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Foreword

The case for an ambitious, expansive, and intelligent investment to vaccinate the world.

The COVID-19 Pandemic is a stark reminder of the importance of humility and the danger of hubris.

When this deadly, unknown pathogen spread across the globe nearly two years ago, it upended certainty and radically altered our lives.

It continues to do so today.

In Australia we thought we had crushed COVID-19 and were quick to congratulate ourselves for our capacity to test, trace, isolate, and quarantine, and where necessary, stay at home.

For a brief period, those tools worked and Australia enjoyed months of living largely free of the virus. While the virus continued to ravage other parts of the world.

But then the virus mutated and restrictions returned. Our current response, mass vaccination, offers renewed protection. But unless everyone, everywhere receives this protection, the virus will continue to spread and mutate. That is why it really isn't over for anyone until it is over for everyone.

However, concerted global action can ensure we create a global environment that means COVID has fewer places to hide and mutate into more dangerous, deadly forms.

This report makes the case for an ambitious, expansive, and intelligent investment to vaccinate the world.

The emergence of the Delta variant shows that Australia can not close its eyes to the impacts of the pandemic in other parts of the world. First, because that is morally wrong. But also because, sooner or later, the consequences will be felt here. That is why we must play a leading role in aggressively responding to this pandemic on a global scale.

A survey of 77 epidemiologists from 28 countries, showed two-thirds believed that if we don't act fast enough, it would take less than a year before the virus mutates to the point where the majority of first- generation vaccines are rendered ineffective.

Speed is of the essence. If we vaccinate the world faster, the likelihood of mutations drops. It is within our power to limit the chance of the next mutation from being so deadly and disruptive.

The rich nations of the world need to understand the global vaccination effort is an investment not a cost. Indeed, the investment required to vaccinate the world is miniscule compared to the dividend. Achieving the goal of fully vaccinating by the end of 2022 would require between USD 50 billion (AUD 68 billion) and USD 60 billion (AUD 82 billion). As one of the richest per capita nations, Australia can and must prosecute the argument for vaccinating the world.

This report calls for Australia to commit a fair share to the COVAX facility in finance and vaccine sharing in additional to our regional commitments, vaccine equity for frontline workers and vulnerable groups, and targeted investment in combating vaccine hesitancy.

The report also recomends bold, new ideas such as supporting an Indo-Pacific technology transfer hub to support establishing mRNA manufacturing capacity in the region. It also recommends Australia becoming a vaccine production factory for the region.

As wealthier countries reach high levels of vaccination and are able to open up to the rest of the world, lower income nations which

can not do so safely will continue to suffer declines in living standards while extreme poverty increases. This is a moral failure that must be addressed. Also, due to our global interconnectedness, it directly impacts on Australia's economic recovery.

Already, almost 10 million extra children are hungry since the pandemic began and 72 million more are not being educated. Health and education are the building blocks of a decent life and everyone deserves that chance.

For the first time in decades human development in our region has gone backwards - a direct result of COVID-19.

This is happening in countries impacted by the direct burden of COVID-19 as well as those who have not felt the direct impact of the pandemic but are forced into maintaining closed borders as their only form of protecting a largely unvaccinated population.

The COVID-19 pandemic will have a long term devastating impact on health systems and development goals.

To ensure that impact is kept to a minimum, developed nations need to ensure developing nations have access to vaccines and support now.

There will need to be continued investment in Australia's overall permanent aid program going forward. While progress has been made in lifting people out of extreme poverty, the pandemic has reversed some of those gains while also highlighting existing vulnerabilities and inequalities and the need for a further investment in aid.

Over a year and a half into this pandemic we know that the cost of inaction is too high. For action to be effective, it must be made swiftly. That is why the recommendations of this report must be implemented now.



KEY TAKEAWAYS

- The COVID-19 pandemic will not end for anyone, until it ends for everyone.
- Everyone everywhere should have access to a safe and effective COVID-19 vaccine.
- More than 19 low income countries have such low rates of vaccination, that on current rates they would not vaccinate 70% of their populations until after 2030.
- Australia has made a significant contribution to the COVID-19 response in our region, but more needs to be done in our region and around the world.

A coalition of experts call on the Australian Government to increase its support to the global challenge of ending COVID-19 for all by:

- Contributing a fair share to the global COVAX facility by making an additional AUD 250 million commitment
- Make a commitment to share 20 million vaccines through the COVAX facility
- Commit to vaccine equity for all frontline workers and vulnerable groups around the world
- Commit AUD 50 million to addressing vaccine hesitancy
- Commit to regular public reporting of the delivery and administration of bilateral vaccine sharing
- Make a fair share commitment of AUD 170 million to the Rapid ACT-Accelerator Delta Response Appeal
- Establish a framework for responding to outbreaks in the Indo-Pacific
- Invest in Australia becoming a vaccine factory for the region
- Support the establishment of a technology transfer hub in the region
- Commit to contributing to the long-term COVID-19 recovery in our region and around the world.

Introduction

"Affordable, nondiscriminatory access to the vaccine is a human right."

United Nations, Human Rights Office

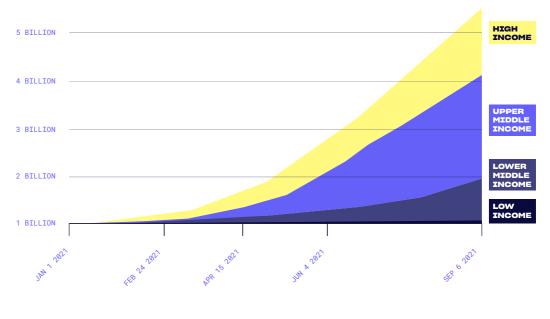
COVID-19 and its consequences has affected almost every one of the world's 7.9 billion people but not all equally. With cases reaching over 215 million and over four million recorded deaths by the middle of 2021, there is no part of our globe untouched by its impact. In the face of this global pandemic however, the world has come together to develop vaccines in record time, with seven safe and effective vaccines endorsed for emergency use by the World Health Organization (WHO).¹ The widespread distribution and administering of vaccines is essential to curbing the spread of the pandemic.

While the impact of the pandemic has been global, it has impacted disproportionately on those most vulnerable. As of August 2021, a third wave is sweeping Africa and many countries are battling the highly transmissible Delta variant. There is widespread underreporting of cases in many developing countries and many health systems are at breaking point. There is an urgent need for the world to come together to ensure that safe and effective vaccines make it from the laboratory and into the arms of people around the world.

As higher income countries (HIC) proceed with their vaccination programs there is growing understanding of the need for global and universal vaccination to end the pandemic for all. In December 2020 the United Nations Office of the High Commissioner on Human Rights declared that, "Affordable, non-discriminatory access to the vaccine is a human right." The World Health Organization (WHO) Director Dr. Tedros Ghebreyesus and the President of the European Commission Dr. Ursula von der Leyen have noted, "None of us will be safe until everyone is safe."

This report is the work of the End COVID for All coalition, made up of global health experts, researchers, international non-government organisations, and all those who believe we cannot end COVID for anyone until it ends for everyone.

COVID-19 vaccine doses administered by country income group



Source: Our World in Data, World Bank, 7 September 2021.

We believe that it is possible to meet the ambitious goal to fully vaccinate most of the population of the world by the end of 2022.

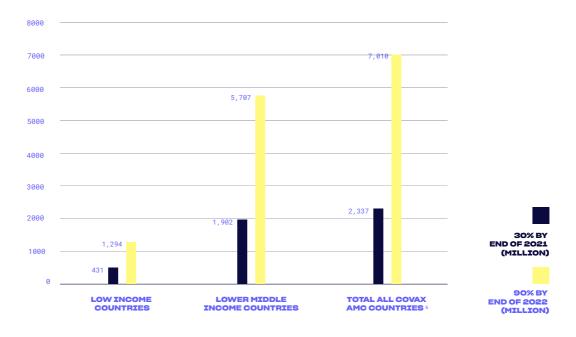
There are many barriers to achieving this goal, however with political will, increased investment of resources, vaccine sharing, broader access to vaccine technology, demand creation, addressing misinformation, and collective action, it is achievable.

It is this ambition for an equitable response to the pandemic that has brought together governments, scientists, business, philanthropists, and global health organisations to create the Access to COVID-19 Tools (ACT) Accelerator. The ACT-Accelerator has created an arm dedicated to vaccines called COVID-19 Vaccines Global Access (COVAX) Facility. The ACT-Accelerator is also working across the range of health responses to the pandemic including testing, oxygen, protective equipment, research and development, and technical assistance.

The COVAX Facility is the only global initiative that is working with governments and manufacturers to ensure COVID-19 vaccines are available worldwide to both higher-income and lower-income countries who may not otherwise be able to procure doses on their own.

This goal must begin with stepping up to achieve the 30% vaccination target for the 92 low and middle income countries⁴ by the end of 2021. This will allow those countries to protect frontline workers and the most vulnerable, however this is just the first step. The next step would be to achieve global vaccination by the end of 2022. To achieve the ambitious goals set would require administering over 7 billion vaccinations to low income countries (LICs) and lower middle income countries (LMICs). All people everywhere should have access to a safe and effective vaccine. While the WHO has set a target of 70% of the world vaccinated by the end of 2022, from experience around the world, it is clear we will need to go further to truly end COVID for all. The details of the vaccination targets are outlined in the table below.

Vaccination Rates Required to Achieve Global Ambition⁵



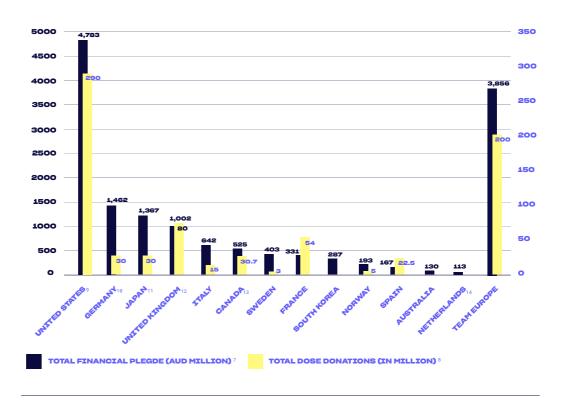
Global momentum is building in support of the COVAX Facility. Despite early challenges often associated with ambitious new mechanisms, in June this year Japan hosted a summit "One World Protected" to mobilise leaders from across nearly 40 donor governments, the private sector, and foundations to raise an additional USD 2.4 billion (AUD 3.3 billion), bringing the total pledged as of August 2021 to USD 9.85 billion (AUD 13.5 billion).

Alongside this, at the June 2021 G7 summit held in the United Kingdom, world leaders pledged to donate 1 billion vaccines both bilaterally and through the COVAX Facility. This brought vaccine donations to COVAX to more than 640 million.



The table below outlines both the financial pledges made to the facility along with the doses donated through the facility by countries comparable to Australia across Europe, North America, and Asia.

Contributions to the COVAX Facility



Alongside this many countries have made bilateral commitments. In Australia's case there are three mechanisms towards which it is contributing:

- 01. Bilateral sharing of Australian owned and produced vaccines with our neighbours in the region.
- 02. Vaccine Access and Health Security Initiative (VAHSI) - Focused on helping to procure vaccines for countries in our region and supporting the rollout of those vaccines.
- 03. The Quad commitment with the US, Japan, and India to support the rollout of 1 billion vaccines.



Our commitments

Throughout the pandemic, the Australian Government has stepped up and contributed to the COVID-19 response in neighboring countries and the broader region. End COVID for All has welcomed those commitments as a reflection of Australia's values. Just as Australia has stepped up in the past, whether during the HIV/AIDs epidemic in the 1990s and 2000s, or following the Indian Ocean tsunami in 2004, so too it is time for Australia to continue to step up to help end COVID for all people everywhere.

Current Commitments from the Australian Government

Mechanism	Doses	Commitment	Timeline	Additional to Existing Aid Budget
COVAX Facility	No doses through vaccine sharing	AUD 130 MILLION	From 2020—2030, utilising the international Finance Facility for Immunisation	NO
Vaccine Sharing ¹⁶	40 million doses	Committed to at least 40 MILLION doses • 15m to the Pacific and Timor-Leste ¹⁷ • 2.5m to Indonesia ¹⁸ • 1.5m to Vietnam ¹⁹	By end 2022	YES
Additional Vaccine Procurement	20 million doses	Procure and share up to an additional 20 million doses	By end 2022	YES
VAHSI ²⁰	The procurement of vaccines for up to 15 million people in the Indo-Pacific region by mid 2022	AUD 523 MILLION This includes a contract with UNICEF worth \$230m to provide vaccines to our region.	Over three years (2020-21 to 2022-23)	YES
Quad Commitment ²¹	The QUAD will boost production by at least 1 billion vaccines	AUD 100 MILLION Australia's contribution will assist with the provision and delivery support in Southeast Asia	Over 2 years (2020-21 and 2021-22)	NO





There are many ongoing barriers to achieving the goal of global vaccination by the end of 2022. These include technical (financing, production, and delivery), legal, and behavioural barriers. This section provides a summary of those barriers and approaches to overcoming them. Ultimately the unfair distribution of vaccination is a consequence of barriers across the supply chain which require global collective mechanisms to solve.

Ultimately, financing of the production and distribution of safe and effective vaccines is the main constraint to achieving the global vaccination goal. The World Bank has made modest assumptions regarding the cost per vaccination in sub-Saharan Africa. Based on these assumptions, we estimate achieving the goal of fully vaccinating the world by the end of 2022 would require between USD 50 billion (AUD 68 billion) and USD 60 billion (AUD 82 billion). Of this Australia's fair share, based on relative wealth, is 1.7%.





Technical Barriers to Global Vaccinations

The supply of the vaccine remains one of the great impediments to achieving global vaccination. This includes both the equitable production and distribution of the vaccine. Scaling up production has been a significant logistical challenge. The global vaccine manufacturing production capacity prior to the pandemic was 5.5 billion doses per annum.²² Recent estimates indicate that the production capacity has expanded to 12 billion for COVID-19 vaccines that could be produced in 2021. While this is an impressive scale up, it is still short of the global requirements and relies on a high level of equity in vaccine purchase and distribution to achieve global vaccination targets.²³

Messenger RNA (mRNA) vaccines are especially well suited to meet this challenge. The mRNA vaccine is simpler, faster, and cheaper to produce on a large scale, and existing sterile injectable manufacturing sites can likely be repurposed.

An analysis by MSF suggests that establishing mRNA vaccine production at an existing manufacturing site in at least one African country could create an annual production capacity of up to 100 million COVID-19 vaccine doses as early as mid-2022 and, based on an analysis from Imperial College London, could cost as little as AUD 174 million.²⁴

Further, both mRNA vaccines, Pfizer Biontech and Moderna, have shown high vaccine efficacy and the platform has shown to be exceptionally quick to adapt to new variants, or even other diseases, thus making expedient technology transfer to low and middle income country manufacturers beneficial in the long-term.

Another challenge is access to the raw materials required to produce the vaccines. There are more than 200 individual components which are required for vaccine production, often manufactured in different countries.²⁵ This has been made more difficult by delays in importing and exporting and the difficulty in experts being able to travel to address challenges.

Another critical focus is the need for technology transfer. Regional hubs are one proposed model which would put the manufacturing much closer to the point of distribution. The WHO has launched the COVID-19 Technology Access Pool (C-TAP) and the South African mRNA technology transfer Hub with the goal of assisting companies to voluntarily share intellectual property and know-how. However, by August 2021 no pharmaceutical company has committed to supporting these mechanisms. For the world to overcome COVID-19, and be prepared for future pandemics, technology transfer is essential. Governments should leverage existing and future investments into research and development to persuade companies to contribute their technologies to these multilateral efforts.

Finally, in the medium term there is a need for a more globally distributed manufacturing capability. If scientific evidence shows there is an ongoing need for booster shots, this capability needs to be expanded, particularly in the Indo-Pacific region.





Distribution is also a significant issue. The WHO estimates that costs of delivery and administration alone to the 92 low and middle income AMC countries will reach over AUD 2.7 billion which is the equivalent of AUD 2.27 per dose or AUD 5.06 per person vaccinated.²⁶

In many instances the cost is much higher. A recent study from CARE International found the cost in South Sudan above AUD 13.50 per dose and AUD 27.00 per person vaccinated. 27

The African Centre for Disease Control (African CDC) is tracking the administration of vaccines. As of 27 August 2021, 72% of the 130 million doses supplied to Africa have been administered.²⁸ This reporting is welcome because you cannot fix what you cannot measure. Vaccines are only effective when they have been administered in people's arms.

Australia has recently commenced reporting on the number of vaccine doses it has directly shared with its regional neighbours. Following the lead of the African CDC, this reporting could be enhanced by also monitoring and reporting on the rate of vaccines administered. Initially this should be at a country by country level, however over time further tracking should be done to ensure everyone, no matter where in a country, can access a safe and effective vaccine.

Another significant constraint on distribution in the Indo-Pacific region has been the export ban imposed by India. Following the imposition of export constraints by the European Union early in 2021 and similar challenges with the United States, after the serious outbreak in India, the government stopped the export of Oxford AstraZeneca vaccine. The WHO reported this will have an impact on those countries participating in the COVAX Facility, particularly in Africa.²⁹

Finally, the risk of future variants requiring the need for booster shots is leading to HICs hoarding vaccines in anticipation of this eventuality. Many HICs have vaccine contracts in place that far exceed the doses needed to vaccinate their populations. Some prudent risk distribution is necessary to manage limitations in supply, changing health advice, and limitations in efficacy to variants. However, HICs like Australia should be prioritising vaccine sharing once they are confident of supply for their own eligible population to receive a first full round of vaccinations.

Legal Barriers to Global Vaccinations

The WHO has called on countries to support the waiver of several sections of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) at the World Trade Organization to remove intellectual-property barriers to COVID-19 vaccines, treatments, and tests. If adopted, the TRIPS waiver would provide countries with an expeditious way to remove key intellectual property (IP) barriers and legal risks in the pandemic and facilitate the scale-up vaccine production.

IP rights waivers will play an important role over the medium term in producing vaccines at sufficient scale to vaccinate the world. Many of the vaccines which have been developed have been the result of partnerships between universities and pharmaceutical companies, supported by government funding. Global pharmaceutical companies have a responsibility to contribute to ensuring that all people everywhere can access safe and effective vaccines. This will involve simplified IP rights which encourages voluntary licensing from IP rights holders without placing unwarranted restrictions on geography or volume of production. It will also require sharing of technology and know-how.

Oxford AstraZeneca and Sinopharm have both undertaken voluntary licensing agreements with countries such as South Korea, Australia, India, and Serbia. However, there are no such agreements with the manufacturers of mRNA vaccines.

If this voluntary and proactive approach from IP rights holders can be achieved, it will lessen the pressure for forced IP waivers and other more extensive reform to the global IP system. IP rights waivers alone will not increase production capacity, nor will they build the technology and know-how required to produce particularly complex vaccines such as mRNA vaccines.





Behavioural Barriers to Global Vaccinations

Across the world vaccine hesitancy and the spread of misinformation is a significant issue.

The spread of the virus combined with the rates of vaccination required to achieve widespread community protection mean that addressing vaccine hesitancy to increase vaccine uptake is critical. However, when assessing the causes of under-vaccination in different settings, it is imperative that both the access and acceptance barriers are diagnosed, as not all low vaccine coverage is due to vaccine hesitancy. To convert positive intentions to behaviour of being vaccinated, or vaccine uptake, practical barriers also need to be overcome (travel, time off work to attend an appointment) and may be facilitated by prompts or reminders. Thus, understanding the complex matrix of social and behavioural drivers of vaccination in each context is critical.³⁰

Monitoring of vaccine sentiment throughout the pandemic has identified low intention to vaccinate in many settings, which fluctuates over time depending on disease threat and vaccine safety signals predominantly. In January 2021 a poll taken in Australia's nearest neighbour, Papua New Guinea, found 77% of respondents did not want to be vaccinated,31 with a more recent poll in May finding 48% did not want to be vaccinated.32 Similar results were found in the Solomon Islands where only 48% of participants indicated a willingness to get vaccinated. 33 Misinformation has contributed to vaccine hesitancy, particularly through social media and word of mouth. Conspiracy theories and rumors have mostly centered around vaccine safety, such the COVID-19 vaccines containing micro-chips, the mRNA COVID-19 vaccines being capable of altering peoples DNA, or potential impacts on fertility.

Changing advice and messaging from Australian authorities in response to the changes in disease burden

"It's one thing to have political leaders speaking on the television telling people broadly what needs to be done, it's quite another to have somebody understand as a person and an individual in a particular context why the story that they've been Richard Mihioo told is not true."

WHO Africa

and community transmission and vaccine safety information has fueled uncertainty around weighing the risks and benefits of the vaccines. This has been most striking with the Oxford AstraZeneca vaccine and the age-related risk of thrombosis with thrombocytopenia (TTs), and subsequent preference individuals over the age of 60 vears to receive the AstraZeneca vaccine in Australia, has contributed to doubts and hesitancy. This is despite the World Health Organization endorsing the vaccine as safe and effective for emergency use

and classifying the risk of vaccination as very low, and the benefit as very high.

Achieving the high vaccination rates required to end the acute phase of the pandemic will require ongoing assessment of the social and behavioral drivers of vaccination, and monitoring of vaccine sentiment, to strengthen vaccine confidence and boost vaccine acceptance. Community engagement and risk communication strategies are the cornerstone to building trust and vaccine confidence in diverse communities and groups. This is consistent with recent comments from Richard Mihigo, coordinator of the Immunization and Vaccine Development Programme for

WHO in Africa. He said, "It's one thing to have political leaders speaking on the television telling people broadly what needs to be done, it's quite another to have somebody understand as a person and an individual in a particular context why the story that they've been told is not true." Furthermore, World Vision has done barrier analysis in six countries (Bangladesh, India, Myanmar, Kenya, Tanzania, and DRC)³⁴ which suggests that endorsement of vaccination by religious and community leaders is a critical ingredient in community acceptance and uptake.

Additionally, the access related barriers and supply issues need to be addressed to ensure all drivers of under-vaccination are identified and addressed. In most low income country settings, practical barriers to vaccination may play just as big a role, if not more, than vaccine hesitancy and so to tailor effective strategies, the range of barriers need to be accurately diagnosed in each setting and population.³⁵

Culturally contextualized strategies to generate confidence, acceptance, and demand for the vaccine are urgently needed in many countries and require significant investment, as is currently being done to develop new vaccines and treatments for COVID-19. It is vaccination that will ultimately save lives, not vaccines, and equitable investment in vaccine deployment, implementation and acceptance is now urgent to achieve the high vaccine uptake needed globally to end this pandemic.













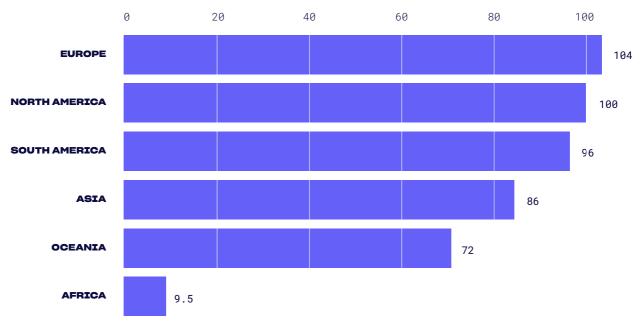
Vaccination Rates in Low Income Countries



The existing vulnerabilities of people in Low Income Countries are significant

Vaccination rates for low income countries (LICs) around the world are still very low. The percentage of people in LICs who have received a first dose as of September 2021 was only 2% of the population.³⁶ At the rates of vaccination in July and August 2021 only three LICs (Mozambique, Nepal, and Tajikistan) are on track to reach the target of 70% of the population fully vaccinated by the end of 2022. Only four were on track to achieve this target by the end of the decade (Afghanistan, Malawi, Rwanda, Sierra Leone). While the remaining 23 countries have such low rates of vaccination that achieving the 70% coverage was projected to be beyond 2030. This rate of vaccination continuing unaddressed creates risk of new variants, undermines health security, will continue to have global economic consequences, and risks political instability.

Covid doses administered by continent



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Vaccination Rates for Low Income Countries

Country	2020 Population (Thousand) ³⁷	Reported Doses	Current Daily Doses	% people with Single Dose	Projected Date 70% ³⁸	Last Updated Date
Afghanistan	38,928	1,979,652	70,760	6.25%	Sep 2023	31/08/2021
Benin	12,123	141,738	3,393	0.40%	2035	1/09/2021
Burkina Faso	20,903	108,799	1,266	0.55%	2086	31/08/2021
Central African Republic	4,830	108,895	1,448	2.60%	2034	25/08/2021
Chad	16,426	68,267	3,040	0.48%	2042	2/09/2021
Congo, Dem. Rep.	89,561	111,142	2,542	0.13%	2160	5/09/2021
Ethiopia	114,964	2,575,687	20,205	2.20%	2043	6/09/2021
Gambia, The	2,417	351,281	3,322	15.76%	Mar 2024	26/08/2021
Guinea	13,133	1,251,226	15,351	9.89%	Oct 2024	3/09/2021
Guinea-Bissau	1,968	31,090	44	1.58%	2195	23/08/2021
Haiti	11,403	41,629	1,651	0.41%	2048	3/09/2021
Liberia	5,058	113,680	793	2.43%	2046	23/08/2021
Madagascar	27,691	283,091	1,238	1.00%	2109	6/09/2021
Malawi	19,130	911,292	4,656	4.67%	2037	6/09/2021
Mali	20,251	344,151	5,367	1.68%	2036	6/09/2021
Mozambique	31,255	2,297,842	88,849	10.80%	Dec 2022	25/08/2021
Nepal	29,137	10,536,178	122,090	36.00%	May 2022	6/09/2021
Niger	24,207	491,738	357	1.97%	NA	28/08/2021
Rwanda	12,952	2,569,906	49,453	19.82%	Jul 2022	6/09/2021
Sierra Leone	7,977	193,557	1,418	2.57%	2043	27/08/2021
Somalia	15,893	310,005	2804	1.92%	2043	2/09/2021
South Sudan	11,194	59,865	387	0.53%	2133	6/09/2021
Syrian Arab Republic	17,501	388,520	2,578	2.35%	2048	22/08/2021
Tajikistan	9,538	2,808,056	69,039	33.92%	Feb 2022	31/08/2021
Tanzania	59,734	304,603	7,165	0.61%	2054	28/08/2021
Togo	8,279	651,941	7,277	7.88%	Nov 2025	5/09/2021
Uganda	45,741	1,395,318	8,133	3.05%	2043	2/09/2021
Yemen, Rep.	29,826	311,483	939	1.15%	2145	27/07/2021

BY END 2022 BY 2030 BY 2050 BY 2100	0 AFTER 2100 NA
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Existing Health Situation in Low Income Countries

While over time it is expected that vaccination rates will grow, this is a poor start from the global community. The existing vulnerabilities of people in LICs are significant:

- Maternal mortality 70 times higher than in Australia
- Neonatal mortality 11 times higher than in Australia
- Child under five mortality rate 18 times higher than in Australia
- Life expectancy 18 years shorter than in Australia
- Universal health coverage index half that of Australia

Source: Sustainable Development Report 2021³⁹





COVID-19 has had a global impact on every part of the world and every part of life. It has had a particularly harsh impact on those living in poverty. This section provides a summary of those impacts and the consequences for different dimensions of poverty both globally and in our region.

Extreme Poverty

Initial estimates from the World Bank were that up to 150 million more people would end up in extreme poverty⁴⁰ because of the pandemic. More recent work done by the International Monetary Fund⁴¹ published in April 2021, indicates 75 million people have been pushed into extreme poverty during the pandemic. However, even more concerning, by 2024 there is little sign of recovery with 60 million people still in extreme poverty as a result of COVID-19 than would otherwise have been the case. The Asian Development Bank paints an even more concerning picture, estimating that 75 to 80 million people in developing countries in Asia were pushed into extreme poverty as a result of the pandemic.⁴² This reality puts at serious risk the achievement of the Sustainable Development Goals, reversing decades of hard won gains in poverty reduction, health, education, food security, and gender and disability inclusion. To achieve the goal of ending extreme poverty by 2030 will require both immediate action to end the acute phase of the pandemic and long-term investments in rebuilding.

Health

There is growing evidence that the health consequences are stretching beyond the direct impact of the COVID-19 disease in low and middle income countries. A recent pulse survey by the WHO of 135 countries found 90% of countries reporting one or more disruptions to essential health services. ⁴³ This has seen fewer other services such as vaccines for cervical cancer, polio, measles, and yellow fever.

Recent early research work suggests impacts on nutrition health in children including an additional 9.3 million experience wasting and 2.6 million experience stunting leading to 168,000 additional child deaths.⁴⁴ This not only has an immediate impact on child health and survival but also a long-term impact on education, wellbeing, and productive capacity. It is estimated the increase in stunting alone could lead to 4.4 million years of school lost. In the long term this could see a loss of \$29.7 billion in productivity.⁴⁵

Education

The consequences of the pandemic have stretched far beyond health to every aspect of human development. 1.5 billion children have been impacted by school closures due to COVID-19. 463 million children have been unable to access remote learning due to a lack of internet access at home. While 86% of Australian households have access to the internet only 6% of children in LICs have access to the internet at home. This could have a permanent impact on children's learning with up to 10 million children permanently forced out of school and up to 72 million children falling into learning poverty.



Food Security

COVID-19 has also impacted global food security. While over 690 million people were experiencing hunger prior to the pandemic this situation has deteriorated. Between 720 and 811 million people in the world faced hunger in 2020 – as many as 161 million more than in 2019, before the pandemic. More than half of people affected by hunger in 2020 were in Asia and more than one third in Africa. After remaining virtually unchanged for five years, the prevalence of undernourishment – an estimate of the proportion of the population facing serious food deprivation – increased 1.5 percentage points in just one year – reaching a level of around 9.9%. The nutrition crisis disproportionately affects women. The prevalence of moderate or severe food insecurity was 10% higher among women than men in 2020, compared to 6% in 2019⁴⁶.

Gender Equality

UN Women in May 2020 launched a campaign highlighting the 'shadow pandemic'.⁴⁷ As a result of the pandemic there has been less access to sexual and reproductive health and increases in domestic violence. Women have taken on increased caring responsibilities as a result of lockdowns while also experiencing higher levels of insecurity in work. Globally, women make up 70% of the health and social care workforce making it imperative that women have equal access to vaccination.

Disability Inclusion

Over 1 billion people, or 1 in 7 of the global population, live with some form of disability and over 80% of these people live in lower income countries. The World Health Organization has identified people with disabilities as one of the most vulnerable populations in public health emergencies that are disproportionately affected by the health, social, and economic impacts of COVID-19.⁴⁸ Evidence shows that people with disabilities are two to three times greater risk of dying from COVID-19 than people without disabilities.⁴⁹ It is critical that people with disabilities are prioritised for vaccinations, including addressing specific barriers to access vaccines, such as providing information in accessible formats (such as braille, and sign-language) and making vaccination clinics fully accessible. The COVID-19 pandemic is deepening pre-existing inequalities⁵⁰ and could reverse economic and social gains achieved through investment in disability inclusion.



The Impact of COVD-19 on the Most Vulnerable

A recent survey undertaken by World Vision of refugees and internally displaced persions (IDPs) respresenting 1,914 people, found:

- Only one person interviewed reported receiving a COVID-19 vaccine
- 68% of those interviewed had not heard of plans for vaccinations in their community
- 47% thought they were not eligible or did not know if they were eligible for a vaccination
- 72% of respondents reported an income drop, 40% said they lost a job, and 77% said they could not meet their food needs
- 36% of refugees and IPDs reported they didn't know if they would take the vaccine or were very unlikely to get vaccinated

Source: High Risk - Low Priority: Why unlocking COVID-19 vaccine access for refugees and internally displaced



Our Region

State of the Pandemic in Australia's Top Development Partners in the Region

Country	Confirmed COVID-19 Cases per Million	Confirmed COVID-19 Deaths per Million	Fully Vaccinated % (Total Population)
Papua New Guinea	1,975	21	0.3%
Indonesia	14,983	492	14.1%
Solomon Islands	28	NA	2.9%
Timor Leste	13,311	60	14.8%
The Philippines	19,103	309	13.6%
Vietnam	5,613	133	3.4%
Vanuatu	13	3	2.8%
Cambodia	5,685	115	53.1%
Myanmar	7,671	290	3.3%
Fiji	53,332	576	29.5%
Laos	2,218	2	24.9%

Source: Our World in Data, World Bank, 7 September 2021.

The pandemic continues to rage across our region, with Southeast Asia now a hotspot, particularly for the Delta variant on the rise in Indonesia, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam.⁵² Civil unrest in parts of the region and overstretched health systems is likely to account for significant under-reporting. Despite this, vaccination rates for Australia's Southeast Asia development partners, with the exception of Cambodia, continue to lag significantly behind Australia.

Many countries in our region with economies reliant on tourism and remittances suffered significant economic and social consequences as a result of hard borders and restrictions on international travel. The Lowy Institute is warning of a "lost decade" because of the impact of international tourism decline and the limited ability of Pacific Island governments to mobilise fiscal stimulus. 53 They estimate the cost of recovery at AUD 5 billion. As a regional leader Australia has a vital role to play in this recovery.

Finally, the lack of social protection systems in many countries is amplifying the economic pressures associated with the pandemic, contributing both to rising poverty and the potential for regional



instability. In Solomon Islands, 57% of surveyed households reported reducing their food consumption in order to make ends meet.⁵⁴ In Papua New Guinea, 35.5% of households reported selling their harvest in advance while 29.9% were forced to spend from their already small savings.⁵⁵

A recent World Vision survey of 752 households in late 2020 in PNG, Solomon Islands, Timor-Leste and Vanuatu, found similar results. Almost 60% of respondents had either lost their job, lost income, or resorted to alternative sources of income due to the economic impacts of the pandemic. In the face of this economic hardship, 14% of surveyed households sent their children to work to make up for lost income. One in five households reported skipping meals or eating cheaper meals since the pandemic. Access to every form of healthcare, including hospitals, health clinics and maternal health centres, has decreased since the onset of COVID-19. There are concerns that gains made in recent years on maternal and child health, TB, HIV and malaria could be undone. The sooner the region is vaccinated, the sooner livelihoods and lives can be rebuilt.⁵⁶

Many of the current social protection transfers in the Pacific are targeted to those who are currently in employment, leaving the poorest households and those most impacted by job losses related to the pandemic and lockdown measures to fall through the gaps. It is critical that Australia works not only to end this acute phase of the pandemic, but to invest in Pacific island states' ongoing resilience to shocks.



The Impact of COVID-19 on Fiji

In April to July 2021, Fiji experienced its worst outbreak of the pandemic so far, reaching 27,000 confirmed cases and more than 200 deaths. This in a country with a population of only 900,000 was devastating. While Fiji has raced to vaccinate its population. As of August 2021 the total population was only 30% fully vaccinated.

This came off the back of a devastating economic contraction in 2020 as a result of the border closures. The economy is predicted to contract by more than 20% having a very substantial impact on the unemployment rate and government revenues.



The Impact of COVID-19 on Myanmar

Early in the first wave Myanmar had limited impact from COVID-19 with just 360 cases and 6 deaths recorded. However, from mid-August 2020, Myanmar was overwhelmed with over 1000 cases per day by mid-October. Myanmar's fragile health infrastructure could not cope. Alongside the limitations of the health system, including inadequate testing capacity and unprepared health system, declines in income and food shortages along with civil unrest exacerbated the situation.

Recent research the United Nations Development Program (UNDP) finds that the consequence of the ongoing political crisis combined with pandemic could push 12 million people into poverty leading to half the population living below the national poverty line. This reverses hard won gains over the previous 12 years. Those most affected are likely to be women and children with half of Myanmar's children likely to be living in poverty by 2022.

Source: Myanmar's response to the COVID-19 pandemic 57 and COVID-19, Coup d'Etat and Poverty: Compounding Negative Shocks and Their Impact on Human Development in Myanmar 58





Imperative to Achieve Global Vaccination

"The potential emergence of vaccine-resistant virus strains poses a risk to all countries"

There are many imperatives for pursuing global vaccination including the universal right to health and wellbeing, the impact on global and regional stability, and the consequences for extreme poverty. Below are another two critical imperatives for Australia and the region and a brief outline of the health and economic case for Australia committing to an ambitious global vaccination goal.

While early in the pandemic there was a perception that managing the health response needed to be balanced with the economic consequences⁵⁹, the evidence is now clear that countries that have had effective health responses have had a better economic performance.⁶⁰

The August 2021 statement by the Reserve Bank of Australia put it starkly:

"Slow vaccinations, limited vaccine supplies and large recent outbreaks have weighed on the recovery prospects in many emerging market economies, including in Asia"

"Similarly, severe pandemic-related disruptions and limited policy responses are likely to have resulted in significant economic scarring in many emerging economies; business closures and skill losses will contribute to this. As a result, the level of GDP is expected to remain well below pre-pandemic paths for an extended time in many emerging market economies"

"In the near term, further outbreaks of the highly transmissible Delta variant could slow the recovery, particularly in countries with low vaccination rates. The potential emergence of vaccine-resistant virus strains poses a risk to all countries. Conversely, reduced circulation of the virus and a faster rollout of vaccines, particularly in emerging market economies, could speed up and strengthen their recoveries relative to current projections." 61

Health Imperative of Achieving Global Vaccination

Providing assurance to the population of LICs that vaccines are safe and effective is critical to overcoming vaccine hesitancy and achieving vaccination rates that can end the acute phase of the pandemic.

Another critical element of the health imperative of vaccinating LICs and LMICs, which make up 50% of the world's population, is to reduce the risk of variants emerging. The rise of the Delta variant of the COVID-19 virus across the world has demonstrated the critical need for rapid, and widespread vaccination. Without rapid, widespread vaccination to slow mutation there is a significant risk that variants will not respond to existing vaccines or boosters, similar to what has been seen with multi-drug resistant tuberculosis. In a survey of 77 epidemiologists from 28 countries, two-thirds believed that it would take less than a year before the virus mutates to the point where the majority of first-generation vaccines are rendered ineffective. ⁶² This would have the consequence of resetting the COVID clock.

Further mutations will also increase the demand for vaccine boosters, particularly in HICs. However, critical to ending COVID-19 for all is ensuring the vaccine distribution is equitable. While third shots for the elderly and vulnerable in rich countries may be a part of an effective vaccination program, valuable manufacturing capacity should not be prioritised for population wide booster vaccinations while much of the world remains off track to meet the 2022 goal. Global vaccine coverage with initial doses should be a prerequisite before supplementary booster doses are manufactured and distributed anything other than this would be 'skipping the queue'.

It is also imperative that we vaccinate to protect hard fought gains in health security in our region. Decades of investment in HIV/AD, tuberculosis, and malaria could be reversed if we fail to vaccinate and continue to see health systems disrupted. A recent report from The Global Fund found significant disruption to diagnosis and treatment of infectious diseases across 32 low- and middle-income countries in 2020. In surveyed facilities in seven countries across Asia, malaria diagnoses fell 56%, and malaria treatment services plummeted by 59%. 63



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Economic Imperative of Achieving Global Vaccination

The global economy has been severely impacted by the pandemic. The global economy contracted by 4.3% in 2020 and the World Bank projects slower than trend growth out until 2025. Australia experienced its first recession in nearly 30 years.

In the first stage, control of the pandemic was achieved through lockdowns, border closures, and contact tracing, and in the second stage through national vaccination programs. However, to achieve a full economic recovery requires widespread global vaccination.

The US National Bureau of Economic Research Study estimates that, in the most likely scenario (where people in advanced economies are fully vaccinated in 2021 and only half of those in developing countries are vaccinated), the global economy would suffer losses of between AUD 2.5 trillion and AUD 5.2 trillion. This outcome reflects the substantial interdependences which characterize the global economy and the ongoing pandemic's impact on international trade and global demand. More than half of these estimated impacts would be borne by advanced economies.⁶⁴

This scenario, which is the most optimistic modelled, incorporates ambitious assumptions (more ambitious than the current vaccination trajectory). Under this scenario Australia would experience a reduction in GDP of between 0.37% and 1.63% compared with the alternative of achieving full global vaccination. This represents an annual loss of GDP of between AUD 7.6 billion and AUD 33.7 billion. This is consistent with recent KPMG modelling which projects a smooth international rollout could have a AUD 17 billion economic benefit and generate nearly 40,000 jobs.⁶⁵

Australia currently has a four-stage National Plan to transition Australia's National COVID-19 Response. Australia is currently within Phase A, with movement to Phase B and Phase C based on national vaccination targets. However, there is currently no threshold for the final phase. This phase includes open international borders with quarantine only for high-risk inbound travel and uncapped arrivals. While the near-term priority for Australia remains achieving the vaccination rates required to move through phases B and C, failing to plan and invest now in the necessary pre-conditions for Phase D will further delay Australia's recovery.

Reaching this phase is essential for the recovery of sectors of the economy that are highly reliant on international travel and migration, including agriculture, international tourism, and tertiary education.

As the Reserve Bank of Australia noted in May:

"Prior to the pandemic, population growth was noticeably faster in Australia than most other advanced economies. This is a key reason why the rate of economic growth in Australia had exceeded that in many advanced economies at that time. Faster population growth was also reflected in employment growth in Australia being stronger than seen in many other advanced economies."

Migration is a critical contributor to Australia's workforce and economic prosperity. In the agriculture sector alone Ernst & Young estimated a shortfall of 26,000 workers.⁶⁷ Despite the provision of some incentives, there remained a shortfall in the peak harvest season with a loss of \$45 million due to a worker shortage.⁶⁸

For companies to efficiently and confidently source regional workers through schemes such as the new Agricultural Visa, the Pacific Labour Scheme, and the Seasonal Worker Scheme it will be imperative that higher vaccination rates are achieved in our neighboring countries. However, agriculture is not the only sector experiencing challenges because



of travel and migration restrictions with many companies reporting labour shortages which will become a handbrake on recovery in the absence of border reopening and high international vaccination rates.

In 2019, Universities Australia estimated the value of the international education sector at AUD 40.3 billion in export income. About 53% of this comprises spending from international students on goods and services domestically with the remaining 47% comprising student fees, contributing over AUD 21 billion to the wider Australian economy. ⁶⁹ In addition, this sector is an important source of jobs, with some 130,000 jobs reliant on the international education sector. ⁷⁰

The pandemic has brought this sector to a halt. In October 2019, 51,000 international students arrived in Australia. In October 2020 numbers had fallen to just 130.71

In 2018-19 Tourism Australia estimated the international overnight tourism spend was AUD 45.4 billion, representing 36% of the total tourism spend. The contribution to national GDP was estimated to be AUD 60.8 billion. The tourism industry employs 666,000 Australians. Of the total spent by international tourists, AUD 4.5 billion is spent in regional Australia where tourism accounts for 4.1% of the GDP and 8.1% of the workforce. In 2019 there were 26.8 million plane seats into Australia.

Of the over 950,000 international students enrolled in 2019 over 340,000 (36%) were from LIC or LMIC including over 70,000 from LIC alone. Also, according to Tourism Australia, of the over 9 million people who arrive in Australia each for a holiday each year, over 1 million (12%) come from LIC and LMIC.

The Federal Government's 2021-22 Budget Papers assumed a gradual return of temporary and permanent migrants from mid-2022. Small, phased programs for international students were expected to commence in late 2021 and gradually increase from 2022. The Budget Papers further noted that inbound and outbound international travel is expected to remain low through to mid-2022 after which a gradual recovery in international tourism is assumed to occur.

The Reserve Bank of Australia continues to warn of an uneven recovery. In its August 2021 Statement on Monetary Policy,73 it noted:

"The recent outbreaks of the Delta variant of the COVID-19 virus are interrupting the recovery. The near term outlook is highly uncertain and dependent on health outcomes. Further large outbreaks are possible, but the need for extended lockdowns should diminish as vaccination coverage increases."

Achieving global vaccination, which would allow for the much freer movement of people to and from Australia, is critical to the recovery of the Australian economy and for the region.



Regional Stability Imperative of Achieving Global Vaccination

The pandemic has exposed and exacerbated inequalities in developing countries in Southeast Asia and the Pacific. This has undermined social contracts, political trust and future resilience to other existing and emerging threats such as intensified geopolitical competition and the growing impacts of climate change. The longer the pandemic rages, the worse these regional impacts will be.⁷⁴

Particularly in the Pacific, youth unemployment is a significant contributor to social unrest, impacting on political stability. Recent analysis has shown that the pandemic has contributed to even higher rates of unemployment amongst young people aged 15-24. Already vulnerable to job loss due the precarious state of their work, this has long term impacts on their life opportunities.

Recent unrest in Fiji highlights the risks in our region as a result of widespread job losses, concerns about food insecurity, and ongoing frustration about restrictions.⁷⁵

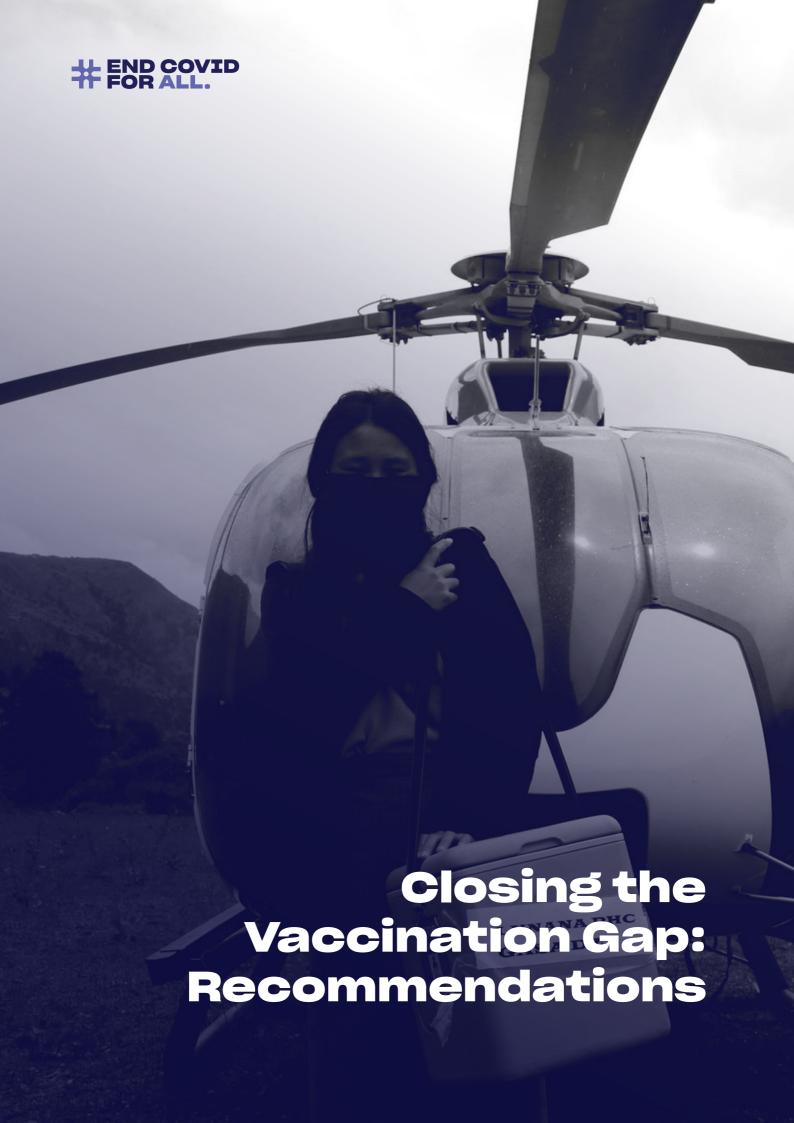




Our Contribution

Roadmap to Australia Contributing to Closing the Vaccination Gap

		2020 & 2021 (Jan-Sep)	Q4 2021 (Oct-Dec)	Q1 2022 (Jan-Mar)	Q2 2022 (Apr-Jun)	Q3 2022 (Jul-Sep)	Q4 (Oct-Dec)
	COVAX Commitment	AUD 130 million					
Existing Commitment	Vaccine Sharing	At least 40 million doses: • Up to 15m to the Pacific and Timor-Leste by mid-2022 • 2.5m to Indonesia in 2021 • 1.5m to Vietnam in 2021					
	Vaccine Access and Health Security Initiative (VAHSI)	AUD 523 million The procurement of vaccines for up to 15 million people in the Indo-Pacific region by mid-2022.					
	Vaccine Procurement & Sharing	Up to 20 million doses					
New Commitments	COVAX Finance Commitment		AUD 150 million contribution to COVAX AUD 100 million contribution to COVAX				
	COVAX Vaccine Sharing			20 million doses			
	Dosage Sharing Targets		2 million per month	4 million per month	4 million per month	5 million per month	5 million per month
	Vaccine Hesitancy	AUD 50 million addressing vaccine hesitancy in Southeast Asia and the Pacific (10% VAHSI)					
	Rapid ACT-Accelerator Delta Response (RADAR) Appeal		AUD 170 millic	on contribution to	RADAR		
Upcoming Events		G20 Summit 30-31 October		AUS achieves 80% coverage (Dec/Jan 21)		Federal Budget 10 May	



Seven Key Recommendations

Below are seven key recommendations the End COVID for All coalition are calling on the Australian Government to commit to as an expression of their commitment to global vaccination. These should be pursued in conjunction with continuing to implement Australia's own vaccine rollout. Vaccine equity should be a touchstone of all efforts to rollout vaccinations, whether in Australia, in our region, or around the world. Our support for global vaccine equity need not be at the expense of local vaccine supply.





COVAX Finance Commitment:

- 1.1 The Australian Government commits an additional AUD 150 million to the COVAX AMC Facility at the G20 Summit in October 2021.
- 1.2 The Australian Government commits an additional AUD 100 million to the COVAX AMC Facility in the 2022-23 Federal Budget.

The COVAX AMC Facility leverages global expertise in distributing and administering vaccines to lower transaction costs, mitigate the risk of supply shortages, get a better price and allocate vaccines equitably. Australia has already made commitments to COVAX totaling AUD 130 million. However, analysis of comparable countries shows that if Australia gave the average commitment (based on wealth), it would require an additional AUD 221million (2.7 times Australia's current commitment).⁷⁶

While Australia has a long-standing commitment to the Indo-Pacific region, and particularly to the Pacific and Timor-Leste, global mechanisms such as COVAX are the key mechanism by which Australia can commit to supporting LICs, almost all of which are outside of the Indo-Pacific. It is also critical to Australia having a seat at the table in the setting of global standards and responding to future global challenges. Investment in COVAX will be essential to any role Australia has in the future of global health governance.

The initial commitment of AUD 150 million would bring Australia more in line with other comparable countries. This would be a vital boost to achieving the 30% coverage target for LICs and LMICs by the end of 2021. It would also mean Australia was continuing to scale its global contribution through financing commitments, while continuing its own vaccine rollout in Australia.

The second commitment of AUD 100 million recommended for Australia's contribution to the COVAX AMC Facility, would bring it up to Australia's fair share contribution to meeting the goal of vaccinating the world by the end of 2022. An increased investment in COVAX would bring our global and regional commitments into greater balance. A commitment to COVAX also includes a no-fault waiver for recipient countries. It also provides access to a broader portfolio of vaccines, mitigating against supply, health advice, or efficacy issues.

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COVAX Vaccine Sharing Commitment:

- 2.1 The Australian Government commits 20 million doses to the COVAX Facility.
- 2.2 The Australian Government commits to achieve at least 2 million dosages shared per month by the end of 2021 and at least 5 million dosages shared per month by the mid 2022.

Unlike other rich countries, Australia has also made no vaccine sharing commitments to the COVAX Facility. Analysis of comparable countries shows that if Australia were to give a commitment equivalent to the average of comparable countries it would commit between 15m and 20m doses. Donations to the COVAX Facility leverage existing vaccine distribution capability and ensure vaccines get to where they are most needed. With the very low vaccination rates in LICs in particular, COVAX is the most efficient and effective mechanism for getting vaccinations to those countries in a timely way.

However, Australia's domestic manufacturing capability should mean that it is well positioned to scale up its vaccine sharing commitments once the initial rollout in Australia reaches the 80% threshold. Based on the Doherty modelling and the National Roadmap this 80% target is on track to be achieved in the final months of 2021.78 This should see significant vaccine supply available to meet both existing bilateral commitments and this new commitment. Current estimates indicate that even accounting for boosters, Australia's contract commitments are 100 million doses in excess of requirements.79

Again, this commitment, like the financing commitment, would balance Australia's regional and global commitments. Alongside this, Australia should continue a steady trajectory to reach a sharing rate of at least 2 million per month. This should continue to scale to at least 5 million during 2022. Alongside this commitment, Australia should continue to track the rate of administration of vaccines it is sharing, particularly bilaterally, to ensure they are administered in a timely way and any distribution or take up barriers can be addressed quickly.





Vaccine Equity:

3.1 Australia's mass domestic rollout of booster shots, beyond priority groups, in 2022 must be accompanied by accelerated and expanded efforts by Australia to ensure that our region and the world's most vulnerable populations have improved access to safe and effective vaccines.

Based on Australia's current domestic manufacturing capability and currently contracted vaccine dosages, there should be ample supply in 2022 to do both vaccine boosters and significantly increase Australia's efforts in the region and globally. The Australian Government should ensure it has done its fair share globally to ensure vaccine equity (see Recommendations 1- 4). Achieving the 30% vaccination rate in lower income countries by the end of 2021 is so critical to reaching frontline workers and the most vulnerable. Vaccine boosters should be based on scientific evidence and prioritise the elderly and those with underlying conditions getting booster shot as part of an effective vaccine course.

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Addressing Vaccine Hesitancy:

- 4.1 The Australian Government invests at least 10% of the AUD 500 million Vaccine Access and Health Security Initiative into addressing vaccine hesitancy in Southeast Asia and the Pacific through strengthened partnerships with trusted, community led organisations.
- 4.2 The Australian Government reports publicly at least monthly on its bilateral sharing commitments including dosages delivered and administered at a country level

Vaccine hesitancy is a feature of the rollout all around the world. The evidence is clear that trusted, community leaders, and organisations are essential in addressing that hesitancy. In order to achieve adequate vaccine demand, communities must be well-informed with accurate information about vaccines and their benefits. There is no point overcoming all the challenges in production and distribution (the supply chain) if investment is not going into increasing take up (the trust chain). AUD 50 million is a modest investment in ensuring the millions of vaccines Australia is distributing to the region are making it into people's arms.

This funding should be used to fund national government efforts to build confidence and trust in the COVID-19 vaccine through tailored and targeted education programs and awareness campaigns. Awareness activities should be tailored to the local context, using trusted local leaders to share accurate medical information in the local language across various media channels about COVID-19, vaccine safety and the rollout. Demand creation activities could also include conducting barrier analyses to identify local obstacles to vaccine take-up, conducting training workshops for local leaders, churches, and community groups to gauge and change community attitudes, working with media organisations to share accurate information, and holding community forums with trusted public figures to dispel myths. Investing in demand creation activities like this will help ensure value for money from much larger investments that the Australian Government is making in vaccine distribution, ensuring vaccines are not only made accessible, but used to protect against COVID-19.

In addition, Australia needs to expand its transparency on its bilateral vaccine sharing. Currently it reports regularly on the number of vaccines it has distributed. However, this is not matched by data on how many of those are administered. This will ensure accountability so that vaccines are not shared which cannot be distributed. If reported at a country level it will highlight where increased effort should be focused on distribution and take up.

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Responding to Delta: Beyond Vaccines

- 5.1 The Australian Government commits AUD 170 million to the Rapid ACT-Accelerator Delta Response (RADAR) urgent appeal.
- 5.2 The Australian Government establishes a rapid response framework and fund which can be triggered by predetermined thresholds to deliver a surge response to outbreaks in the Indo-Pacific region. The framework should include commitments on:
 - Vaccines based on population, scale of outbreak, and current vaccination rate
 - Equipment
 - Expertise
 - Finance
 - Capacity building

Outbreaks will continue to occur in our region and around the world until a critical mass of vaccination has been achieved. The RADAR urgent appeal of AUD 10.5 billion will be used for:

- Ten times more testing, with an emphasis on lower income countries
- Oxygen for the seriously ill
- · Protective gear for 2 million healthcare workers
- Research and development to keep pace with the virus
- Technical support and flexible funding for countries as they roll out vaccines, tests, oxygen, and protective gear

A contribution from Australia of AUD 170 million is commensurate with our wealth and is a small investment to tackle the pandemic on all fronts.

Australia should also prioritise timely and generous response packages. To enable the more timely and effective activation a dedicated fund should be established along with vaccine and other supplies contingency. This would allow for rapid scalable responses in our region.

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Scaling Australia's Regional Response:

- 6.1 The Australian Government invests in domestic production capability to produce an additional 50-100 million vaccines to sell at cost in southeast Asia.
- 6.2 The Australian Government supports the establishment of a World Health Organization mRNA technology transfer hub in the Indo-Pacific.

With the scale of the crisis, we should look beyond ODA and vaccine sharing. There are opportunities for the Government, as the vaccine rollout picks up in Australia to invest in domestic production to produce an additional 50-100 million vaccines to sell at cost in Southeast Asia. Some of the supply purchased from other countries in the regions is either no longer available due to trade restrictions or has been found less effective against the Delta variant. This would extend Australia's contribution beyond low and middle income AMC countries, and harness its mass production capacity for a licensed, effective, and safe vaccine. Many higher middle income countries would be able to purchase the vaccine at cost. This would take pressure off the supply from elsewhere in the world. This should not be seen as an alternative to financial and vaccine sharing in our region and to COVAX but as a complement and extension of this effort.

Alongside this direct effort, Australia could also make a significant contribution to the regional vaccine capability by working with the WHO to establish a vaccine technology transfer hub in the region. Based on the similar model to the hub in South Africa it would create a mechanism for pharmaceutical companies to share their vaccine technology for mRNA vaccines. This technology will be a critical element in producing and distributing vaccines in response to emerging variants and securing manufacturing capability for the region, making the whole region less dependent on international supply chains. In selecting a location for the hub Australia should work with the WHO and pharmaceutical companies to establish a hub that assists in building technical capability across the region. As Australia looks to establish its own domestic mRNA capability, a hub for the region should form part of those negotiations. Both initiatives could be alongside technical support to neighbours.



Rebuilding Our Region and the World:

- 7.1 The Australian Government commitments to vaccine equity and responding to outbreaks are in addition to the existing Australian aid budget of AUD 4 billion and existing temporary and targeted measures.
- 7.2 The Australian aid budget continues to grow in line with the effort required to respond to the growth in extreme poverty in our region and around the world as a result of the COVID-19 pandemic.

The commitments to vaccine equity and tackling the acute phase of the pandemic recommended in this report should not come from the existing Australian aid budget, rather, in light of the unprecedented nature of the pandemic they should come as additional budget commitments, similar to those in other times of major global and regional disasters. Existing bilateral and global aid programs should not be raided to fund these commitments. As the analysis in this report outlines, these commitments are relatively small in comparison with the ongoing economic impact of closed borders.

In the medium term it will also be necessary for Australia to continue to increase the overall permanent aid program. The pandemic has both increased the number of people in extreme poverty while also highlighting existing vulnerabilities and inequalities. There will be an increased need for investment in health, education, and protection systems.

Equally, if we can come together as a globe to tackle the immediate threat of a pandemic it also demonstrates we can come together to tackle the longer term challenges facing our globe such as achieving the Sustainable Development Goals and tackling the existential threat of climate change.



- 1_ https://covid19.trackvaccines.org/agency/who/, last updated 3 September 2021, accessed 9 September 2021.
- 2_ <u>Human Rights and Access to Vaccines</u>, Office of the United Nations High Commissioner for Human Rights, 17 December 2020.
- A global pandemic requires a world effort to end it none of us will be safe until everyone is safe, World Health Organisation and European Commission, 30 September 2020.
- 4_ These 92 countries include all economies with Gross National Income (GNI) per capita under USD 4,000 plus other World Bank International Development Association (IDA)-eligible economies. 92 low- and middle-income economies eligible to get access to COVID-19 vaccines through Gavi COVAX AMC, Gavi, 31 July 2020.
- 5_ This is based on the UN 2020 estimates total population of countries including children. It assumes two doses required to be fully vaccinated and is based on making the vaccine available to all the population.
- 6_ Note there are 12 small nations which are part of the COVAX AMC which are not classified as low income countries or lower middle income countries.
- 7_ Assured resources for the Gavi COVAX AMC, Gavi, 6 August 2021. Converted from USD to AUD.
- 8_ <u>Dose Donations to COVAX</u>, Gavi, 6 August 2021.
- 9_ US support has allowed COVAX to secure an additional 500m Pfizer doses. Reflecting US funding above its original pledge, 200m of these are recorded here as a donation.
- 10_ Primarily through COVAX, final amount TBC.
- 11_ Mainly through COVAX TBC.
- 12_ Primarily through COVAX, final amount TBC.
- 13_ At least
- 14_ Mainly through COVAX, by end of 2021.
- 15_ O'Keeffe, Annmaree, <u>International Covid cooperation: Lessons from HIV/AIDS</u>, The Interpreter, 17 April 2020.
- 16_ <u>Australia Commits 20 Million Doses To G7 Vaccine Initiative</u>, Prime Minister, 11 June 2021.

 <u>Statement to the President's Global Summit to End Covid-19 Washington DC</u>, USA,

 23 September 2021.
- 17_ <u>Pacific and Timor-Leste to receive up to 15 million vaccine doses from Australia</u>, Foreign Minister, 6 July 2021.
- 18_ <u>Australia partners with Indonesia for COVID-19 response</u>, Foreign Minister, 7 July 2021.

- 19_ Australian support for vaccination efforts in Vietnam, Foreign Minister, 14 July 2021.
- 20_ <u>Australian support for COVID-19 vaccine access in the Pacific and Southeast Asia</u>, Foreign Minister, 31 October 2020.
- 21_ <u>Quad Leaders' Joint Statement: "The Spirit of the Quad"</u>, Prime Minister, 13 March 2021.
- 22 <u>Cohen, John and Kai Kupferschmidt, Rich countries cornered COVID-19 vaccine doses.</u>

 <u>Four strategies to right a 'scandalous inequity'</u>, Science, 26 May 2021.
- 23 Taylor, Andrea et. al, Issue Brief: Deciphering the Manufacturing Landscape for Covid-19 Vaccines, Global Health Innovation Center, Duke University, 19 March 2021.
- 24_ Following full FDA approval, Pfizer and BioNTech must urgently share COVID-19 vaccine know-how to increase global production and supply MSF, 23 August 2021.
- 25_ Irwin, Aisling, What it will take to vaccinate the world against COVID-19, Nature, 25 March 2021.
- 26_ Assuming two doses and after accounting for vaccine wastage. <u>Costs of delivering</u>
 <u>COVID-19 vaccine in 92 AMC countries</u>, World Health Organisation, Gavi and UNICEF, 8
 February 2021.
- 27_ 27 South Sudan: The True Cost of COVID-19 Vaccines, CARE Evaluations, 28 July 2021.
- 28_ <u>COVID-19 Vaccination Africa CDC</u>, Africa Centres for Diseases Control, accessed 9 September 2021.
- 29_ Som, Vishnu, <u>Indian Vaccine Export Ban Makes 91 Nations Vulnerable To New Strains:</u>
 WHO, NDTV.com, 31 May 2021.
- Brewer NT et. al, <u>Increasing Vaccination: Putting Psychological Science into Action</u>, Psychological Science in the Public Interest, 18, No. 2 (Dec 2017), 149-207.
- 31_ 31 Munoz, Gabriell, <u>COVID-19 vaccination rollout in Papua New Guinea needs a boost</u>, Business Advantage PNG, June 7, 2021. This was based on a simple Yes/No question.
- 32_ Fox, Rohan, <u>Vaccine hesitancy in PNG: results from a survey</u>, DevPolicy Blog, 24 June 2021.
- 33_ Solomon Islands' Road to Recovery from the COVID-19 Pandemic, National Democratic Institute, August 2021.
- 34_ World Vision International, Barrier Analysis Study: Behavioral and Other Determinants of Vaccine Acceptance, 2020. Kebede, A et. al., <u>Determinants of COVID-19 Vaccine</u> <u>Acceptance in Six Lower-and Middle-Income Countries</u>, April 2021.
- 35_ Solis Arce, J.S., Warren, S.S. and Meriggi, N.F. et al., <u>COVID-19 vaccine acceptance</u>
 and <u>hesitancy in low- and middle-income countries</u>, Nature Medicine 27, 1385-1394.

- 36_ Share of people who received at least one does of COVID-19 vaccine, Our World in Data, 12 September 2021.
- 37_ Based on 2020 UN population estimates.
- 38_ This projection is based on the population of the country and the current rate of vaccination. See <u>Covidvax.live</u> for more detail
- 39_ Sachs, Jeffrey D. et. al., <u>Sustainable Development Report 2021</u>, <u>The Decade of Action for the Sustainable Development Goals</u>, Cambridge University Press, 2021.
- 40_ Defined as living on less than US 1.90 a day
- 41_ Emmerling, Johannes et. al., <u>Will the Economic Impact of COVID-19 Persist? Prognosis</u>

 from 21st Century Pandemics, International Monetary Fund, 30 April 2021.
- 42_ Key Indicators for Asia and the Pacific 2021, Asian Development Bank, August 2021.
- 43 Second round of the national pulse survey on continuity of essential health services

 during the COVID-19 pandemic, World Health Organisation, 23 April 2021.
- 44_ <u>Nutrition Critical: Why we must act now to tackle child malnutrition</u>, Save the Children, 15 December 2020.
- 45_ Osendarp, Saskia et, al., The COVID-19 crisis will exacerbate maternal and child undernutrition and child mortality in low- and middle-income countries, Nature Food, 19 July 2021.
- 46_ The State of Food Security and Nutrition in the World 2021, Food and Agriculture Organization of the United Nations, IFAD, UNICEF, WFP and WHO, 2021.
- 47 Press release: UN Women raises awareness of the shadow pandemic of violence against women during COVID-19, UN Women, 27 May 2020.
- 48_ <u>Disability considerations for COVID-19 vaccination: WHO and UNICEF policy brief, World</u>
 Health Organization & United Nations Children's Fund (UNICEF), 19 April 2021.
- 49_ <u>Updated estimates of coronavirus (COVID-19) related deaths by disability status,</u>
 <u>England: 24 January to 20 November 2020</u>, UK Office for National Statistics, 11
 February 2021.
- 50_ A <u>Disability-Inclusive Response to COVID-19</u>, United Nations, accessed 9 September 2021.
- 51 High Risk Low Priority: Why unlocking COVID-19 vaccine access for refugees and internally displaced communities is critical for children, World Vision, 2021.
- 52_ Chookajorn, Thanat et. al, <u>Southeast Asia is an emerging hotspot for COVID-19</u>, Nature Medicine 16 August 2021.
- 53_ Rajah, Roland, Alexandre Dayant, <u>Avoiding a "lost decade" in the Pacific</u>, The Interpreter, 16 December 2020.

- 54_ Solomon Islands High Frequency Phone Survey On COVID-19: <u>Results from Round One, World Bank</u>. 2020. 25.
- Papua New Guinea High Frequency Phone Survey On COVID-19: Results from Round One,
 World Bank, 2020, 23.
- 56_ Rapid Recovery Assessment: Pacific and Timor-Leste, World Vision, 2020.
- 57_ Despande, Aswini, Khaing Than Hnin and Tom Traill, <u>Myanmar's response to the COVID-19</u> pandemic, Brookings, 1 December 2020.
- 58_ COVID-19, Coup d'Etat and Poverty: Compounding Negative Shocks and Their Impact on Human Development in Myanmar, ReliefWeb, 30 April 2021.
- 59 Cormann, Mathias, <u>COVID Fight Needs Balance Between Health and Economy</u>, Minister for Finance, 29 July 2020.
- Joe Hasell, Which countries have protected both health and the economy in the pandemic?, Our World in Data, 1 September 2020.
- 61_ <u>Statement on Monetary Policy</u>, Reserve Bank of Australia, August 2021.
- 62_ Two-thirds of epidemiologists warn mutations could render current COVID vaccines
 ineffective in a year or less; New survey from People's Vaccine Alliance shows urgency
 of vaccinating all countries World, ReliefWeb, 30 March 2021.
- 63_ The Impact of Covid-19 on HIV, TB and Malaria Services and Systems for Health: A

 Snapshot From 502 Health Facilities Across Africa and Asia, The Global Fund to Fight

 AIDS, Tuberculosis and Malaria, April 2021.
- 64_ Cem Çakmaklı, Selva Demiralp, ebnem Kalemli-Özcan, Sevcan Yeşiltaş, and Muhammed A. Yıldırım, <u>The Economic Case for Global Vaccinations: An Epidemiological Model with International Production Networks</u>, NBER Working Paper No. 28395, January 2021, Revised April 2021.
- 65_ Faster global vaccine roll-out could boost economy, KPMG, 19 March 2021.
- 66_ <u>National Plan to transition Australia's National COVID-19 Response</u>, Australian Government, 2 July 2021.
- 67_ <u>EY report demonstrates 26,000 worker shortage that will cripple fruit and vegetable industries</u>, AUSVEG, 30 September 2020.
- 68_ Liveris, James, <u>National Lost Crop Register surpasses \$45 million in losses at farmgate value due to worker shortage</u>, ABC News, 9 February 2021.
- 69_ 2020 Higher Education Facts and Figures, Universities Australia, October 2020.

- 70_ Hurley, Peter, <u>2021 is the year Australia's international student crisis really bites</u>, The Conversation, 14 January 2021.
- 71 The value of international education to Australia, Australian Government, accessed 9 September 2021.
- 72_ International Visitor Spend Corporate, Tourism Australia, accessed 9 September 2021.
- 73_ Statement on Monetary Policy, Reserve Bank of Australia, August 2021.
- 74_ Le Th, Huong, <u>The COVID-19 Pandemic and Geopolitics in Southeast Asia</u>, Australian Strategic Policy Institute, 27 January 2021.
- 75_ Fox, Liam, <u>Civil unrest and political instability threaten Fiji as COVID-19 outbreak</u> <u>takes hold</u>, ABC News, 23 June 2021.
- 76_ Based on a fair share calculated on the basis of Australia's proportion of the global economy
- 77_ <u>National Plan to transition Australia's National COVID-19 Response</u>, Australian Government, 2 July 2021.
- 78_ Data from Airfinity, science data analytics company, accessed on 28 August 2021.

