



Collaboration on Social Science and Immunisation

Increasing COVID-19 vaccine uptake in children aged 5–11 years: behavioural insights from the field

A forum to share knowledge and identify solutions

Co-convened by the Collaboration on Social Science and Immunisation (COSSI) and the National Centre for Immunisation Research and Surveillance (NCIRS)

3 March 2022

Summary report

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Background to the forum

Vaccinating children against COVID-19 has direct benefits, particularly for those at risk of severe disease. Vaccination also has indirect benefits, including some reduction in transmission and minimising disruption to schooling; protecting others in the household, community and schools; and providing a sense of safety for some parents and caregivers (hereafter only referred to as parents).¹ Vaccination may also provide some baseline cross-protection and immunity to children against potential new variants, which is particularly important with winter approaching in Australia.

In response to plateauing COVID-19 vaccine uptake in 5–11 year old children around 8 weeks into the program, as well as emerging inequities in uptake, the Collaboration on Social Science and Immunisation (COSSI) and the National Centre for Immunisation Research and Surveillance (NCIRS) convened an online forum, supported by the Australian Government Department of Health, states and territories, on Thursday 3 March 2022.

The forum aimed to identify the drivers of COVID-19 vaccine uptake in children aged 5–11 years and discuss strategies for increasing coverage in this age group. It brought together federal, state and territory governments; representatives from key communities; immunisation providers; social scientists; and other academics. Presenters shared coverage data; early social research with parents on barriers to uptake; case studies of successful interventions to support COVID-19 vaccination among 5–11 year olds; and a summary of global evidence on strategies shown to improve uptake. These presentations are summarised in sections below, with the presentations attached as an appendix.

Evidence sharing among all key stakeholders can guide the development of effective and targeted solutions.² Coverage data can identify gaps in uptake, particularly for harder to reach or high-risk groups, while social research can provide rich insights from community and provider perspectives on what they see as barriers to vaccination and feasible solutions. Panellists from key communities, providers and governments reflected on these ideas and shared their own perspectives. Their reflections are summarised in a section below. The online audience also contributed to the discussion; their contributions are summarised throughout the report in italics.

The intention of the forum was to encourage an ongoing conversation with a common purpose. The forum did not seek to represent all perspectives, nor solve all problems, but rather provide a common place to identify solutions. It can also act as springboard to follow-up discussions with a broader range of groups. The forum also offered the opportunity to develop a new model to address immunisation coverage gaps by bringing together government, providers and researchers to collaborate and seek solutions, both now and in the future.

The current situation

A snapshot of national COVID-19 vaccine coverage in children aged 5–11 years

Colonel Spencer Norris from the National COVID Vaccine Taskforce – Operation COVID Shield presented a snapshot of national COVID-19 vaccine coverage in 5–11 year olds. The vaccination rollout in this age group commenced on 10 January 2022 and coverage rapidly increased. Globally, Australia was among the top three countries for daily increases in coverage in 5–11 year olds (New Zealand 1.52%; Singapore 1.30%; and Australia 1.24%). However, soon coverage began to plateau. As of 1 March 2022, 50% of the cohort had received first dose of the vaccine, with the highest coverage in the Australian Capital Territory (78%) and Tasmania (61%), and the lowest in New South Wales (48%) and Queensland (43%). It was noted that these figures do not consider children whose vaccination may be delayed due to COVID-19 illness. Primary care has delivered 64% of all vaccinations in 5–11 year old children.

Australian data also reveal early equity gaps in coverage. By 23 February 2022, there was a 19 percentage point gap in coverage nationally between Aboriginal and Torres Strait Islander children (hereafter respectfully referred to as Aboriginal) and non-Aboriginal children. There was a 28 percentage point gap in coverage between people living in the highest (64%) and lowest (36%) socioeconomically disadvantaged areas as measured by the Socio-Economic Indexes for Areas (SEIFA), with differences between states.

Members of the online forum audience noted this striking difference, and the difference in the socioeconomic gradient between different jurisdictions. One participant questioned whether it would be possible to release more granular data, for example, by age group, sociodemographic indicators, as is done in the United Kingdom, noting that this may empower communities to work to develop solutions to increase uptake.

Influences on parents' willingness to vaccinate

The forum heard about preliminary findings from the Coronavax project in Western Australia,³ presented by Associate Professor Katie Attwell on behalf of Dr Samantha Carlson. This study involved interviews with parents conducted in late 2021 to examine their willingness to vaccinate, before the childhood vaccination rollout began. Qualitative interviews with 14 parents of children aged 5–11 years enabled researchers to obtain indepth insights into their intentions and influences. Based on a COVID-19 vaccine intentions model,⁴ most parents were accepting of the vaccine. Some, however, were hesitant and one planned to refuse it. All parents were keen to receive clear, consistent messaging, and for those planning on vaccinating, preferred for their child to be vaccinated by a familiar and conveniently located general practice. Consumer-reviewed fact sheets⁵ about COVID-19 disease and vaccination were developed from the findings of these interviews.

One online forum participant noted their experience of parents in South Australia who had had minor and systemic side effects after vaccination themselves and were hesitant to vaccinate their children. Another reported observing that parents think that if their children have had COVID-19, then they don't need to be, or cannot be, vaccinated. Associate Professor Atwell noted that the parents in the Coronavax study reported only minor side effects from their own vaccinations and said that being vaccinated first generated confidence in vaccinating their children.

Barriers to COVID-19 vaccine uptake in higher risk and priority groups

The forum heard about research on barriers to COVID-19 vaccine uptake in higher risk and priority groups in Victoria, undertaken by Associate Professor Margie Danchin and colleagues from the Murdoch Children's Research Institute (MCRI) and supported by the Victorian Department of Health. This research is being undertaken with Culturally and Linguistically Diverse (CALD) communities, parents of children with disabilities, and Aboriginal communities. It includes a comprehensive description of barriers and motivators from qualitative interviews and focus groups, resource development for parents, including decision support tools, and evaluation.

Three initial themes on concerns about and barriers to uptake of vaccination have emerged:

Access barriers, including difficulty in scheduling appointments because of the timing of the vaccination rollout in children coinciding with the return to school and work; more children with needle phobia needing access to services that provide distraction and support, especially children with intellectual and developmental disabilities like autism; and victims of family violence and other vulnerable groups struggling to access vaccines.

Risk assessment/need, including low perceived need for a vaccine due to low perceived risk of severe disease; perception that the vaccines are not effective; and safety concerns, especially about possible long-term effects of mRNA vaccines; and concern about children needing multiple doses.

Communication challenges, including confusion about vaccine recommendations and frequent schedule changes, such as whether the gap between doses is 3 or 8 weeks.

The study team recommended creating both broad and tailored messaging for specific groups that includes simple audio and visual messages and uses stories and case studies of children who have experienced severe disease such as multi-system inflammatory syndrome. Messaging should focus on the protection offered by vaccination against new variants, the opportunity for greater school attendance, the currently reduced need for isolation and the many unknowns about COVID-19 and children.

One online forum participant emphasised the need for messaging to be appropriate for the demographics of the target population, having already seen much messaging that appears to target higher socioeconomic groups. Another participant requested help with frameworks that could inform messaging on vaccine benefits versus severity of disease and safety of the vaccines (e.g. should messages compare rates of hospitalisation for other vaccine preventable disease or emphasise importance of 'laying down broader immunity'), noting these are complex messages and may not be suitable for everyone. Another participant noted the need to improve access, and to not just focus on messaging as a solution.

Attitudes on vaccinating children against COVID-19

The forum heard about research being conducted in Victoria under the Optimise study, presented by Professor Margaret Hellard. This longitudinal cohort study oversamples participants from key groups considered to be at a higher risk of contracting or developing severe COVID-19, or experiencing negative consequences of public health restrictions. Repeated surveys examining study participants' attitudes on vaccinating children against COVID-19 found an increasing willingness to vaccinate children over time. In January 2022, close to 75% respondents had already had their children vaccinated or would definitely get their children vaccinated, up considerably from late 2020 and mid-2021. Of those participants not in this group, the top three reasons recorded in January 2022 for not wanting their children to have a COVID-19 vaccine were: the vaccine may not be safe (49%), their child might be sicker after COVID-19 (20%) and COVID-19 was not serious (20%) (note: participants could give multiple responses to this question). Participants in the Optimise community engagement group also noted confused communications from government as a barrier to willingness to vaccinate, including confusion over eligibility early in the roll-out of the AstraZeneca vaccine and the timing of vaccination after a COVID-19 infection. Many also noted receiving conflicting information about vaccine side effects and effectiveness from relatives overseas.

Solutions

Training community advocates

The forum heard about the Victorian Vaccine Champions program, which is designed to build confidence in COVID-19 vaccines in schools, workplaces and communities and enable access to robust information in diverse communities to facilitate vaccination. The program has engaged with provider and community groups and trained trusted community and religious leaders to be community advocates via 70+ webinars over the 12 months, starting with the adult rollout.

Associate Professor Margie Danchin from MCRI described the program's three modules: (1) COVID-19 vaccine safety, effectiveness and risk communication; (2) how to be a community advocate; and (3) guidance on engaging with people who are hesitant in various scenarios, such as in-person, in online forums, through social media and in healthcare environments. The webinars also include practical skills and role-plays around effective vaccine communication.

Post-training surveys conducted by the Victorian Department of Health found very high levels of participant satisfaction, with 85% of participants saying they felt more confident discussing COVID-19 vaccines with people who were hesitant or had questions and 96% agreeing that the session increased their knowledge of COVID-19 vaccines and their side effects. The Victorian Department of Health has commissioned another 20 sessions in 2022 with a focus on the COVID-19 vaccination rollout for 5–11 year olds.

Helping parents make confident decisions

Dr Jane Frawley from the University of Technology Sydney (UTS) presented an interactive web-based COVID-19 vaccine decision aid for parents, hosted on the NCIRS website.⁶ The decision aid helps parents weigh up risks of vaccinating versus not vaccinating to understand the outcomes of their decisions and determine next steps, while integrating their values and preferences about vaccination. The decision aid is evidence-based, referenced, transparent in terms of authorship and funding, and has a Year 8 reading level. Decision aids help parents make evidence-based decisions about vaccinating their children,⁷ increase intention to vaccinate, and can be used at home or during a consultation with a health professional. The decision aid will be updated regularly, and work to translate the resource into multiple languages is underway, ensuring it is accessible to culturally and linguistically diverse communities.

The decision aid was well received by the audience. Several online audience members suggested the decision aid should offer advice on when to vaccinate after infection to reassure parents about the safety of vaccinating their child after a COVID-19 infection, which Dr Frawley confirmed will be added. One commenter asked whether the aid could be used in the field, for example, on iPads in health settings (it can). Another noted the importance of decision support for people with lower health literacy.

Achieving high uptake and equitable access

The forum heard about Victoria's COVID-19 vaccination program for 5–11 year olds, which aims to achieve high uptake and equitable access. Naomi Bromley, Head of the Victorian COVID-19 vaccination program at the Victorian Department of Health described the program's three pillared approach that has seen Victoria lead nationally in the smallest equity gaps in coverage:

Delivering a positive experience for patients at state-run sites by supporting parent/guardian involvement and providing calming elements such as showbags and visual themes.

Working closely with primary care settings, including general practice and community pharmacies, by providing access to training, promotional collateral and grants to increase capacity.

Using data to target efforts at local levels to achieve equitable access for priority communities.

Targeted strategies include: school-based clinics where parents (as well as the broader community) can walk in without appointments; pop-up clinics offering walk-in vaccination at family attractions such as Melbourne Zoo, Aquarium and Scienceworks; dedicated campaigns and Victorian Aboriginal Community Controlled Health Organisation (VACCHO) van providing face-to-face engagement, rapid antigen tests, and walk-in access for Aboriginal communities; and using Disability Liaison Officers and ambassadors to facilitate vaccination of children with a disability.

One online audience member suggested that vaccination programs for children could use some of the same strategies used to support adult vaccine uptake. This could include local council-led parent forums, pop-up clinics at playgrounds, funding for multicultural organisations to produce videos, relevant spokespeople doing social media videos or even a Bluey episode focused on immunisation. Others discussed the value of delivering vaccination at schools. One commenter noted their opinion that, while the requirement for the parent to be present adds a layer of complexity, this strategy may be especially useful in areas with many different cultural groups, lower health literacy or lower socioeconomic status. In terms of other strategies to address hesitancy in Aboriginal communities, one participant mentioned the 'Vax Up You Mob' show on 3KND Kool N Deadly Indigenous radio station,⁸ set up to address topics and concerns that may cause vaccination hesitancy.

Global evidence on what increases vaccine uptake in children

The forum considered global evidence drawn from systematic reviews of interventions to increase uptake of vaccines in children, presented by forum convenor Professor Julie Leask from the University of Sydney.^{9–11} There is evidence of effectiveness for interventions at various levels, set out according to the Social Ecological model of health:¹²

At the public policy level, reducing out-of-pocket expenses is well supported. Making vaccinations a requirement is effective in some settings, although this strategy has significant negative impacts as well.

At the community level, multiple combined interventions have the largest impact on coverage. Some reviews found community engagement to be effective and that it helps reduce inequity in uptake.

At an organisational level, effective interventions include on-site vaccination, standing orders, provider reminders or prompts to vaccinate a patient, provider recommendation and home visiting.

At an interpersonal level, interventions that leverage social norms can be effective, such as by empowering community advocates and role modelling. In clinical encounters, behaviour change counselling for hesitant individuals was found to be effective in some studies.

At the individual level, effective interventions include receiving reminders to vaccinate, default appointments and prompts to make a time and place for vaccination.

There is mixed evidence supporting the use of incentives, and education as an intervention on its own usually produced limited or no effect in trials where vaccination was the outcome measure, notwithstanding the important supportive role of good communication overall.

Multiple strategies that address the target groups' specific barriers to uptake, and are tailored to local contexts, are most likely to be effective. When considering workable strategies, they need to be not just effective in trial-based evidence but also feasible, acceptable and affordable. Opportunity costs should also be considered.

Community, provider and government perspectives on key messages and next steps

Invited panellists representing communities, organisations and governments shared their key perspectives on how coverage could be increased. The panellists included Aboriginal

peoples and Aboriginal Controlled Community Health Services; carers of people living with disability; primary health care providers; and state and national governments. We have grouped the panel's reflections by the different social-ecological levels of intervention.

At the individual level, Belinda Ross, Disability Liaison Officer from Eastern Health, Victoria, emphasised that a one-size-fits-all approach does not always work, and therefore, interventions to improve uptake need to be person-centred and tailored to a child's individual needs. For children with disabilities, such interventions may need to consider how to reduce medical trauma and provide a safe/low sensory vaccination environment. For example, low sensory clinics with extended appointment times, sedation clinics, drive through vaccinations and home-based vaccinations have helped many children living with disabilities in Victoria get vaccinated against COVID-19.

In terms of other interventions, the online comments noted the powerful influence of personal stories like case studies of children with severe disease.

At the community level, the forum heard about the need to continue to engage with, support and empower diverse communities both at the grassroots and the infrastructure level. Kylie Taylor, Aboriginal Health Worker at Hunter New England Population Health, Dr Jason Agostino, Medical Advisor at the National Aboriginal Community Controlled Health Organization and Mohammad Al-Khafaji, CEO of the Federation of Ethnic Communities' Councils of Australia described the important role of community organisations (i.e. the Aboriginal Community Controlled Health Organisations; the CALD vaccination infrastructure) during the early stages of the pandemic in understanding community needs and priorities, and appropriately promoting COVID-19 vaccination. Community organisations, however, must not bear the brunt of addressing communities' needs in terms of COVID-19 vaccination information and service delivery. Panellists stressed the need for continued policy support and funding at the infrastructure level. Ms Taylor added that cultural governance over communication strategies for Aboriginal people needs to extend beyond the surge phase of the pandemic. Mr Al-Khafaji said there is interest among many people from CALD groups to be involved and trained as vaccination champions.

In the online comments, one participant highlighted the community-by-community approach in the Northern Territory (NT) to vaccinate Aboriginal communities, in recognition of the diversity of Aboriginal groups across the NT. They noted that the engagement of community champions and leaders has been critical to the program's success and that local resources are being successfully shared through social media.

At the organisational level, Karen Booth, President, Australian Primary Health Care Nurses Association, reflected on the challenges of resources and workforce capacity for professionals who deliver COVID-19 vaccinations to 5–11 year olds, with a focus on general practice. To address those challenges, Ms Booth called for new models of service provision and resourcing, including a greater flexibility and autonomy for accredited nurse immunisers to vaccinate without GP approval and off-site as needed; expanding after-school vaccination programs; and commissioning local health workforce to speak to children about vaccinations.

In the online comments, one participant noted the policy constraints that prevent health professionals from providing vaccines using methods that are more responsive to their communities. Another noted the remuneration levels for providers are not sufficient to vaccinate this age group.

Finally, **at the policy level**, government representatives reflected on the forum, noting opportunities for policy-level support. Robyn Gibbs, Immunisation Program Manager at the Western Australian Department of Health applauded the COVID-19 decision aid as a potential tool to be promoted via primary care and/or used in schools. Joanne Edwards, Deputy Controller, State Health Emergency Operations Centre – COVID-19, NSW Health reflected on the need to address the vaccination gap between Aboriginal and non-Aboriginal children and to strengthen collaboration with multicultural organisations and primary health networks. Dr Lucas de Toca, First Assistant Secretary, National COVID-19 Vaccine Taskforce stressed that, while Australia was one of the fastest countries in the world to vaccinate 5–11 year olds, the recent plateauing requires a creative and multi-pronged approach (informed by today's presentations), in particular to reach the most at-risk groups, such as people living in the most socially disadvantaged areas.

In the online comments, some audience members raised the question of how high we should or need to go with COVID-19 vaccination rates in children, especially given there may be areas of greater need, such as increasing uptake of adult booster doses and additional levels of infection immunity in a proportion of children.

Conclusions

The forum brought together stakeholders representing consumers and communities, health providers, researchers and policymakers. This occurred in response to plateauing uptake of COVID-19 vaccines in 5–11 year old children. The forum considered feasible solutions and implementation plans.

This forum demonstrated that this coordinated approach is not only worthwhile but also feasible, even when there is an imminent need for implementable solutions. As a result of two hours of focused presentations and discussion involving diverse stakeholders, the forum offered a range of practical solutions that are not only effective but also feasible, acceptable, efficient and address inequity.

A key theme from this forum is the usefulness of timely data. The federal government's recent sharing of coverage data by local government area¹³ is a welcome opportunity for all Australians to recognise and act on coverage inequities at a geographic level. Governments must fund and involve researchers to provide timely and useful data on why parents are not willing or able to vaccinate. Vaccination programs must integrate data into planning at the outset and there should be enhanced capacity to rapidly and iteratively use both quantitative data that tell us who is under vaccinated and qualitative insights that explore why they are under vaccinated.

While some children are yet to have a vaccine because of a recent COVID-19 illness, other families experience access barriers and yet others see the disease as insufficiently risky to vaccinate their children. Many parents have also been confused over changing vaccine recommendations. Sometimes the one family will experience all these barriers. To overcome barriers, vaccination programs need two major categories of solutions: informing parents and addressing their concerns; and making services highly convenient and accessible. Programs must tailor solutions to local needs.

Regarding the first category of solutions, programs should provide parents with timely and consistent information about COVID-19 vaccines, including on the current recommendations. Messages should address concerns and motivate, providing both information and 'real life' stories of families affected by COVID-19. Information should be accessible in diverse languages and to people with lower health literacy. Programs should promote and integrate decision support tools into services to help parents on their vaccination decision journey. Programs should combine these strategies, with prompts for parents to act on their positive intentions. Given the documented effectiveness of reminders, the federal government could consider sending letter-based reminders to parents of children on the Australian Immunisation Register (AIR) who have no recorded COVID-19 vaccines.

Regarding the second category of solutions, to address inequities for those parents facing logistical and access barriers, governments must continue to invest in localised approaches that make vaccination convenient. For busy working parents, offering free vaccination at schools and extending vaccination hours at local GPs will assist. In Aboriginal and CALD communities, localised engagement with trusted leaders is key, as is building community advocates' knowledge and confidence to discuss and promote vaccinations. For children with a disability, governments should engage with current support networks (e.g. the Disability Liaison Officers program) to increase reach, and ensure parents have access to a range of service delivery options to suit individual needs. For children facing socioeconomic disadvantage, programs should use strategies that promote convenience for parents, such as pop-ups in places children frequent, for example, schools, zoos, aquariums and museums. For children experiencing needle phobia, it is helpful to create a supportive, positive environment around vaccination through ambient décor (where possible) and distraction techniques.¹⁴

At the provider level, both usual (e.g. general practice and community health) and new (e.g. pharmacy) child vaccination providers require additional support to accommodate the complex interactions required for vaccinating young children. Skilled and adequately trained providers are crucial to vaccinating anxious children and managing parental anxiety. Furthermore, providers also need motivation to recommend the vaccine for children and foster opportunistic vaccination. Vaccination programs must also consider how primary care can integrate COVID-19 vaccination into usual vaccination care, for example in combination with influenza vaccination.

As the nation moves into a business-as-usual phase, characterised by reduced workforce dedicated to delivering COVID-19 vaccinations and shifting priorities, researchers, communities, providers and governments must consider the strategies that can be implemented at scale. We encourage forum participants and readers of this report to take these ideas and continue to shape and refine their strategies.

Acknowledgements

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In alphabetical order Associate Professor Katie Attwell Ms Naomi Bromley Dr Samantha Carlson Associate Professor Margie Danchin Dr Jane Frawley Professor Margaret Hellard Professor Kristine Macartney Colonel Spencer Norris Ms Belinda Ross Dr Lucas de Toca

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NCIRS National Centre for Immunisation Research and Surveillance Increasing COVID-19 vaccine uptake among children aged 5–11 years

Behavioural insights from the field

Thursday 3rd March, 10:30am – 12:30pm

5 to 11-year-old cohort vaccination overview

National COVID Vaccine Taskforce (NCVTF) - Operation COVID Shield

3 March 2022



OFFICIAL: SENSITIV

5-11 Year Rollout – Overview and International comparison

Chart 1: The rollout of vaccines to 5-11s began more quickly than 12-15s. Weekly administrations have decreased by ~50% week to week since 31 Jan. Assuming a continued weekly decline of 50%, the proportion of children aged 5-11 with a first dose will plateau at 50% from early March.



Chart 2: International comparison of 5-11 first dose coverage. New Zealand (1.52%) has the highest daily percentage point increase followed by Singapore (1.30%), Australia (1.24%) and Spain (0.90%).



*Only first two months of the 12-15 roll-out has been reported

Source: Administration data from Australian Immunisation Register (AIR) as at 11:59pm 22 Feb '22. Patient state based on geo-enhanced AIR coordinates. Population estimates based on ERP June 2020. Note AIR reporting lag



OFFICIAL: SENSITIVE

5-11 rollout: 50% of 5-11s nationally have received a first dose with the ACT and TAS having the highest coverage rates at 78% and 61% respectively





Source: Persons aged 5-11 in Australian Immunisation Register (AIR) as at 11:59pm up to 01 Mar 22. Population estimates based on ABS June 2020 ERP. Note AIR reporting lag when comparing last week figures to previous week figures.

Trends identified within the cohort

Chart 1: The split of administrations across channels remains largely unchanged from the previous week. 5 out of 8 jurisdictions were administering doses within +/-5% of their allocated channels. Doses administered in QLD, ACT and NT jurisdictional channels continue to be greater than their allocations for that channel. NT administered 63% compared to 50% allocated, QLD 39% compared to 30% and ACT 56% compared to 50%.

5-11s cumulative administrations, by jurisdiction and channel

Per cent (of group doses), up to 20 Feb 22



Chart 3: Unweighted average LGA 5-11 first dose % coverage by SEIFA Index of relative socio-economic advantage and disadvantage. 5-11 first dose % coverage rates are lower in areas of disadvantage, except in VIC. Each decile an area moves up the SEIFA index is an increase of 2.5-3 percentage points in first dose rates.

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	National
1	n/a	19%	34%	36%	40%	52%	55%	35%	36%
2	n/a	30%	27%	31%	40%	54%	53%	34%	37%
3	n/a	40%	n/a	36%	48%	54%	52%	29%	44%
4	n/a	41%	n/a	44%	50%	53%	48%	40%	44%
5	n/a	40%	n/a	41%	47%	54%	49%	40%	42%
6	n/a	46%	n/a	37%	48%	56%	53%	49%	47%
7	n/a	48%	n/a	38%	49%	67%	52%	44%	47%
8	n/a	44%	71%	33%	51%	n/a	55%	40%	45%
9	n/a	51%	54%	41%	60%	73%	57%	48%	53%
10	77%	61%	n/a	62%	75%	n/a	61%	67%	64%
1=MOST DISADVANTAGED10=MOST ADVANTAGED									

Chart 2: Indigenous 5-11s: The difference in uptake has grown in SA to 24% while ACT and NSW hold at 23%. The uptake is highest in indigenous in remote areas with the largest gap in Metro locations.





Chart 4: The younger the child is the less likely they are to be vaccinated. This is represented equally across all jurisdictions.



Au



Barriers to COVID-19 Vaccine Uptake for 5-11 year olds

Study funded by and conducted in partnership with the Victorian Department of Health

A/Prof Margie Danchin Dr Jess Kaufman Ms Belle Overmars



MCRI Study: Supporting Parent Decision Making and Uptake



Dr Jess Kaufman **Ms Belle Overmars** Ms Carol Jos Mr Zeph Hilton

murdoch

children's

institute

Part 3: Vaccine Champions Program

- Evaluation of program to build confidence in COVID vaccines in schools, workplaces and communities - survey/interviews attendees
- Healthcare providers, nurse immunisers, community and religious leaders from different CALD groups, disability groups including refugee and asylum seeker sector
- 60-90 minute interactive webinar including roleplay and Q&A
- Three modules:
 - 1. Overview of vaccination program, safety, effectiveness
 - 2. Strategies to build vaccine confidence
 - 3. Discussing COVID-19 vaccines with people who have questions

Barriers to 5-11s COVID-19 Vaccine Uptake

Information Sources		Emerging Barriers & Concerns					
DH Disability Engagement Team	Access barriers	Back at work/not available at school - need parent present	Needle pho for vaccin sedation (disabilities	obia - de nation ur (esp kids s, autism	mand nder with etc)	ms of family e, perpetrator y not allow	
DH CALD Engagement Team Vaccine Champions	Risk assessment/need	Don't need it - low risk of severe disease; doesn't work ie doesn't prevent infection	Rec infec with 0	ent ction COVID	Long term vaccine effects unknown (inc fertility)	Concerned children will require booster doses/multiple doses	
Training Program FAQs	Communication	Confusion in va recommendations - know reasons behine	ccine • want to d changes	- Nee messa case s sever	ed creative & simpl aging (audio, visuals tudies - children w re disease; messagin	e s); ith ng	
				aroun day aga unk	id reduced need for isolation; protectio ainst new variants; nowns about COVID	n Search Institute 2020 9	

The Optimising Isolation, Quarantine and Distancing and Vaccine Uptake for COVID-19 Study

Partnership between the Burnet and Doherty Institutes

COLLECT STRATEGIC INFORMATION

Understand compliance and adherence with social isolation, guarantine and physical distancing.

Determine key factors affecting cooperation with physical distancing measures, including health, social, structural and economic factors.

Assess unintended consequences of isolation, and distancing measures on key vulnerable groups and among the general population.

Identify vulnerable populations for whom sustaining self-isolation is more difficult or who are disproportionately affected.

Characterise people's social networks and assess if key groups or individuals are at higher risk of COVID-19 infection.

UNDERSTAND AND PREDICT THROUGH MATHEMATICAL MODELS

Develop responsive, precise agent-based mathematical models, utilising empirical data to inform and test strategies, such as the impact of various testing strategies and changes to restrictions.

INFORM NATIONAL POLICY AND PRACTICE

Inform Government strategy to ease 'lockdown' restrictions in a precise and informed way, that mitigates the risk of a flare up of new infections.

Improve cross-cultural messaging to enhance comprehension, acceptability and cooperation with guidance and interventions.

Test the feasibility and acceptability of emerging strategies for COVID-19 testing such as point-of-care tests, home-based

testing and antibody testing.

Develop strategies to support highly vulnerable populations to reduce their risk of infection and limit unintended consequences.

The Optimise Study

- Innovative multidisciplinary research platform
- Providing government with timely and high-quality information to help formulate informed, precise and impactful policy during the COVID-19 pandemic
- Produce shared • understandings

•

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Demographics

720

participants

39% are aged between **18-34**

80% live in **metropolitan Melbourne** 000

percent

20

12% speak a **language other than English** at home

Optimise is a longitudinal cohort study following around 700 participants.

Study participants are not intended to be representative of the broader population but instead have been intentionally recruited from key groups who are considered to be: • at risk of contracting COVID-19

• at risk of developing severe COVID-19 or,

• at risk of the unintended consequences of the restrictions

29% have a **chronic condition** that would put them at risk if they caught COVID-19

39% are aged between **18-34**

81% are vaccinated

Reasons for not wanting to get a COVID-19 vaccination for your child/ren

* Indicates that question was introduced after 26-May-2021

Reporting

Community Engagement Group

Finding are discussed at a CEG prior to final compilation Their views/input included in the report

Government

- Monthly reports to State and Federal government
- Cross-sectional only
- Adherence with directives
- Key factors reducing or improving adherence
- Strategies to help improve adherence
- Rotating topical interests (e.g. vaccines)

Community & Sector Reports

- Identify key challenges & successes
- Exchange information and insights about what is/isn't working

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Optimising isolation, quarantine and distancing for COVID-19

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COVID-19 VACCINE DECISION AID A COLLABORATION BETWEEN UTS, NCIRS, USYD, UNSW & MCRI DR JANE FRAWLEY

Decision aids are an evidence based way to help make confident decisions about vaccination

1.HELP PARENTS UNDERSTAND RISK

Include probabilistic information in number and graph format

2. HELP TO CONSIDER OPTIONS FROM A PERSONAL VIEW

e.g. how important are the possible benefits and harms to me

3. INTEGRATE VALUES AND PREFERENCES

into the decision process

eview

A systematic review and meta-analysis of effectiveness of decision aids for vaccination decision-making

Cassandra Vujovich-Dunn^{a,*}, Jessica Kaufman^{h,g}, Catherine King^{c,d}, S. Rachel Skinner^{d,e}, Handan Wand^a, Rebecca Guy^{*}, Julie Leask^{c,f}

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4. HELP PARENTS UNDERSTAND PROBABLE OUTCOMES OF THEIR DECISION

as well as next steps

A RECENT META-ANALYSIS FOUND PARENTS WERE 2.5 X MORE LIKELY TO VACCINATE AFTER USING A DECISON AID

Vujovich-Dunn C, Kaufman J, King C, Skinner SR, Wand H, Guy R, Leask J. A systematic review and meta-analysis of effectiveness of decision aids for vaccination decision-making. Vaccine. 2021 Jun 23;39(28):3655-3665.

For health professionals V For the public V Our work V News & events About us V

STEP 1: LEARN ABOUT THE VIRUS AND THE VACCINES

This page contains drop down accordion boxes with information on COVID-19 and the COVID-19 vaccines

Learn about the virus and the vaccines

COVID-19

COVID-19 is caused by the SARS-CoV-2 virus. There have been over 1 million confirmed cases of COVID-19 in Australia, including over 100,000 in children.¹ Over 4,700 people have lost their lives, including six children.¹ Most children who catch COVID-19 will get better; however, some children get so sick they need to go to hospital or be cared for by hospital staff in a 'hospital at home' program. Children with existing health issues are more likely to require hospitalisation.

What is COVID-19?	~
What are the risks of COVID-19?	~

The COVID-19 vaccines

Australia is likely to get different COVID-19 vaccines over time.

Two 'mRNA vaccines' are approved for children in Australia: the vaccine made by Pfizer/BioNTech (Comirnaty) and the vaccine made by Moderna (Spikevax).

How do the COVID-19 vaccines work?	~
How were the COVID-19 vaccines tested?	~
What are the benefits of a COVID-19 vaccine for your child?	~
What are the risks of a COVID-19 vaccine for your child?	~
Do the vaccines work for different variants?	~

STEP 2: INFOGRAPHICS

Infographics help to compare complex information about risk

Choose vaccine and age group

Choose to see information in % or number of people

Compare symptoms from SARS-CoV-2 with symptoms/side-effects following vaccination

		HEALTH R	IISKS		
With COVID-1	9	😵 Percentage	e of people	With 5-11 years Pfizer/Bio	NTech va
÷					
		SYMPTOMS AGE	5-11 YEARS		
72%		- 0	-		
2-3 weeks		DURATION OF S	SYMPTOMS	••••	1-3
		- CLICK TO SEE INDIVI	DUAL SYMPTOMS		
0%		injection pain, red	ness, swelling		
47%		fever	_		1
64%		cough	h		
19%		fatigu	e 👘		
6%		muscle or jo	int pain		1
9%		shortness of	f breath		
33%		sore thr	oat		1
15%		headac	he		
6%		nausea, vomiting	g, diarrhoea 🛛 🗖		
70%		runny/stuff	fy nose		
		MULTISYSTEM INFLAMM	ATORY SYNDROME		
0.13%		•	-		
		INFLAMMATION OF TH	E HEART MUSCLE		
0.03%		0	-		0.0
		SEVERE ALLERGIC	REACTIONS		
0%		percento	age		0.0
		HOSPITALIS	SATION		
0.03%		•	-		0.0
		INTENSIVE	CARE		
		-			

STEP 3: YOUR CHILD'S PERSONAL RISK FACTORS

To determine if your child is at higher risk of severe COVID-19 or ongoing health problems

Possible contraindications

Discuss with your doctor if.....

Check your child's personal risk profile

Your child's personal health history may affect how their body responds to the virus or the vaccine. Talk to your family doctor if any of the statements below apply.

Your child may be at a higher risk of severe COVID-19 and ongoing COVID-related problems if they:1 have had an organ transplant and are on immune-suppressive therapy have had a bone marrow transplant have a complex chronic disease live with a significant disability that requires assistance with activities of daily living have chronic inflammatory conditions that require immune-suppressive or immunomodulatory medication have chronic neurological conditions (e.g. epilepsy) have a blood disorder or cancer are having certain cancer treatments such as chemotherapy or radiotherapy are survivors of childhood cancers have chronic lung disease, kidney failure, liver disease, heart disease, diabetes or high blood pressure have HIV/AIDS have a compromised immune system. COVID-19 vaccination may not be recommended for your child if they:2 have previously had a severe allergic reaction (anaphylaxis) to a COVID-19 vaccine have previously had a severe allergic reaction (anaphylaxis) to any other vaccine. Discuss the best timing of COVID-19 vaccination with your doctor if your child:

- takes immunosuppressive medication
- is acutely unwell (e.g. with a fever).

STEP 4: CONSIDER WHAT MATERS MOST TO YOUR FAMILY

Consider what matters most to your family

Use the tables below to explore how the decision to vaccinate or not could impact your child and family. Remove the statements that aren't important to you by clicking 'X'. You can also add your own reasons in the blank box at the bottom of each column.

If I get the COVID-19 vaccine

	Really Important To Me	Somewhat Important To Me	Not important to me
If my child gets the COVID-19 vaccine they will be better protected against COVID-19 and serious related health problems			X
If my child gets the COVID-19 vaccine they will be able to see family and friends more safely			X
If my child gets the COVID-19 vaccine and they still catch COVID-19, their symptoms will be milder			X
If my child gets the COVID-19 vaccine they will be free to travel around Australia or overseas			X
If my child gets the COVID-19 vaccine they will be able to move freely around our community and neighbourhood			X
If my child gets the COVID-19 vaccine I won't have to worry about being judged for not getting my child vaccinated			X
If my child gets the COVID-19 vaccine they may experience side effects from the COVID-19 vaccine			X
If my child gets the COVID-19 vaccine they may have to take time off school to get the vaccine or recover from side effects			X
If my child gets the COVID-19 vaccine I will have to make the effort to find, book and attend an appointment			X
If my child gets the COVID-19 vaccine I will worry about being judged by people who disapprove of my decision			X

(ADD YOUR OWN REASON

STEP 5: MAKE YOUR DECISION

Make your decision

Having read this information, what will you do next?

We hope the information in this decision aid has helped you to make a decision. Select from the options below to see what your next steps will be.

Meet the team

DR JANE FRAWLEY DR KERRIE WILEY University of Technology University of Sydney Sydney

PROF JULIE LEASK University of Sydney

DR JESS KAUFMAN MCRI

A/PROF HOLLY SEALE A/PROF MARGIE University of New South DANCHIN Wales MCRI

PROF KIRSTENDR ABELA MAHIMBOPROF LYNDALMCCAFFERYUniversity ofTREVERNAUniversity of SydneyTechnology SydneyUniversity of Sydney

Thank-you!

Victoria's 5-11-year-old COVID-19 Vaccine Program

3 March 2022

Department of Health

* Protect your child with the coronavirus vaccine for 5-11 year olds

Know the how, what & when of vaccination for 5-11 year olds

Authorised by the Victorian Government, Melbourne

Pillars for the 5-11-year-old COVID vaccine program

Objective – Victoria rapidly delivers 5-11-year-old vaccination coverage, building on the strengths of existing BAU and COVID immunisation programs

1. State-run sites are a premium offering that create a positive narrative around vaccination

Create an experience that minimises anxiety and supports necessary involvement of parent / guardian including vaccination of parents or older children in same visit if required. 2. The state-run program supports and empowers the primary care network

Enable primary care clinics to deliver a high volume of vaccinations to their local communities and support them to have a sustainable model for COVID-19 vaccinations in future.

3. Targeted strategies to engage with vulnerable and at-risk children

Sustain, improve and increase bespoke service delivery for priority populations including Aboriginal and Torres Strait Islander children, children who have a disability, those from marginalised backgrounds and those who live in low vaccinated communities.

OFFICIAL: Sensitive

Vaccination Rate (5 to 11) by LGA

Total Doses Administered to 5 to 11	320 , 510	6,764
% 5 to 11 Pop. Vaccinated	55.4%	1.2%

The 10 Metro LGAs with lowest

LGA	Dose 1 (#)	Estimated population	Dose 1 (%)
Hume	9,945	25 , 293	39.3
Whittlesea	11,749	24,878	47.2
Mornington Peninsula	7,111	15,030	47.3
Brimbank	5,544	11,213	49.4
Cardinia	6,184	12,216	50.6
Yarra Ranges	7,558	14,853	50.9
Frankston	5 , 537	10,851	51
Melton	12,449	24,417	51
Moreland	6,780	13,031	52
Casey	21,413	39,880	53.7

The 10 Regional LGAs with lowest

LGA	Dose 1 (#)	Estimated population	Dose 1 (%)
Wellington	1,625	3,795	42.8
Benalla	446	1,029	43.4
Murrindindi	348	802	43.4
Baw Baw	2,147 4,927		43.6
Towong	177	405	43.7
Latrobe	3,038	6,824	44.5
East Gippsland	1,697	3,761	45.1
Mildura	2,310	5 , 075	45.5
South Gippsland	1,284	2,811	45.7
Glenelg	734	1,550	47.4

Note:

- Vaccination data taken from AIR with a one day reporting lag. The Commonwealth allows up to 10 days for providers to upload data to AIR
- Population taken from ABS ERP 2020 and using ABS ERP 2019 postcode population distribution.
- Postcode is mapped to one single LGA
- Coverage rate is calculated as the number of dose one administered to children aged 5 to 11 divided by the estimate population for the same schoot in each ICA

Pillar 1: State-run sites are a premium offering that create a positive narrative around vaccination

- Victoria's 5-11 program has been built from a starting point of giving kids an enjoyable time and a time which doesn't instil fear or create angst.
- Working with the Murdoch Children's Research Institute at the Royal Children's Hospital in Melbourne, the Department of Health designed a system that was warm, welcoming, fun and inclusive.
- A central part of this was making vaccination one-part of the experience, not the entire experience.
- Ambient décor, showbags, gifts, performers and even hopscotch decals were strategically used at points of the user journey to distract kids from the core aim of their presence; vaccination.

Colouring Books designed by Melbourne Aboriginal artist Emma Bamblett featuring Australian animals

Pillar 2: The state-run program supports and empowers the primary care network

Primary care is an integral partner of COVID-19 vaccinations. We used a number of initiatives to amplify the capacity of primary care to administer vaccines to children aged 5-11, leveraging the trust and confidence we had created with local communities

We ran 3 rounds of Vaccine Enhancement Grants for general practitioners and community pharmacies, in order to maximise throughput at primary care. The grants focused on:

- LGAs where vaccination rates were lower than average and where there were fewer primary care providers
- Clinics in metropolitan Melbourne
- Clinics in regional Victoria
- Workforce

We provided primary care with access to training package that we developed for immunisers at state-run sites.

Training was available to pharmacists, who had not participated in vaccinating children under age 10 previously Our engagement packs were provided to GPs and pharmacies to use as collateral in their clinics.

This contributed to a uniform and familiar look and feel of COVID-19 vaccinations across the state-run program and primary care We trained our call centre to book people in for their vaccination at primary care on health direct – this was part of our 'no wrong door approach'.

Pillar 3: Targeted strategies to engage with vulnerable and at-risk children

Victoria has achieved national leadership on vaccination coverage based on socio-economic disadvantage, regional participation and uptake in priority communities. Efforts are being sustained across priority communities with equity principles in mind.

Children with a disability

- The Disability Liaison Officer program matches people with supports to decide the best way to get vaccinated, i.e. through specialist support at state-run sites or through in-home vaccination
- Working with AMAZE and NDS, the Victorian Government supported the development of social scripts to help children with autism prepare for

Aboriginal and Torres Strait Islander children

- Walk-in access is available at all state hubs.
- VACCHO van supports face-to-face vaccination engagement.
- Provision of Rapid Antigen Tests and education.
- Continuation of Aboriginal 5-11 campaign and Development of Youth

FOR OUR KIDS, be communitied by the second s

> Community Unity Immunity

- 30 in-reach services have been delivered
- Services are delivered largely on week-days, out of school hours
- There is walk up access, and where appropriate, sites are open to the broader community
- Largely located in 14 priority LGAs or school communities with disadvantaged populations
- 15 schools planned for the next two

K-pops

weeks.

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- Attractions across Melbourne have been used to attract families in priority populations, children in out-of-home care and children with a disability.
- 8 pop-up clinics held at places like Melbourne Zoo, Melbourne Aquarium and Scienceworks have allowed families to be given free access to these sites also.

Campaign

OFFICIAL: Sensitive

Snapshot of global evidence for increasing uptake

Professor Julie Leask, PhD, MPH

Susan Wakil School of Nursing and Midwifery Sydney Institute for Infectious Diseases University of Sydney Visiting Fellow, National Centre for Immunisation Research and Surveillance

Increasing COVID-19 vaccine uptake among children aged 5—11 years: behavioural insights from the field 3 March 2022

Sources

Universally recommended vaccinations: community-based interventions implemented in combination www.thecommunityguide.org/vaccines/universally/communityinterventions.html

Ward K et al. Strategies to improve vaccination uptake in Australia, a systematic review of types and effectiveness. *Aust NZ J Public Health* 2012; 36(4):369–77.

Brewer NT, Chapman GB, Rothman AJ, Leask J, and Kempe A (2017). Increasing vaccination: Putting psychological science into action. *Psychological Science for the Public Interest.* 18(3): 149-207

Strategies that can increase vaccination coverage - from systematic reviews

Community engagement Multiple combined interventions

> On-site vaccination (work, school, childcare) Standing orders Provider support, assessment, feedback & reminders Provider recommendation Home visiting

> > Positive social norm messages Behaviour change counselling

Reminder/recall systems Default appointments Incentives Planning prompts Education when used in combination

In choosing solutions, consider...

- Multiple strategies work best
- Is the solution appropriate to the target groups and barriers they experience?
- Does the solution address inequity?
- Is the solution:
 - -Effective
 - -Feasible
 - -Acceptable
 - -Affordable?

Thank you

