INSIGHTS FOR HEALTHCARE RESILIENCE AND ECONOMIC PERFORMANCE

The Broader Economic Benefits of COVID-19 Vaccination in Australia

Authors: Hania El Banhawi, Sian Hodgson, Margherita Neri, Lotte Steuten

COVID-19 continues to impose a significant **burden on healthcare systems and the national economy**, particularly when other infectious diseases like **influenza and RSV** co-circulate. Access to vaccinations remains essential to sustain population immunity, curb variant emergence, and mitigate its burden on the economy.

Methods

We used a cost-of-illness analysis (COI) to quantify the economic burden of COVID-19 and assess the broader economic benefits of immunisation using three main scenarios:

- No further annual autumn vaccinations
- Annual autumn vaccination of population aged 65+ years (in line with the age-based criteria in ATAGI's 2024 recommendation)
- Annual autumn vaccination of the general population aged 50+ and 18+

Key takeaways

Despite current COVID-19 vaccination efforts, a substantial economic burden persists.

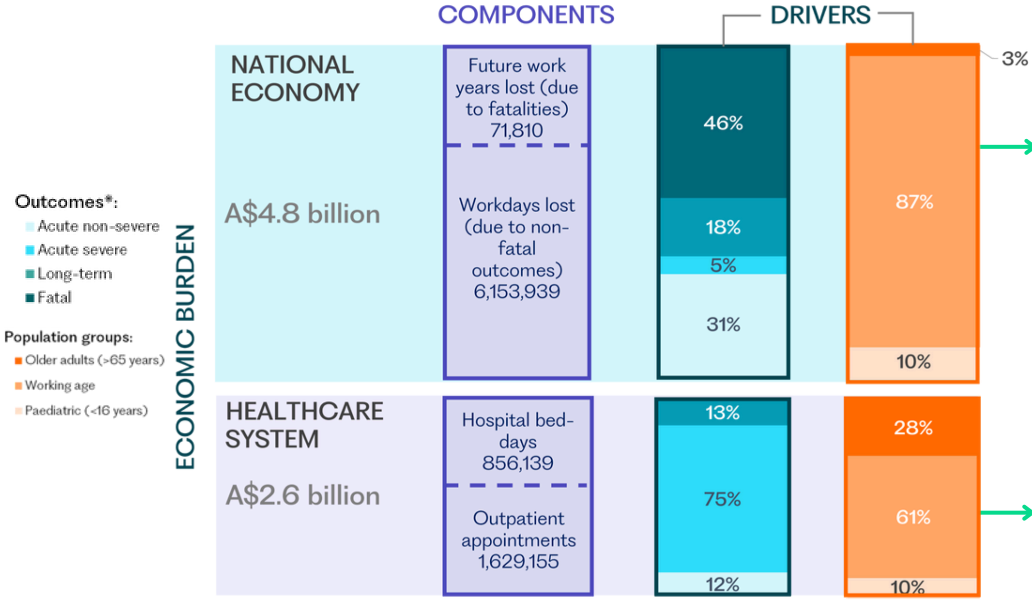
- The **total burden** of COVID-19 without annual autumn vaccination is approximately **A$7.4 billion per year**.
- The annual cost to the national economy (A$4.8 billion) is almost double the cost to the healthcare system (A$2.6 billion).
- Cases in the working age population generate a majority of the economic burden on both the national economy and the healthcare system.

Annual autumn COVID-19 vaccination of the population aged 65+ would save approximately A$1.1 billion per year, or **15%** of the total economic burden of A$7.4 billion.

- Of the A$1.1 billion, the national economy benefits A$569 million yearly (12% of its burden), while the healthcare system saves A$515 million (20% of its COVID-19 burden).

Economic burden of COVID-19 in Australia with no further annual autumn vaccination

Without annual autumn routine vaccination, COVID-19 could cost Australia approximately **A$7.4 billion** annually (0.28% of GDP), more than double Australia's spending on preventive health (0.13% of GDP).[1]



Productivity losses are largely due to fatalities (46%) and acute, non-severe cases (31%). Cases in the working age population drive **87%** of the national economy burden.

Healthcare utilisation is mostly (75%) driven by severe acute infections. Cases in the working age population drive two-thirds (**61%**) of healthcare system costs.

[1] Ananthapavan, J., Rychetnik, L., Mitchel, J., Chevalier, A., Howse, E. and Signy, H., 2024. Economics of prevention. Synthesis of knowledge from The Australian Prevention Partnership Centre.

This research was commissioned and funded by Moderna

Date of preparation: October 2025

INSIGHTS FOR HEALTHCARE RESILIENCE AND ECONOMIC PERFORMANCE

The Broader Economic Benefits of COVID-19 Vaccination in Australia

Economic benefits of maintaining COVID-19 vaccination in Australia

COVID-19 vaccination programmes help safeguard national productivity, reduce strain on healthcare systems, and protect vulnerable populations.

Annual autumn COVID-19 vaccination targeting individuals aged 65+, in line with the age-based criteria in ATAGI's 2024 recommendation, would generate

A$ 1.1 billion

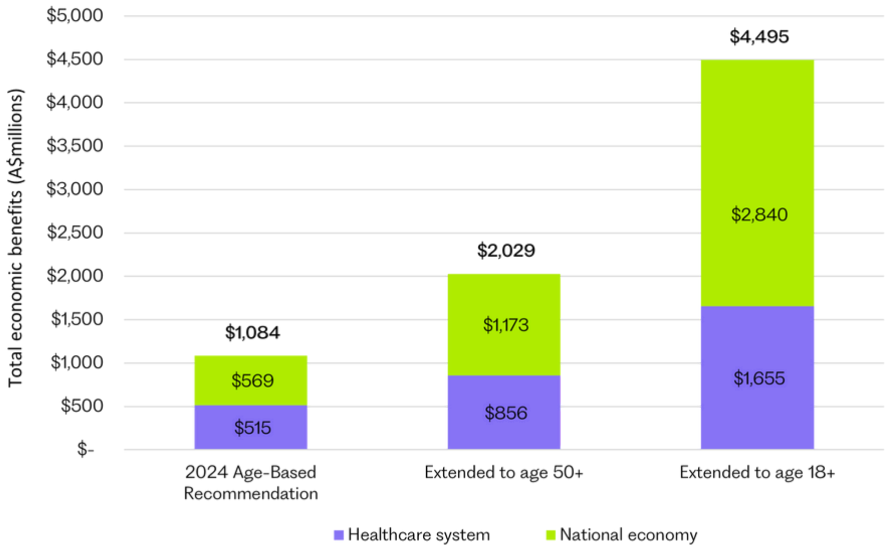
in annual economic benefits, reducing 15% of the total COVID-19 economic burden.

Annual autumn COVID-19 vaccination of the population aged **50+** and **18+** would increase the total economic benefit to

A$2.0 billion and A$4.5 billion per year

respectively, which equals 28% and 61% of the total COVID-19 economic burden.

Averted **productivity losses** are the major driver of the economic benefits across all vaccination scenarios...



We call on policymakers to:

- Provide **continued investment in endemic COVID-19 vaccination programmes** and pandemic preparedness to safeguard economic resilience and public health.
- Adopt a decision-making and funding approach to routine immunisation that **recognises the broader economic benefits**.

FIND OUT MORE

This research was commissioned and funded by Moderna

Date of preparation: October 2025