



# Long Covid: High economic burden justifies further preventive efforts

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## Summary

The persisting Covid-19 pandemic is causing both acute illness and longer-term debilitating symptoms: Long Covid. Long Covid also reduces worker productivity resulting in economic harm. A recent analysis suggests that Long Covid is likely costing the Australian economy approximately 0.5% of GDP in reduced productivity. In Aotearoa New Zealand (NZ) this GDP loss would translate to around NZ\$2 billion per year. We need robust local data and economic analyses of productivity losses and other costs such as healthcare use to inform the cost-effectiveness of preventive interventions.

Nevertheless, the NZ Government can take immediate action to reduce this joint health and economic burden by improving Covid vaccination eligibility and coverage and intensifying interventions that reduce community spread of Covid-19, including improvements in ventilation and air filtration in workplaces, schools, and other public settings.

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This Briefing reviews overseas evidence on the economic impact of Long Covid, considers its potential effects in the NZ context, and outlines actions that the NZ Government can take to mitigate these costs.

## **Long Covid: growing recognition of a substantial impact on population health**

Long Covid refers to a change in health status that can persist for months or years following a Covid-19 infection.<sup>1</sup> Long Covid affects multiple organs and systems in the body and can occur at any age. Common symptoms include fatigue, shortness of breath, and cognitive impairment leading to difficulties with memory and attention. Even moderate levels of these symptoms can cause people to struggle with everyday tasks.<sup>2</sup> (See our [previous Long Covid Briefing](#) for further details).

Globally, the population prevalence of symptomatic Long Covid is estimated at around 6-7% of all adults.<sup>1</sup> Many affected people are unable to work and drop out of the workforce altogether.<sup>1-3</sup> Those who remain in the workforce may find themselves less productive, requiring additional support to perform their roles ([see Appendix](#) for further discussion of the types of impacts that Long Covid has on the workforce and some estimates of their prevalence). These effects put strain on businesses, health<sup>4</sup> and [education](#) sectors, and the wider economy.

## **International evidence on economic costs**

No robust analysis of Long Covid prevalence or productivity loss has been carried out in NZ, but international estimates of economic impacts are concerning. These include around [£1.5 – 2.7 billion GDP loss](#) for the UK in 2030 from decreased productivity and reallocation of healthcare resources; and a total economic and social welfare cost of [US\\$864 billion to \\$1.04 trillion](#) per year across the OECD. [Economist Impact](#) has estimated GDP losses from Long Covid during 2024 to be 0.5-2.3% (mean 1.0%; median 0.6%) across eight high-income countries.

Of particular relevance to NZ, Australian researchers conducted a detailed economic analysis of how Long Covid-related reductions in labour supply affected productivity and GDP from 2022-2024. Their [just published research](#)<sup>5</sup> suggests that Long Covid is likely costing the Australian economy **AU\$9.6 billion (95% CI: \$4.7-15.2 billion)**, equivalent to **0.5% of Australia's GDP**. Importantly, this estimate is likely to be conservative ([see Appendix](#)).

## **Potential cost to NZ**

Given [similarities](#) in how the pandemic affected NZ and Australia, Long Covid will likely have a comparable economic impact. If NZ's GDP ([NZ\\$410 billion](#) for the March 2024 year) faces a 0.5% reduction due to Long Covid, as seen in Australia, that would represent approximately **NZ\$2 billion** per year.

Supporting evidence for the above estimate and that Long Covid is affecting productivity in Aotearoa comes from findings that Long Covid imposes an important burden on worker productivity. The [Long COVID Registry Aotearoa](#) reported that individuals with self-reported Long Covid worked 7.3-9.4 fewer hours a week in 2023/4 than they did before the pandemic. In addition to this reduction in hours, presenteeism (working despite being

unwell) was reported by 61-71% of respondents.

## What the NZ Government needs to do

The need for decisive action is clear. The global evidence indicates that both the health and economic burden from Long Covid in NZ are likely to be large. Ongoing high infection rates mean that each week, another cohort of New Zealanders enters the Long Covid lottery. The three key actions are as follows:

- **Prevention.** The NZ Government needs to do more to reduce Long Covid risk and incidence. This requires action to:
  - **Reduce case numbers** using well-evidenced public health and social measures (including indoor ventilation and mask use where appropriate), with a focus on settings such as schools, hospitals and public transport where Covid-19 infection risks are high and sector-level impacts are already being felt.
  - **Increase vaccination coverage** because this can substantially reduce the risk of Long Covid in adults and children following a Covid-19 infection.<sup>6-8</sup> NZ's Covid-19 vaccine strategy must reflect this knowledge by immediately expanding eligibility for regular additional (booster) doses to younger age groups with a strong emphasis on occupations at increased risk, such as teachers.
- **Occupational and social support** must be strengthened. Occupational support could include extended sick leave policies, workplace accommodations to address productivity, workplace safety assessments, and comprehensive rehabilitation programmes to help those affected return to work. Social support must be provided for those who cannot work.
- **Strengthen economic analysis and research.** We need robust, local studies to quantify the true numbers and costs of Covid-19 infections and Long Covid in NZ, building on other NZ studies for assessing worker productivity loss from poor health.<sup>9-11</sup> These studies should include comparisons with appropriate control groups (eg, people with a history of Covid-19 infection who do not have Long Covid<sup>2 3</sup>). Without accurate data, it will be difficult for policymakers to make informed decisions about how to efficiently and equitably protect New Zealanders from the health and economic harms of the ongoing Covid-19 pandemic.

## Conclusions

Long Covid is more than a health crisis—it also imposes an important economic burden. As other countries have shown, the impact of Long Covid on workforce participation, productivity, and overall economic performance is substantial. NZ has yet to conduct its own in-depth analysis, which is clearly needed. In the meantime the NZ Government should invest more in a preventive approach, using evidenced-based measures to reduce the unsustainably high incidence of acute Covid-19 infection and Long Covid.

## What this Briefing adds

- In addition to the health harm, Long Covid creates multiple costs to society through loss of workers and productivity.
- New Australian research reports that this impact equates to 0.5% of GDP, AU\$9.6 billion, as a conservative estimate. Translated to the NZ context this would represent an annual economic cost of around \$2 billion NZD.

## Implications for policy and practice

NZ's response to the ongoing high baseline of Covid-19 cases needs to be strategic, evidence-informed, and proportionate. Key actions include:

- Reducing Covid-19 case numbers using well-evidenced public health measures (eg, improved ventilation) and expanding eligibility and coverage of Covid vaccination, ensuring that these protections are in place for workforces and sectors at high risk of Covid-19 and Long Covid.
- Strengthening occupational support across all sectors to protect health and occupational performance, including providing formal screening and support in occupations where occupational performance has safety implications.
- Conducting comprehensive research and economic modelling of acute Covid-19 infection and Long Covid impacts, considering our unique context, to quantify the true value of preventive action.

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## Appendix: Impacts of Long Covid on the workforce: what the evidence tells us

- **Inability to work full-time or at all is common:** In a large UK community cohort study,<sup>3</sup> participants currently reporting Long Covid were around 34% more likely to be economically inactive up to a year post-infection, compared with pre-infection (adjusted odds ratio: 1.34; 95%CI: 1.05–1.72). Long-term absence was experienced by

13.1% of those who reported Long Covid, compared with 9.8% of participants who had Covid-19 infection without Long Covid. Similar findings have been reported from the US.<sup>2</sup>

Almost one in five UK doctors with Long Covid who responded to a workforce survey said that they were unable to work,<sup>4</sup> and hundreds of doctors<sup>12</sup> and [teachers](#) in the UK are currently taking legal action over system-level failures to protect their health. Reductions in domestic tasks and volunteering were also reported in the Long COVID Registry Aotearoa, and there was a significant reduction in the informal care they gave, and an increase in the informal care they are receiving.

- **Occupational safety and performance is a concern:** Economic and other pressures may result in people with Long Covid continuing to work while unwell (presenteeism). Cognitive impairment is common after a mild infection,<sup>13-16</sup> indicating a need for formal assessment of deficits in memory, reasoning, or executive function in some workplaces. Occupations where safety implications of Long Covid are important include healthcare workers,<sup>17</sup> airline pilots,<sup>18</sup> bus and train drivers, truck drivers, electricians, and first responders.
- **Essential workforces are experiencing Long Covid impacts:** Strategic action is needed to protect key workforces because occupations where Covid-19 infection and reinfection risk is high are also at higher risk of Long Covid. An analysis of Covid-19 rates by occupational group conducted by the NZ Ministry of Health in 2022 showed high rates in education- and healthcare-related occupations,<sup>19</sup> consistent with UK data.<sup>3</sup>
- **The economic estimates cited in this Briefing are conservative:** For example, in the Australian study by Costantino et al.<sup>5</sup> the real cost could be much higher as this estimate did not take reinfections into account, and did not include wider impacts on the economy such as employment loss from caring for others with Long Covid.<sup>20</sup> [UK modelling](#) has shown that these wider impacts are on a much higher scale than direct loss of productivity and jobs. Long Covid also has substantial direct impacts on health costs: a recent UK study reported that compared with a control group, healthcare costs for people with Long Covid were 44% higher in their first year post-diagnosis.<sup>21</sup>

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