understanding which strategies are the most effective in particular circumstances can guide our response to this and future pandemics.

**Approach:** Review of literature on Covid-19 response strategies and data on the impact of the pandemic in New Zealand (NZ) and other Asia-Pacific jurisdictions.

**Outcomes/Impact:** Jurisdictions pursuing Covid-19 elimination strategies in the Asia-Pacific region included NZ, Australia, Singapore, Hong Kong, Taiwan and mainland China. In the pre-vaccine phase, these jurisdictions achieved very much lower Covid-19 infection and mortality rates than comparable high-income countries in Europe and North America pursuing suppression and mitigation.

In the post-vaccine phase, most of these jurisdictions transitioned to suppression/mitigation strategies. This phase of the pandemic response has seen major waves of Omicron variant infection but a relatively low case fatality risk (CFR) in NZ, Australia and Singapore which have high vaccination rates. The CFR in Hong Kong has been substantially higher, partly due to relatively low vaccination coverage in older age groups.

Choosing an optimal strategy for the next phase of the pandemic is challenging because of:

- Continuing viral evolution producing subvariants that escape immune protection
- Waning immunity
- High infectiousness limiting the effectiveness of public health and social measures
- Relaxation of control measures
- Continuing high infection and reinfection rates with periodic pandemic waves
- Continuing rise in cumulative mortality and chronic effects from Covid-19

**Innovation and Significance:** Consider using this well-defined typology of Covid-19 response strategies:

1. to assist in coordinating and evaluating responses at different phases of a pandemic
2. to focus on elimination as the default option for outbreaks of emerging infectious diseases that reach agreed thresholds of severity and infectivity
3. to help coordinate multilateral response in the Asia-Pacific Region and globally.

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