

# Vaccination: Perspectives of Australian parents



Poll 6, March 2017

## Detailed report

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### Report highlights

- The vast majority of Australian parents support childhood vaccination and keep their children's vaccines up-to-date
- Almost one in three parents have some concerns about vaccination for their children
- Vaccine safety is the most common concern held by parents about immunisation
- The most common reason for vaccine delay is minor illness
- Many parents are confused about whether to delay vaccines in the setting of minor illness
- Three quarters of parents believe they should be informed about the number of children not up-to-date with vaccines in their child's school, kindergarten or child care centre
- Seven out of ten Australian parents think children who are not up-to-date with vaccines should be excluded from child care or kindergarten
- One in six children who are not up-to-date with vaccines have been refused care by a health care provider

In a survey fielded in January 2017, Australian parents were asked a series of questions relating to childhood vaccination. Parents were asked to rate their level of agreement with a number of statements relating to the benefits and safety of vaccines. Barriers to vaccination and access to health care providers were explored in those parents who indicated that their children were not up-to-date with vaccines. Parents were also asked their opinions on vaccination policies for schools, kindergartens and child care centres.

Across a sample population of 1,945 parents, data were collected on a total of 3,492 of their children aged between one month and 18 years. The median number of children per parent was two, with a range from one to eight.

## Vaccine uptake among Australian children

The vast majority of parents (93%) indicated that they prefer their children to receive all recommended vaccines on the National Immunisation Program. A minority indicated a preference for selective or partial vaccination (6%) or complete refusal of all recommended vaccines (1%).

Among the 3,492 children studied, 95% of parents collectively indicated that all of their children were fully up-to-date with all recommended vaccines, with somewhat lower rates in children under two years of age (92%) and those over 13 years (92%), compared with those aged between two and 13 years (96%). These figures are in keeping with current immunisation coverage figures from Immunise Australia.

## Reasons for children not being up-to-date with vaccinations

Reasons for vaccination delay were explored among parents who reported that their children were not up-to-date (see figure 1). The most common reason given by parents as to why their child is behind on vaccinations was delay due to fever or minor illness (24%), followed by a parent preference against vaccination (18%). One in ten parents (11%) indicated it had been too difficult to attend to get vaccines and a further 11% said they were unsure about vaccination and had not been able to get their questions answered, highlighting the importance of the need to address both access issues and vaccine concerns for parents to optimise immunisation uptake. Of the small number of parents who said it was too difficult to get their child vaccinated, half (47%)

### Parents' reasons why child vaccinations are not up-to-date

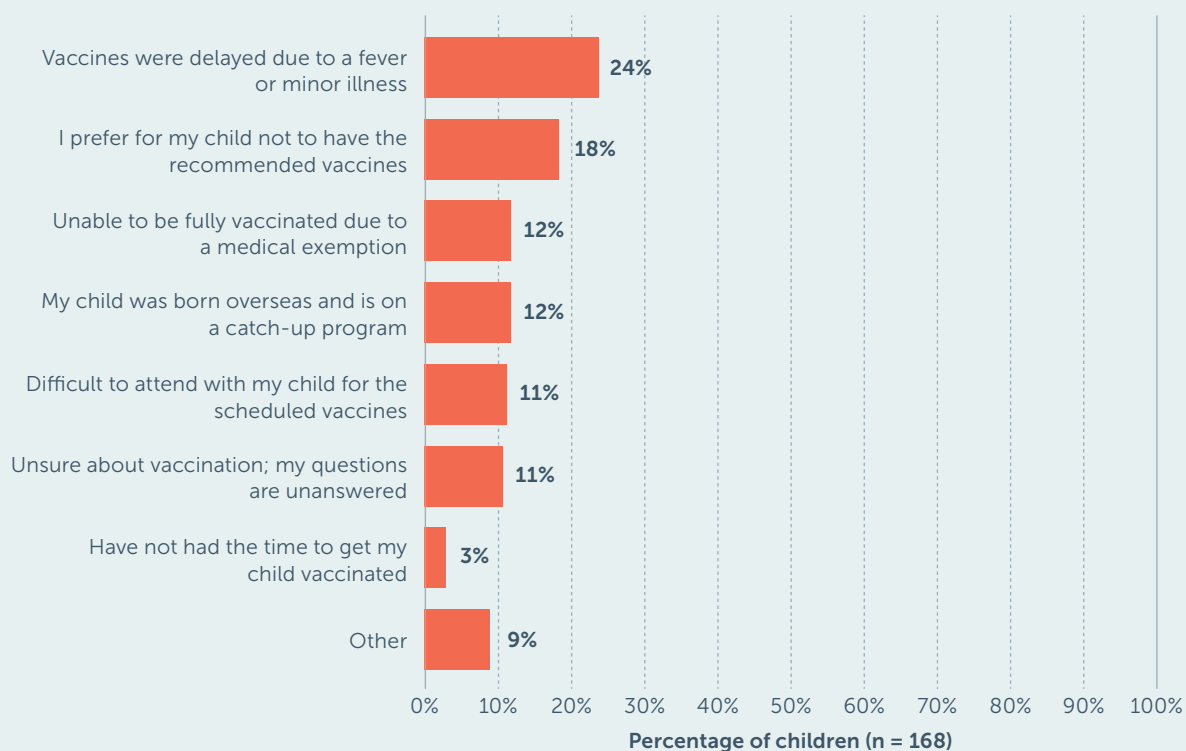


Figure 1.

reported they were not sure where to go to get the vaccinations, one in five (21%) said they could not get to the clinic during opening hours and one in six (16%) said they could not get time off work to attend for the vaccinations.

## Vaccine-related concerns held by parents

Despite high levels of vaccine acceptance and reported uptake, this poll found that almost a third (30%) of parents have some concerns about vaccination for their children; 6% having major concerns and 24% reporting minor concerns (see figure 2). Of the 6% of parents who had major concerns, they were more likely to have completed tertiary education, migrated to Australia within the last ten years, and have a child with a chronic illness. Seventy-four per cent of these parents were still fully vaccinating their child despite major concerns, with 23% choosing only some or no vaccines. The majority of those parents with minor vaccine-related concerns reported that they still prefer for their child to have all the recommended vaccines (see figure 2). Of the 24% of parents having minor concerns, they were more likely to not have a regular GP. There were no differences in concerns across parent income, age, or gender. There was some state-based variation, with parents from Western Australia being more likely to report concerns (40%) than those in other states. Rates of concerns were lowest in Australian Capital Territory (ACT) (11%) and the Northern Territory (11%).

## Myths and misconceptions

### What are parents worried about?

Vaccine-related concerns held among Australian parents, including those who prefer to vaccinate their children, relate primarily to vaccine safety. All vaccines currently available in Australia must pass stringent safety testing before being approved for use by the Therapeutic Goods Administration (TGA), and yet 12% of parents indicated that they were unsure whether vaccines are safe for their children and 1% felt they were not safe. Around one in six parents (16%) believe vaccines contain ingredients that can cause serious harm, such as mercury and aluminium. In addition to their active components, vaccines can contain other ingredients that are in the vaccine for a specific reason. These other ingredients are usually present in trace amounts and are extensively tested to ensure they are not harmful. Since the year 2000, vaccines available on Australia's National Immunisation Program have not contained the mercury-containing preservative thiomersal.

Vaccines work to strengthen the immune system by stimulating defence mechanisms that provide protection against specific diseases, and yet one in eight (12%) parents feel children's immune systems could be weakened by vaccines.

Extensive medical research has shown no causal link between autism and vaccines, especially the Measles, Mumps and Rubella (MMR) vaccine, yet 9% believe that vaccines can cause autism, with a further 30% being unsure about this.

## Vaccine uptake and level of concern among Australian parents

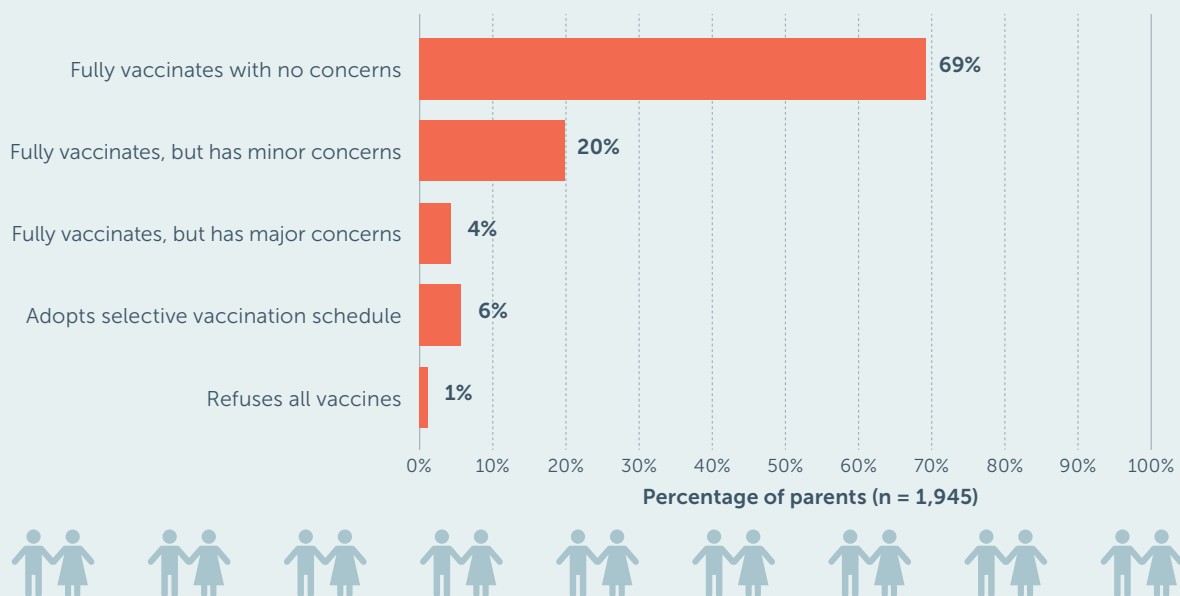


Figure 2.

## Immunity in the community

An important feature of immunisation is that it brings benefits not only for the individual who receives the vaccine, but also for the entire population through a concept known as 'herd immunity', sometimes also called 'community immunity'. If a critical number of people are immunised and protected from a disease, the infection will not be able to spread in the community. This protects the population as a whole from infection. A small proportion of parents doubted the importance of community ('herd') immunity with 9% reporting they did not agree that it is important for their child to be vaccinated to protect others in the community. One in ten parents reported that it is not necessary for their child to be vaccinated because other children are vaccinated.

## When should vaccines be delayed?

Results showed high levels of misperceptions among parents about when a child's vaccines might need to be delayed due to a minor illness. Over a third (36%) of parents reported that vaccines should be delayed in a child who has a runny nose without a high temperature and a further third (33%) were unsure. Almost half (47%) thought that vaccines should be delayed if a child is on antibiotics, even if they are well. Almost a quarter (22%) felt that vaccines should not be given to a child who has had

a local reaction to a previous vaccine, such as swelling or redness at the injection site. In all of these scenarios, there is no medical reason for vaccination to be delayed. Most parents (75%) correctly reported that a fever or high temperature was a valid reason to delay vaccination.

## Parents' views on school and child care access for unvaccinated children

The majority of Australian parents (74%) are in support of information being made available to parents about the number of children not up-to-date with vaccines in their child's school, kindergarten or child care centre. Sixty-nine per cent of parents agreed that knowing the percentage of under-vaccinated children in a school or centre would influence their decision about whether to send their child to that facility (see figure 3).

Parents also showed majority support for a 'No Jab, No Play' policy, with almost three quarters (72%) of parents indicating that children who are not up-to-date with vaccines for their age (and are not on a catch-up program or do not have an approved medical exemption) should be refused access to kindergarten and child care (see figure 3). The strongest level of support for this policy

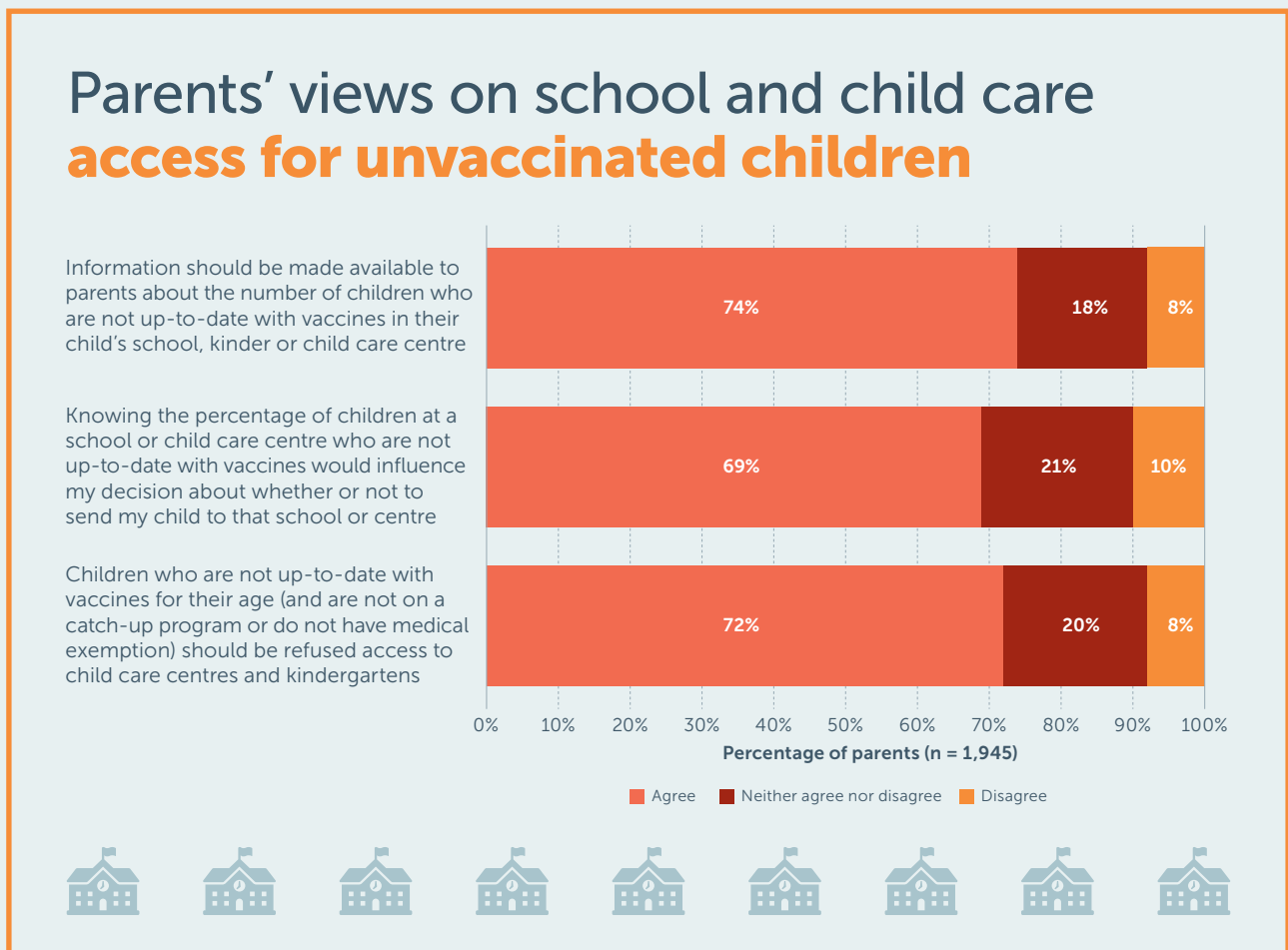


Figure 3.

was seen in Tasmania among 86% of parents. Support was lowest in Western Australia, where 67% agreed with the policy. There is currently a 'No Jab, No Play' policy in place in Victoria, Queensland, and New South Wales (NSW). Parent support for the policy was similar across these three states, Victoria (72%), Queensland (72%) and NSW (71%).

## Impact of vaccination status on health care access

Among those children who parents reported as not being up-to-date with vaccines (5%), 17% had been refused care by a health care provider. This was most common among children aged less than six years, where a quarter (25%) had been refused care by a health care provider, followed by 21% of primary school-aged children and 5% of teenagers. This raises some concern as children who are under or non-vaccinated are at greater risk of getting a vaccine preventable disease and health care providers refusing care to these children places them at further risk of disadvantage.

## Implications

In this national poll of nearly 2,000 parents we found that concerns regarding the safety of childhood vaccination persist among a minority of parents, despite significant public health campaigning and education over recent years. The overwhelming majority of Australian parents indicate a preference for fully vaccinating their children, yet among this group of vaccinating parents nearly a quarter hold some concerns about vaccination for their children. A small minority of parents hold major concerns about vaccination for their children and indicate a preference for selective vaccination or complete refusal. Parental concerns most frequently relate to vaccine safety. Concerns about a causal link between autism and vaccines, and fears that vaccines contain harmful ingredients or may weaken a child's immune system persist despite clear scientific evidence that this is not so.

These results serve as an important reminder that while most parents follow the National Immunisation Program for their children, the level of vaccine-related concern and misconceptions among parents is significant. Parents who are concerned about vaccine safety may be less likely to vaccinate their children. Ongoing education and effective communication to tackle these concerns among vaccine-hesitant parents is vital if we are to continue to see high levels of uptake of vaccination among Australian families. As health care providers, particularly GPs, are the most trusted and frequently accessed resource regarding vaccine concerns, we need to ensure they are adequately resourced to address this need. Families without a regular GP were considerably more likely to hold vaccine-related concerns, suggesting

# 72%

of parents indicate children who are not up-to-date with vaccines should be refused access to kindergarten and child care



the importance of a good relationship with a health care provider in providing health education to families.

Among those Australian children not up-to-date with their vaccinations, the leading reason offered by parents was that their child's vaccines had been delayed due to minor illness. The majority of parents also had poor knowledge about when vaccines may need to be delayed. These findings suggest children may be having their vaccines unnecessarily delayed by parents and highlight the need for improved education about appropriate reasons for delaying vaccination in the setting of minor illness. Parents should be encouraged to see their health care provider for advice before assuming their child needs to have their vaccines delayed.

Difficulty accessing vaccination services was another factor identified by parents as a reason for under-vaccination of their children. Being unsure where to go or not being able to take time off work to attend the clinic during opening hours were among the leading barriers to access. Consideration of these factors in developing models of service provision is important, including after-hours or weekend immunisation clinics.

The clear majority of Australian parents indicated support for strong policies to help get kids up-to-date on vaccines and preserve immunity in the community. Three quarters believe that information should be made available to parents about the number of children who are not up-to-date with vaccines in their child's school or child care centre. A further 69% said this information would influence their decision about sending their child to that school or centre. The majority (71%) indicated support for a 'No Jab, No Play' policy, as is currently in place in NSW, Victoria and Queensland, saying that children who are not up-to-date with vaccines

# 93%

**of parents prefer their children to receive all recommended vaccines on the National Immunisation Program**



(excluding those with a medical exemption or on a catch-up program) should be refused access to child care centres and kindergartens.

This poll found that implications regarding equity of service access for under-vaccinated children extends into the health care sector, with one in six children who are not up-to-date with vaccines being refused care by a health care provider. Managing vaccine refusal is complex and while some clinicians argue that unvaccinated children can present a risk to their other patients, the ethical considerations for a child who is unvaccinated at their parents' discretion being refused health care are considerable. By turning away children who do not receive all the recommended vaccines, health care providers could deny adequate health care to a child who is not unvaccinated by their choice and eliminate the possibility of educating parents and helping them to eventually choose to vaccinate. While a clinician's right to refuse care to a non-vaccinated child without medical exemption has been a topic of discussion for some time in the United States, these results suggest a worrying pattern of practice not previously identified in Australia.

## Data source

This report presents findings from a nationally representative household survey conducted exclusively by the Online Research Unit for The Royal Children's Hospital, Melbourne. The survey was administered from January 17 to February 6, 2017, to a randomly selected, stratified group of adults aged 18 and older (n=1,945). All respondents were parents or caregivers to children aged less than 18 years. Collectively respondents had a total of 3,492 children. The sample was subsequently weighted to reflect Australian population figures from the Australian Bureau of Statistics. Among Online Research Unit panel members contacted to participate the completion rate was 65%.

## References

1. National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS) Myths and Realities: Responding to Arguments against Immunisation. A guide for Providers. 5th Ed (2013) Retrieved 22 February 2017 from [www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/AD34C3D063510C0CCA257D49001E73D4/\\$File/full-publication-myths-and-realities-5th-ed-2013.pdf](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/AD34C3D063510C0CCA257D49001E73D4/$File/full-publication-myths-and-realities-5th-ed-2013.pdf)
2. National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS) (2009). Thiomersal fact sheet. Retrieved 22 February 2017 from [www.ncirs.edu.au/assets/provider\\_resources/fact-sheets/thiomersal-fact-sheet.pdf](http://www.ncirs.edu.au/assets/provider_resources/fact-sheets/thiomersal-fact-sheet.pdf)
3. Taylor, L.E., Swerdfeger, A.L., & Eslick, G.D. (2014). Vaccines are not associated with autism: An evidence-based meta-analysis of case-control and cohort studies. *Vaccine*, 32(29), 3623-3629. doi: 10.1016/j.vaccine.2014.04.085.
4. Gardener, H., Spiegelman, D., & Buka, S. (2011). Perinatal and neonatal risk factors for autism: A comprehensive meta-analysis. *Pediatrics*, 128(2), 344-355. doi: 10.1542/peds.2010-1036.
5. National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS) (2009). MMR vaccine, inflammatory bowel disease and autism. Retrieved 22 February 2017 from [www.ncirs.edu.au/assets/provider\\_resources/fact-sheets/mmr-vaccine-ibd-autism-fact-sheet.pdf](http://www.ncirs.edu.au/assets/provider_resources/fact-sheets/mmr-vaccine-ibd-autism-fact-sheet.pdf)

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