



Tackling Future Pandemics	
Party:	Australian Greens
Summary of proposal: The proposal contains three components. <ul style="list-style-type: none"><li>• <b>Component 1</b> – Establish a national centre for disease control as a new independent statutory body permanently resourced to fulfil a national coordination, advisory, capacity building, and research function. The centre would be responsible for assessing risks relating to communicable diseases and providing briefings, public education, and policy advice on disease threats.</li><li>• <b>Component 2</b> – Provide \$1 billion, including departmental costs, in order to build a publicly owned vaccine manufacturing facility. Additional funding required for ongoing operation of the facility would be split 50:50 with State and Territory governments. Vaccine doses produced in excess of domestic requirements would be sold or donated overseas with a 50:50 split.</li><li>• <b>Component 3</b> – Provide \$250 million over two years in order to fund vaccine research.</li></ul> All components are to commence on 1 July 2023.	

## Costing overview

The proposal would be expected to decrease both the fiscal and underlying cash balances by around \$1,203 million over the 2022-23 Budget forward estimates period, primarily due to an increase in administered expenses.

The proposal would have an impact beyond the 2022-23 Budget forward estimates period.

A breakdown of the financial implications (including separate PDI tables) over the period to 2032-33 is provided at Attachment A.

## Uncertainty and sensitivities

### Component 1

The financial implications of Component 1 are sensitive to assumptions around the number of staff required to fulfil the centre's functions, as well as the establishment costs.

### Component 2

The financial implications of Component 2 are very uncertain and highly sensitive to assumptions around the speed with which the facility could be constructed, the facility's ultimate manufacturing capacity, and the costs associated with vaccine manufacturing.

The Parliamentary Budget Office (PBO) has made no assessment of the labour market impacts of creating these facilities or the costs associated with employing staff sufficiently qualified to operate them. Additionally, there has been no assessment as to whether the relevant supply chains for vaccine manufacture in Australia could handle such an increase in capacity. The PBO has also made no

assessment as to the capacity of State and Territory governments to jointly fund ongoing operational costs.

### Component 3

The PBO has made no assessment of whether the funds allocated to this component are sufficient to achieve the policy goals of the proposal.

**Table 1: Financial implications (\$m)<sup>(a)(b)</sup>**

	2022-23	2023-24	2024-25	2025-26	Total to 2025-26
Fiscal balance	-	-401.8	-462.2	-338.5	<b>-1,202.5</b>
Underlying cash balance	-	-401.8	-462.2	-338.5	<b>-1,202.5</b>

(a) A positive number represents an increase in the relevant budget balance; a negative number represents a decrease.

(b) PDI impacts are not included in the totals.

- Indicates nil.

## Key assumptions

The PBO has made the following assumptions in costing this proposal.

### Component 1

- As specified, the centre for disease control would be established as a separate independent statutory body and so would be responsible for all of its own establishment and administration costs. The costing does not include any potential savings from the transfer of existing similar functions to the new body from other agencies.
- Capital costs would be incurred in 2023-24 to secure and fit out the required office space.
- The average staffing level (ASL) and total expenses for the centre would be similar to the ASLs of other health agencies with a similar remit on a national level.
  - It would take two years for the centre to reach its ASL cap of 400 staff.
- Staffing expenses would grow in line with the relevant wage cost index and account for the efficiency dividend.
- Non-staffing departmental expenses would grow in line with the consumer price index.

### Component 2

- The number of vaccines produced annually is based on the budget specified and an analysis of the capital costs associated with production of the Pfizer and Moderna COVID-19 vaccines.
- New facilities will phase into full production at a rate proportional to the capital expenditure.
- The per-dose cost of the vaccines would be similar to those associated with the large-scale production of the mRNA COVID-19 vaccines from Pfizer and Moderna, and those associated with viral vector flu vaccines for which World Health Organisation data is available.
- Excess vaccine doses produced by the facilities surplus to domestic requirements would equal approximately 90 per cent of the facility's output.
- All labour, raw materials, and logistical support required to build and operate vaccine manufacturing facilities of this scale in Australia would be available.

- As specified, 50% of the non-departmental ongoing operational costs would be funded by the States and Territories, rather than the Australian Government. The Australian Government would retain the revenue from the sale of any excess vaccine doses.

## Methodology

### Component 1

- Departmental expenses were estimated based on an analysis of statutory bodies with comparable functions.
- Non-staffing departmental expenses in 2023-24 were adjusted to account for additional start-up capital costs, before other departmental costs were grown by the specified indices over the medium-term period.

### Component 2

- The cost to build the facilities is based on a \$1 billion fixed cost fund as specified in the request, including departmental costs.
- The cost to operate the facility is based on the assumed levels of vaccine output multiplied by an average per-dose cost of vaccine based on international data for a variety of mRNA and viral vector vaccines.
- Vaccine output is based on the production of similar sized facilities, including an allowance to reflect increased difficulties that may be encountered in Australia due to a lack of experience with large scale vaccine production.
- The revenue from the sale of excess vaccines is calculated by assuming that 50% of excess vaccines are sold at cost price.
- The ratio of departmental to administered expenses is based on analysis of various existing infrastructure budget measures.

### Component 3

- The ratio of departmental to administered expenses is based on analysis of previous budget measures of a similar size.

Financial implications were rounded consistent with the PBO's rounding rules as outlined on the PBO Costings and budget information webpage.<sup>1</sup>

## Data sources

The Department of Finance and the Treasury provided the economic and indexation parameters as at the Pre-election Economic and Fiscal Outlook 2022.

Aged Care Quality and Safety Commission (ACQSC) (2020) [Annual Report 2019-20](#), ACQSC, accessed 1 May 2022.

Department of Health (2019) [Budget 2019-20 - Portfolio Budget Statements 2019-20](#), Australian Government.

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<sup>1</sup> [https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_Departments/Parliamentary\\_Budget\\_Office/Costings\\_and\\_budget\\_information](https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Budget_Office/Costings_and_budget_information)

Department of Health (July 2021) [Vaccine Operations Centre - Weekly Operational Updates](#), Department of Health, accessed 1 May 2022.

CSL Limited (May 2021) [Update on CSL COVID-19 Vaccine Manufacturing Numbers](#), CSL Limited, accessed 1 May 2022.

Kis Z and Rizvi Z (May 2021) [How to Make Enough Vaccine for the World in One Year](#), Public Citizen, accessed on 1 May 2022.

Martonosi S, Behzad B, and Cummings K (September 2021) [Pricing the COVID-19 vaccine: A mathematical approach](#), Omega, accessed on 1 May 2022.

Plotkin S, Robinson JM, Cunningham G, Iqbal R, and Larsen S (July 2017) [The complexity and cost of vaccine manufacturing – An overview](#), Vaccine, accessed on 1 May 2022.

## Attachment A – Tackling Future Pandemics – financial implications

**Table A1: Tackling Future Pandemics – Fiscal and underlying cash balances (\$m)<sup>(a)</sup>**

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	Total to 2025-26	Total to 2032-33
<b>Non – tax revenue</b>													
<i>Component 2 - Sale of excess vaccine doses at cost price</i>	-	-	320.0	410.0	560.0	860.0	1,770.0	1,810.0	1,860.0	1,900.0	1,950.0	730.0	11,440.0
<b>Total – revenue</b>	-	-	320.0	410.0	560.0	860.0	1,770.0	1,810.0	1,860.0	1,900.0	1,950.0	730.0	11,440.0
<b>Expenses</b>													
<b>Administered</b>													
<i>Component 2 - Construction of vaccine manufacturing facility</i>	-	-181.0	-182.0	-196.0	-198.0	-198.0	-	-	-	-	-	-559.0	-955.0
<i>Component 2 - Operation of vaccine manufacturing facility</i>	-	-	-330.0	-450.0	-620.0	-950.0	-1,940.0	-1,990.0	-2,040.0	-2,090.0	-2,150.0	-780.0	-12,560.0
<i>Component 3 - Funding for vaccine research</i>	-	-121.0	-123.0	-	-	-	-	-	-	-	-	-244.0	-244.0
<b>Total – administered</b>	-	-302.0	-635.0	-646.0	-818.0	-1,148.0	-1,940.0	-1,990.0	-2,040.0	-2,090.0	-2,150.0	-1,583.0	-13,759.0
<b>Departmental</b>													
<i>Component 1 - National Centre for Disease Control</i>	-	-76.6	-82.8	-84.0	-85.2	-86.5	-87.7	-89.1	-90.4	-91.8	-93.2	-243.4	-867.3
<i>Component 2 - Administer vaccine manufacturing facility</i>	-	-19.2	-62.4	-18.5	-14.5	-21.2	-39.2	-40.2	-41.2	-42.3	-43.3	-100.1	-342.0
<i>Component 3 - Administer vaccine research funding</i>	-	-4.0	-2.0	-	-	-	-	-	-	-	-	-6.0	-6.0
<b>Total – departmental</b>	-	-99.8	-147.2	-102.5	-99.7	-107.7	-126.9	-129.3	-131.6	-134.1	-136.5	-349.5	-1,215.3
<b>Total – expenses</b>	-	-401.8	-782.2	-748.5	-917.7	-1,255.7	-2,066.9	-2,119.3	-2,171.6	-2,224.1	-2,286.5	-1,932.5	-14,974.3
<b>Total (excluding PDI)</b>	-	-401.8	-462.2	-338.5	-357.7	-395.7	-296.9	-309.3	-311.6	-324.1	-336.5	-1,202.5	-3,534.3

(a) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms. A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.

- Indicates nil.

**Table A2: Tackling Future Pandemics – Memorandum item: Public Debt Interest (PDI) impacts – Fiscal and underlying cash balances (\$m)<sup>(a)(b)</sup>**

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	Total to 2025-26	Total to 2032-33
<b>Fiscal balance</b>	-	-5.0	-14.0	-24.0	-33.0	-43.0	-54.0	-65.0	-77.0	-90.0	-105.0	<b>-43.0</b>	<b>-510.0</b>
<b>Underlying cash balance</b>	-	-4.0	-13.0	-23.0	-32.0	-42.0	-53.0	-63.0	-75.0	-88.0	-103.0	<b>-40.0</b>	<b>-496.0</b>

- (a) As this table is presented as a memorandum item, these figures are not reflected in the totals above. This is consistent with the approach taken in the budget where the budget impact of most measures is presented excluding the impact on PDI. If the reader would like a complete picture of the total aggregate, then these figures would need to be added to the figures above. For further information on government borrowing and financing please refer to the PBO's online budget glossary<sup>2</sup>.
- (b) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms. A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.
- Indicates nil.

<sup>2</sup> [Online budget glossary – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au)