



Immunisation of young people with disabilities in specialist school settings in Victoria, Australia

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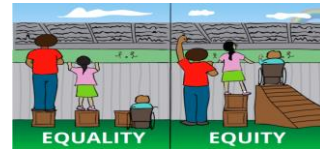
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Social equity and health of people with disabilities

UN Convention of the Rights of Persons with Disabilities, Article 25

State parties shall provide persons with disabilities with the same range, quality and standard of free or affordable health care and programmes as provided to other persons, including ... population-based public health programmes



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Importance of immunisations for young people with disabilities



Images from <https://cdn2.theinertia.com>: <https://cerebral-palsy-information.com>



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Immunisation in young people with disability



- Only 9 studies (1 Australian) on adolescent immunisation in young people with a disability, all suggest lower uptake than those without disability

- One unpublished UK study exploring consent to HPV vaccine of parents of girls in specialist schools

Tuftey, Provost, Macleod, 2013



Image from <https://cerebral-palsy-information.com>

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School immunisations

"...our greatest success was among Parochial school children in which authorities cooperated to the limit. As a result a mark of over 80% completed immunizations was reached as early as 1930....In these schools, each class reaching 100% was given a banner and an ice-cream party"



Craizer, Diphtheria control by immunization, 1938



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Special school settings in Victoria

- 12,000 attend specialist school settings
- Over 80% - intellectual disability and/or autism
- 4.1% - physical disability

Special Schools – mild to moderate ID

Special Development Schools – moderate to severe ID

Multi-mode schools – all levels of ID

Physical Disability Schools

Autism Schools



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Immunisation data in ungraded schools

No immunisation uptake rate for specialist schools recorded



Image from <https://aboutastheedliving.org>



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Study question

What is the **uptake** of immunisations, and **reasons for non-vaccination** for young people with disabilities eligible for the School Immunisation Program in specialist schools in Victoria, Australia?



Image from <https://thechronicleherald.ca>



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Methodology

- Prospective data on immunisation uptake from specialist schools in Victoria
- Documented if dTpa and/or HPV given on each immunisation day for every student 12 or 13 years
- If not immunised, why not:
 - Up to date with vaccine
 - Vaccine not available
 - No consent form returned
 - Consent form returned with consent for immunisation not given
 - Not able to immunise due to student behaviour
 - Not at school



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Table 1: School Demographics

Demographic	Consenting schools (n=38) n(%) Total students: 6,976	Non-consenting schools (n=43) n(%) Total students: 6,298
Type of School		
Special School	6 (22)	8 (18)
Special Development School	7 (23)	13 (29)
Multi-Sector School	11 (29)	19 (40)
Physical Disability	2 (7)	4 (9)
Autism Specific School	2 (7)	2 (4)
Student enrolment numbers		
<50 students	4 (10)	6 (11)
50-99 students	5 (13)	7 (16)
100-199 students	6 (15)	28 (58)
200-299 students	6 (15)	5 (11)
>300 students	4 (10)	2 (4)
Region of Victoria		
Metropolitan Melbourne	17 (43)	28 (58)
North Eastern	7 (23)	8 (18)
North Western	6 (23)	11 (24)
South Eastern	5 (13)	17 (38)
South Western	10 (26)	1 (2)
Student population		
Socio-economic index		
Low-mid	14 (35)	21 (35)
Mid	7 (23)	11 (24)
Mid-High	2 (7)	6 (13)
High	2 (7)	0 (0)
Missing data	1 (4)	0 (0)
English as a second language household		
<10%	22 (57)	37 (82)
10-19%	6 (15)	8 (18)
20-29%	25 (62)	37 (82)
30-39%	2 (5)	1 (2)



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Data collected



- 375 individual students recorded from 27 (37%) specialist schools in Victoria
- 24 schools completed data for all immunisation days
- Data was complete for dTpa and first dose of HPV with some attrition for second and third dose of HPV



Image from <https://mabimemagazine.co.uk>

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Results

Table 2: Uptake of dTpa as compared to Victorian data

	dTpa n (%)
Victorian 2016 Year 7 * (n=69,186)	60,964 (89)
Specialist schools (study cohort n=375)	261 (67)**

*From data provided by DHS Immunisation, Victoria and DET

**Includes those who received the dTpa immunisation on an immunisation day in 2017 and those who were up to date with dTpa



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Results

Table 3: Uptake of HPV as compared to Victorian data

	HPV1 n (%)	HPV2 n (%)	HPV3 n (%)
Victorian Year 7 *(n=33,675)			
Female	29,545 (88)	28,566 (85)	26,640 (79)
Male	28,672 (84)	28,582 (81)	26,531 (75)
Specialist Schools (n=261)			
Female	6 (66)	58 (51)	28 (25)
Male	75 (67)	123 (47)	72 (28)

*From the HPV register



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Results

Table 4: Reasons for non-immunisation in specialist schools

Reason	dTpa missed doses n (%)	HPV missed doses n (%)
Not at school	47 (38)	117 (30)
No consent form returned	31 (25)	97 (25)
Consent form returned but no consent given	9 (7)	52 (13)
Behaviour/refusal	11 (9)	35 (9)
Parents indicate they will take to a community provider/ GP	9 (7)	35 (9)
Other	17 (14)	55 (14)



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Conclusion

- First study measuring uptake of adolescent immunisations in specialist schools in Australia
- Significant disparity in uptake of dTpa and HPV in young people in specialist schools compared to mainstream schools
- Urgent need for further research exploring issues of missed immunisation further, particularly high absence rate on immunisation day, consent form return rate and management of immunisation anxiety in young people with disability
- Phase 2 – Qualitative study using the socioecological model, includes key informant interviews at many levels: policy, local government, specialist school, parent/family and adolescents



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Image from <https://kidzorg.blogspot.com>



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