Submission for the Inquiry into Public Health (Childhood Vaccination and other legislation) Amendment Bill 2015

1.0 Summary

It would be necessary for the Queensland Government to have irrefutable evidence that enacting the proposed legislation would eradicate any potential threat from any '*vaccine preventable', 'bloodborne' or 'gastrointestinal'* disease, in order to justify the violation of a long list of human rights, international treaties and anti-discrimination laws and principles.(refer section 4)

The argument for excluding healthy unvaccinated children is based on the idea that a child who is not fully vaccinated according to the latest (and ever changing) Childhood Immunisation Schedule can somehow covertly transmit a disease, to which they remain unaffected. The current public health laws and powers strike the appropriate balance between the rights of the individual and those of the general public (refer section 2). Excluding *healthy* unimmunised children from childcare, kindergarten, special-needs care, afterschool care etc. will not serve to further protect the public health.

The case for coercing compliance is based on the premise that we are in an epidemic situation with high infant morbidity and mortality rates while simultaneously having the highest childhood vaccination rates in our history. These two situations cannot exist together - either we are in a plague-like situation which remains unaffected by vaccines and high vaccination rates; or mortality and morbidity rates are being exaggerated (refer section 3.2).Diseases which were once considered a childhood rite of passage, then included on the schedule for convenience and economic reasons, are now considered by some as potentially devastating as polio and diphtheria in our grandparents era. Measles is being used to rationalise herd immunity for all diseases listed on the schedule and their high vaccination rates (refer section 3.3 &3.4), when we don't have a problem with measles. While the perceived problem with pertussis and the serious risk it poses to infants is being used to justify coercive government strategies when the pertussis vaccine is incapable of preventing transmission of the bacteria which causes whooping cough (refer section 3.4). Government and media misrepresentation of the disease coupled with the mode of action of the pertussis vaccine, is putting infants and other vulnerable persons at risk.

Legislating for obedience to the changeable and unknown schedule of the future is something no critical thinker, no honest person, would ever sign off on. The government is disguising this draconian legislation as a 'choice childcare centres can make' while simultaneously demonstrating their use of leveraging and 'practical compulsion' tactics to meet government performance targets. This raises the obvious question: what tactics will the government use to leverage or compel the childcare centres to make the desired 'choice'?

It is outrageous for the government to infringe on the fundamental rights by forcing parents to accept a one-size-fits-all approach to their child's medical care. The current ALP government has chosen to ignore the success an earlier education campaign in raising vaccination rates, instead opting for autocratic and discriminatory methods to ensure compliance. This is particularly troubling when questions still remain concerning the safety of certain chemicals used to produce vaccines. As long as these substances carry any potential hazard, their use should be a parent's decision - not the government's (or their delegate).

2.0 The proposed legislation is unreasonable and unnecessary to protect public health

The proposed legisaltion is a heavy-handed solution to a non-existant problem. Childhood vaccination rates are the highest in our history, that is, **we have never had childhood vaccination rates this high!** In Queensland, the 2 year old cohort is currently at 92.36% and higher than the national average. Contrast this to when vaccination rates for 2 years olds in Queensland were 90.5% in 2003, 79.58 % in 1999 and a national estimate of 35% in the 1995.[1]

With childhood 'vaccination rates' the highest in our history, if the mortality and/or morbidity rates from vaccine-targeted diseases were also high, this would indicate that the problem lies with the vaccination schedule or the vaccines used, rather than an issue with vaccine uptake. (Refer section 4)

2.1 The current provisions are adequate and fair.

The proposed legislation is unnecessary government overreach as presently, the state and federal governments already have wide ranging powers[2] to exclude unvaccinated children during an outbreak or a suspected outbreak of notifiable disease. There is no evidence to extend these powers to exclude healthy, unvaccinated children based on some indefinable threat in the future.
The current public health laws are long standing and appropriate, striking the right balance between the rights of the individual and that of the wider public.

2.2 Public Health Regulation 2005

Mr Dick also proposed to amend the Public Health Regulation 2005 '*to list all necessary vaccine - preventable conditions relevant to the Bill*'[3] as the regulation currently only stipulates measles. This is unnecessary as Queensland Health already **specifies** the medical conditions which require exclusion from school or child care to prevent the spread of infectious diseases among staff and children. The poster[4] on the following page and at the following link provides information on the recommended minimum exclusion periods for infectious conditions.
https://www.health.qld.gov.au/ph/documents/cdb/timeout_poster.pdf

If any amendments need to be made, children who have been recently vaccinated with a live vaccine (rotavirus, measles, mumps, rubella and chicken pox vaccines) should be excluded for a prescribed period to prevent transmission through 'shedding'. (Refer section 3.4.3)

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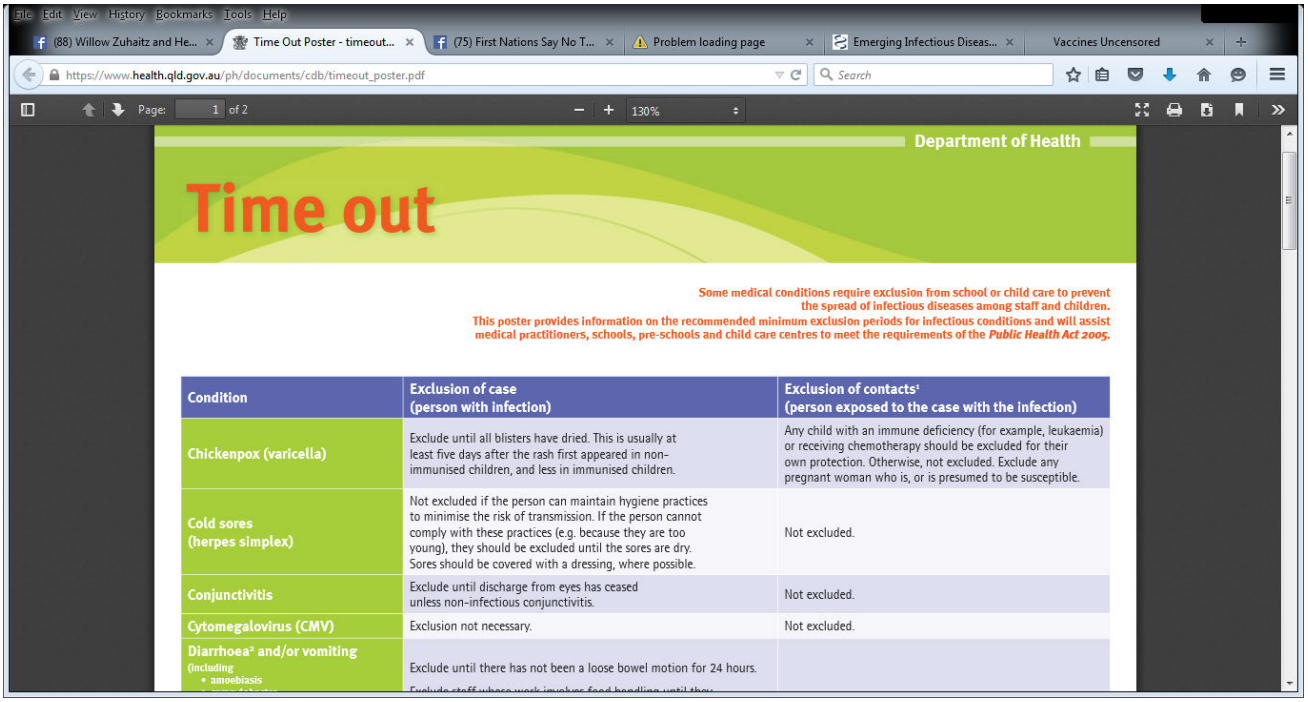
[1] Sources: Australian Childhood Immunistion Register &
http://www.abs.gov.au/ausstats/abs@.nsf/mf/4813.0.55.001#4.%20RESULTS%20-%20VACCINATION%20COVERAGE

[2] Public Health Act under the Education and Care Services National Law (Queensland) or Education and Care Services Act 2013

[3] http://www.legislation.qld.gov.au/Bills/55PDF/2015/PubHealthChVaccOLAB15E.pdf

[4] https://www.health.qld.gov.au/ph/documents/cdb/timeout_poster.pdf



Department of Health

Time out

Some medical conditions require exclusion from school or child care to prevent the spread of infectious diseases among staff and children.
This poster provides information on the recommended minimum exclusion periods for infectious conditions and will assist medical practitioners, schools, pre-schools and child care centres to meet the requirements of the *Public Health Act 2005*.

Condition	Exclusion of case (person with infection)	Exclusion of contacts[1] (person exposed to the case with the infection)
Chickenpox (varicella)	Exclude until all blisters have dried. This is usually at least five days after the rash first appeared in non-immunised children, and less in immunised children.	Any child with an immune deficiency (for example, leukaemia) or receiving chemotherapy should be excluded for their own protection. Otherwise, not excluded. Exclude any pregnant woman who is, or is presumed to be susceptible.
Cold sores (herpes simplex)	Not excluded if the person can maintain hygiene practices to minimise the risk of transmission. If the person cannot comply with these practices (e.g. because they are too young), they should be excluded until the sores are dry. Sores should be covered with a dressing, where possible.	Not excluded.
Conjunctivitis	Exclude until discharge from eyes has ceased unless non-infectious conjunctivitis.	Not excluded.
Cytomegalovirus (CMV)	Exclusion not necessary.	Not excluded.
Diarrhoea[2] and/or vomiting (including • amoebiasis	Exclude until there has not been a loose bowel motion for 24 hours.	

2.3 Purpose of the legislation

Mr Dick states that the aim of the legislation is to give childcare centres the 'choice' (interestingly this 'choice' is enabled by removing the choice of the primary caregiver, the parent); however inconsistently he also states that currently '*a childcare centre is also free to exclude a child solely on the basis that they are not fully immunised*'[5]. If this is the case and childcare centres wished to exclude a child based on vaccination status, it seems it can be achieved in the area of the childcare centre's policies. This has already faced an administrative (not judicial) test in Beattie v Maroochy Shire Council. However legislating for the exclusion of unvaccinated children would constitute discrimination and civil conscription, this is discussed in section 4.

Perhaps this is a reason the legislation is framed as a 'choice' to 'empower' the childcare centres, thus it would be the 'choice' of a childcare centre to breach various state, Commonwealth and international laws or treaties (section 4); leaving the Queensland government with everything to gain (increased immunisation rates to meet a National Health performance criterion) and nothing to lose (no liability).

It is likely that the proposed legislation will have the desired effect of increasing vaccination rates through **practical or effective compulsion** (refer section 4.2), however it is unlikely that this will in turn result in less occurrence of vaccine targeted diseases (discussed in section 3).

[5] http://www.parliament.qld.gov.au/documents/tableOffice/BillMaterial/150715/Public%20Health.pdf p1349

2.4 Conflicts with other policy objectives

The bill is inconsistent with both State[6] and Federal[7] policy objectives of increasing the workforce participation rate for women and contradict government initiatives of raising the kindergarten attendance rates.[8]

Ironically the varicella (chickenpox) vaccine was originally included on the schedule (funded in 2005) because of the cost-benefit compared with parents taking time off work to care for children with chicken pox.

2.5 Unintended consequences

Legislation such as this changes the current system of *compulsory choice* to one of *practical or effective compulsion*, which raises issues such as:

- Leveraging childcare services to influence, force or control a parent into vaccinating their child (against their conscience) does not constitute 'valid consent' as defined by the Australian Immunisation Handbook. Does this then constitute trespass or assault and by whom?
  "In addition, doctors must obtain valid consent to vaccinate children, and consent is not valid in the presence of any form of coercion." [9]
- If consent is not legally valid in the presence of coercion, who then is liable for an adverse reaction?
  In 1997, former Australian Greens Senator, Dee Margetts, during a Senate discussion about the Child Care Payments Bill, argued that there was a "*reciprocal obligation on any government which actually requires compulsion for a particular activity—in this particular case child immunisation—which is seen to be for the public good* ", so that *" if the vaccination harms the child, there is an obligation on the Commonwealth government to make sure that adequate compensation is available"*. [10]

  If the childcare centre chooses to adopt the legislation, who has the reciprocal obligation, the childcare centre or the Queensland government?

- The legislation could result in concentrations of '*unvaccinated*' children in childcare and early learning centres which did not exercise the option exclude children who were not fully vaccinated. The significance of this is twofold:
  - The occurrence of diseases which do respond to herd immunity
  - Creating examinable populations to compare long term health outcomes of vaccinated and unvaccinated children.

[6] http://www.parliament.qld.gov.au/Documents/TableOffice/TabledPapers/2011/5311T3988.pdf
[7] http://www.smh.com.au/federal-politics/political-news/australia-wont-meet-female-workforce-participation-target-intergenerational-report-shows-20150309-13zbpm.html
[8] Accessing Kindergarten in Queensland report, 2011, http://deta.qld.gov.au/earlychildhood/pdfs/access-report.pdf
[9] http://www.theaustralian.com.au/opinion/letters/questioning-vaccination-policy-is-not-synonymous-with-anti-vaccination/story-fn558imw-1227312423699
[10] http://www.aph.gov.au/binaries/hansard/senate/dailys/ds111197.pdf page 8687 -8

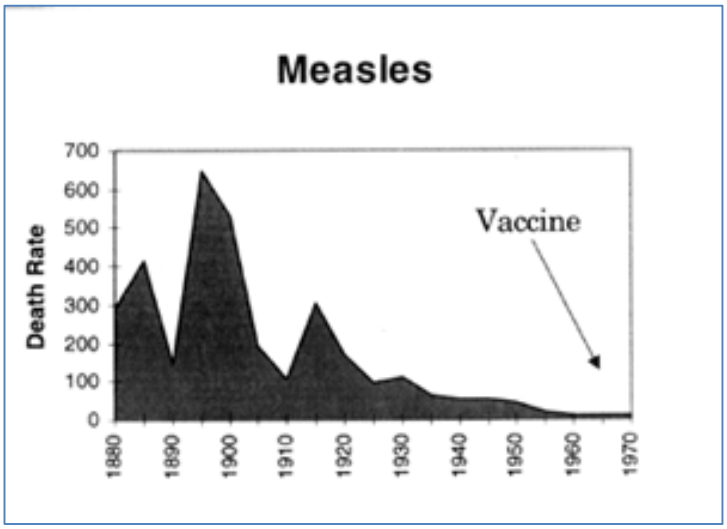
3.0 Vaccination and Public Health

Vaccination is being purported as *'one of the greatest public health measure in our history'*, that *'high vaccination rates are needed for herd immunity to protect the community from disease'* and *'the unvaccinated are responsible for disease outbreaks'*. Statements such as these have been made so frequently and without data or research to support them, that they have become entrenched beliefs and any information to the contrary or which questions the current paradigm is disregarded. However, good science (and policy) is about evaluating **all** the information not just that which supports a certain viewpoint.

In the 1950's and 60's the Department of Health deemed Australia to be infectious disease free and that improvements made in public health (sanitation, hygiene, nutrition and smaller family sizes[11], also isolation and treatment) reduced the deaths and illness associated with infectious diseases. The public sector vaccines available[12] in the 50's and 60's were:

- - 1980 **Smallpox** vaccine
- 1945-46 **Tetanus toxoid**
- 1953 **DTPw** (diphtheria/tetanus/pertussis whole cell)
- 1956 May **Poliomyelitis (SALK)**
- 1966 Sep **Poliomyelitis (OPV)** (oral Sabin)
- 1969 **Measles**
- **-** 1985 **BCG** (ie Tuberculosis vaccine)

These were available on a **voluntary** basis and introduced after many of the deaths from these disease declined by 80-98% in the 60 years **preceding** the introduction of the vaccine/s. A graphical example of this decline has been reproduced- right.



This graph and others like it for diphtheria, whooping cough, scarlet fever (for which no vaccine is available) and polio have been developed by Beattie[13] from figures from Commonwealth Year Books and the Australian Bureau of Statistics. It is therefore fundamentally incorrect to suggest that vaccination is responsible for the prevention of these deaths.

Note: Graphical evidence on the decline in death rates from infectious disease for USA, England, New Zealand and many other countries shows the exactly the same situation as above.

[11] (Wilyman, Immunisation Policy, 2013) cites J.H.L Cumpston and MacFarlane Burnett
[12] Australian Immunisation handbook 9th edition
[13] Beattie, 1997, Vaccination A Parent's Dilemma also available at http://www.vaclib.org/sites/debate/web1.html

However if vaccines must be credited for protecting '*against diseases such as whooping cough and diphtheria that killed thousands of babies in our grandparent's generation'*[14], it must also then be acknowledged this was **achieved by a totally voluntary vaccination program**.

The Australian Bureau of Statistics estimated childhood vaccination rates to be 53% in the 1980's dropping to 35% in 1995. [15]

In 1993/94, when the Immunise Australia Program formally documented the vaccines required for children in the Childhood vaccination Schedule, it consisted of about 17 shots to eight diseases by the age of six, that is:

(Diphtheria, tetanus, pertussis) x 3,
Polio x 2,
(measles, mumps, rubella)x 1 and
HIB x 3.[16]

Today, in its 10th edition, the Immunisation Handbook details a much expanded vaccination schedule with additional doses to existing vaccines and vaccines to new diseases. Now there are 41 shots to 14 diseases by age four. We are being told the newer, safer and more effective vaccines are being added to the schedule[17]. In October 2015 we can expect an additional diphtheria, tetanus and acellular pertussis (DTPa) dose will be included at 18 months [18](of age) making it 5 doses of the vaccine (by 4 years of age) in an attempt to achieve immunity.

However, in 2004 the 18month and fourth dose of DTPa had been removed from the schedule to '*help reduce the number of large local reactions seen when the dose was given at 18 months.*' [19]

Question:

What guarantees have or will be given for the safety of the re-introduced DTPa booster at 18 months?

An inherent problem with relying on the 'percentage of fully vaccinated children' as an indicator of public health, that is, it takes over twice as many doses to be considered '*fully vaccinated'* that what it did 20 years ago, and with nearly 300 vaccines in development[20], this trend is unlikely to change.

The argument for excluding unvaccinated children from childcare is focussed on an incorrect perception of what an unvaccinated child is. Many people think that this is a child that has never had a vaccine (while this may be true in some instances); it is more accurately defined as *a child*

[14] Jo-ann Miller (Member for Bundamba), Personal Communication, 26 June 2013
[15] http://www.abs.gov.au/ausstats/abs@.nsf/mf/4813.0.55.001#4.%20RESULTS%20-%20VACCINATION%20COVERAGE
[16] Compiled from: Australian Immunisation handbook 9th edition and http://www.health.vic.gov.au/immunisation/resources/history.htm
[17] Newman, 2013, Personal Correspondence
[18] https://www.tenders.gov.au/?event=public.atm.showClosed&ATMUUID=FCEB23B3-A29A-6DAF-DCE31D985155430E
[19] https://www.mja.com.au/…/issu…/180_10_170504/bur10901_fm.pdf 2004, p 494
[20] Medicines in Development Vaccines, A Report on the Prevention and Treatment of Disease Through Vaccines , 2013 presented by America's biopharmaceutical research companies http://phrma.org/sites/default/files/pdf/Vaccines_2013.pdf

who is not fully vaccinated according to the latest childhood vaccination schedule.[21] This distinction must be made, as children included in the unvaccinated statistic may not be completely unvaccinated, be partially vaccinated or have natural immunity and thus contribute to the 'herd immunity' for certain diseases.

This is well illustrated in the ACIR data where uptake for individual vaccines is as much as 5% higher than '*fully vaccinated*' figures - see table below. It is also unknown exactly what contribution natural immunity makes.

Queensland Vaccination Figures as at 30 June 2015[22]

Cohort	Number of children in state	% DTP	% Polio	% HIB	% Hep B	% MMR	% Pneumo	% MenC	% Varicella	% Fully immunised
12 to 15 mths (cohort 1)	16,043	92.5	92.5	92.4	92.2	0.0	92.2	0.0	0.0	92.0
24 to 27 mths (cohort 2)	15,678	95.3	95.2	94.6	94.9	91.3	0.0	94.6	91.2	89.9
60 to 63 mths (cohort 3)	16,622	92.8	92.8	0.0	0.0	92.8	0.0	0.0	0.0	92.3

Note: As rotavirus is not included as part of the '*percent fully immunised'* statistic (or vaccination rates), there should be no requirement to have the vaccine.

Another, more fundamental problem with using vaccination coverage rates as an indicator of public health is the public **health** should be measured by an absence of disease not the consumption or uptake of a drug. As such, *vaccination rates* are more accurately a measure of **compliance** or **obedience** to the current vaccination schedule.

The term '*vaccination rate*' is too easily aligned and misinterpreted to be the rate required for herd immunity (or the herd immunity threshold), when the burden of this vaccination (compliance) rate is on about 7%[23] of the population. Children who are not fully vaccinated comprise less than 0.56% of the Australian population[24] - hardly cause for concern. This is detailed further in section 3.2

In Queensland, the 15 000 children under 5 years that are not fully immunised represent about 0.32% of the Queensland population[25]. To illustrate this more clearly: if 55 000[26] people attended the last Ekka People's Day, 176 were healthy 'unvaccinated' children 'spreading' their non-existent diseases.

[21] Public Health (Exclusion of Unvaccinated Children from Child Care) Amendment Bill 2013 defined an unvaccinated child as unvaccinated child , for division 1AA, means a child who— (a) has not been vaccinated for every vaccine preventable condition; and (b) has not otherwise acquired an immunity from contracting each vaccine preventable condition for which the child has not been vaccinated . The proposed legislation has failed to define it.

[22] http://www.humanservices.gov.au/corporate/statistical-information-and-data/australian-childhood-immunisation-register-statistics/

[23] ABS 2013 percentage of population 0 - 5 years

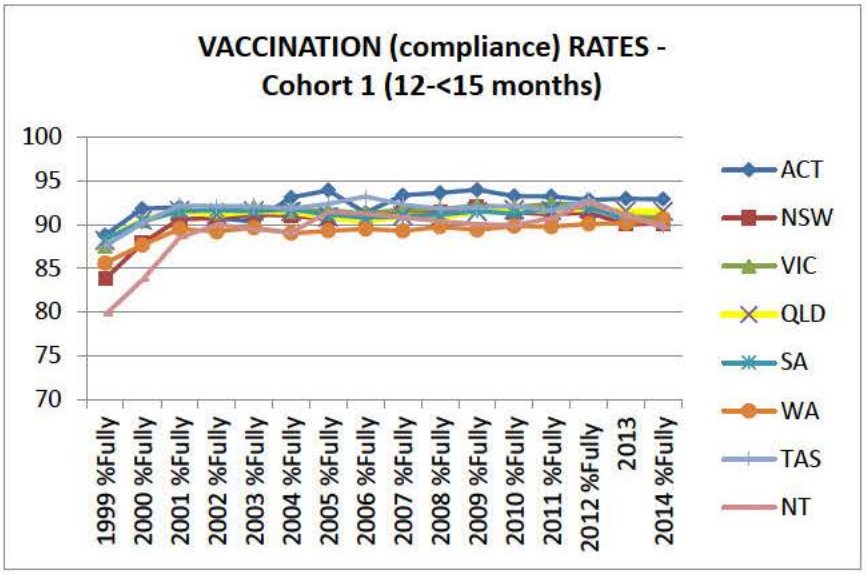
[24] 0-5 year old children are less than 7% of the Australian population. If 8% are not FULLY vaccinated (as 92% are) then 8% of 7% = 0.56%

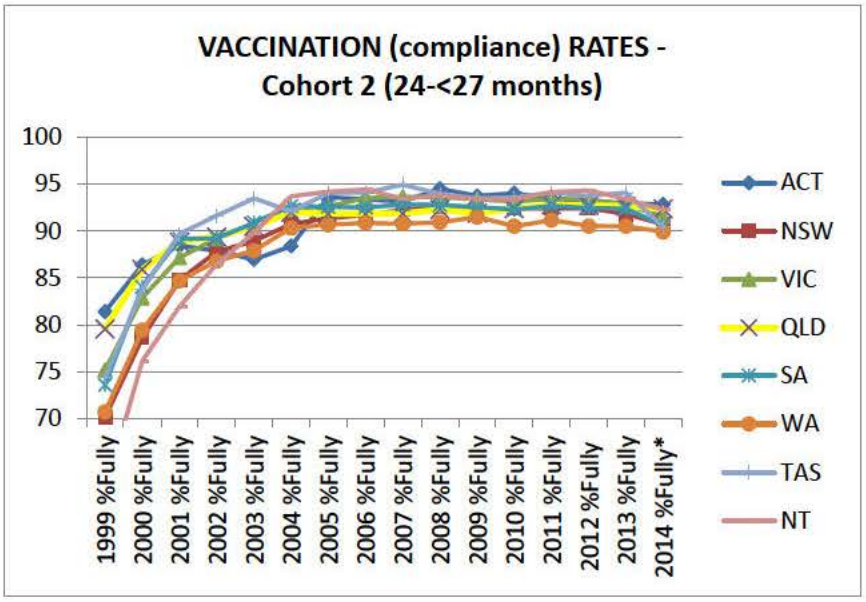
[25] Queensland population 4.691 million

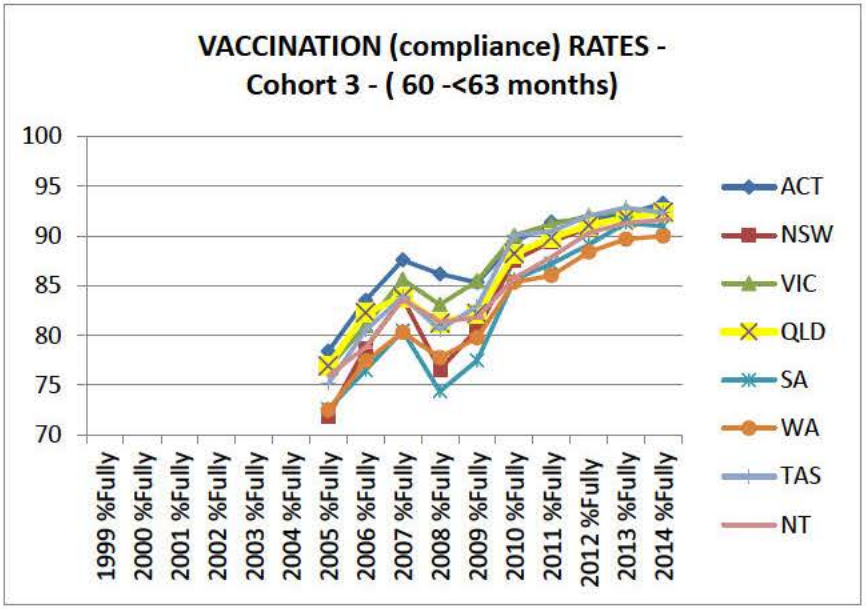
[26] http://www.brisbanetimes.com.au/queensland/storms-fail-to-dampen-ekka-peoples-day-spirits-20150812-gixtqp.html

3.1 Australian Childhood Immunisation Register (ACIR) data

The ACIR collects information on the percentage of fully vaccinated children by state and year, for three age cohorts. For ease, this information is represented graphically below.







What these graphs demonstrate is

- We have **never** in our history achieved 95% compliance with the Australian Childhood Vaccination Schedule.
  - Australian lowest 73.63% in 1999 24-27month cohort
  - Highest was 94.96% in Tasmania in 2007 24-27 month cohort
- We have high and stable 'percent fully vaccinated' rates both on a state basis and nationally.
- Queensland sits roughly in the middle of the pack. 75% of the time we have higher vaccination (compliance) rates than the national average.

What the graphs are unable to show:

- Those children which may follow an altered or delayed schedule are not included in the *% fully vaccinated* figures
- How the vaccination schedule has changed (increased) over the years (thus affecting the ease and definition of being 'fully vaccinated')
- In 1995, only 35% of children were following the recommended vaccination program[27]

As of January 1, 2014 the NSW 'no jab no play' legislation came into in place and NSW experienced **an overall decline (of 0.66%)** in vaccination (compliance) rates across the three cohorts. **Compare this to Queensland which opted for an education campaign and had an increase of 0.25% across the three cohorts**. Data from the ACIR[28] is tabulated below.

2013 – 2014 COMPARISON	NSW (with legislation)	QLD (without legislation)
Cohort 1 (12- <15 months)	0.09% to 90.11%	-0.02 to 91.53%
*Cohort 2 (24 - <27 months)**	*-1.12% to 90.72%*	*-0.29 to 92.36%*
Cohort 3 (60 - < 63 months)	0.37% to 92.43%	0.56% to 92.41%
Across the 3 cohorts	**-0.66%**	**0.25%**

* NOTE: *From quarter ending 31 December 2014, meningococcal C (given at 12 months), and dose 2 measles, mumps, rubella (MMR) and dose 1 varicella (given as MMRV at 18 months) was included in the definition of fully immunised for the 24-27 month cohort. The inclusion of these immunisations to the coverage calculation has caused a drop in the 24-27 month coverage rates.*

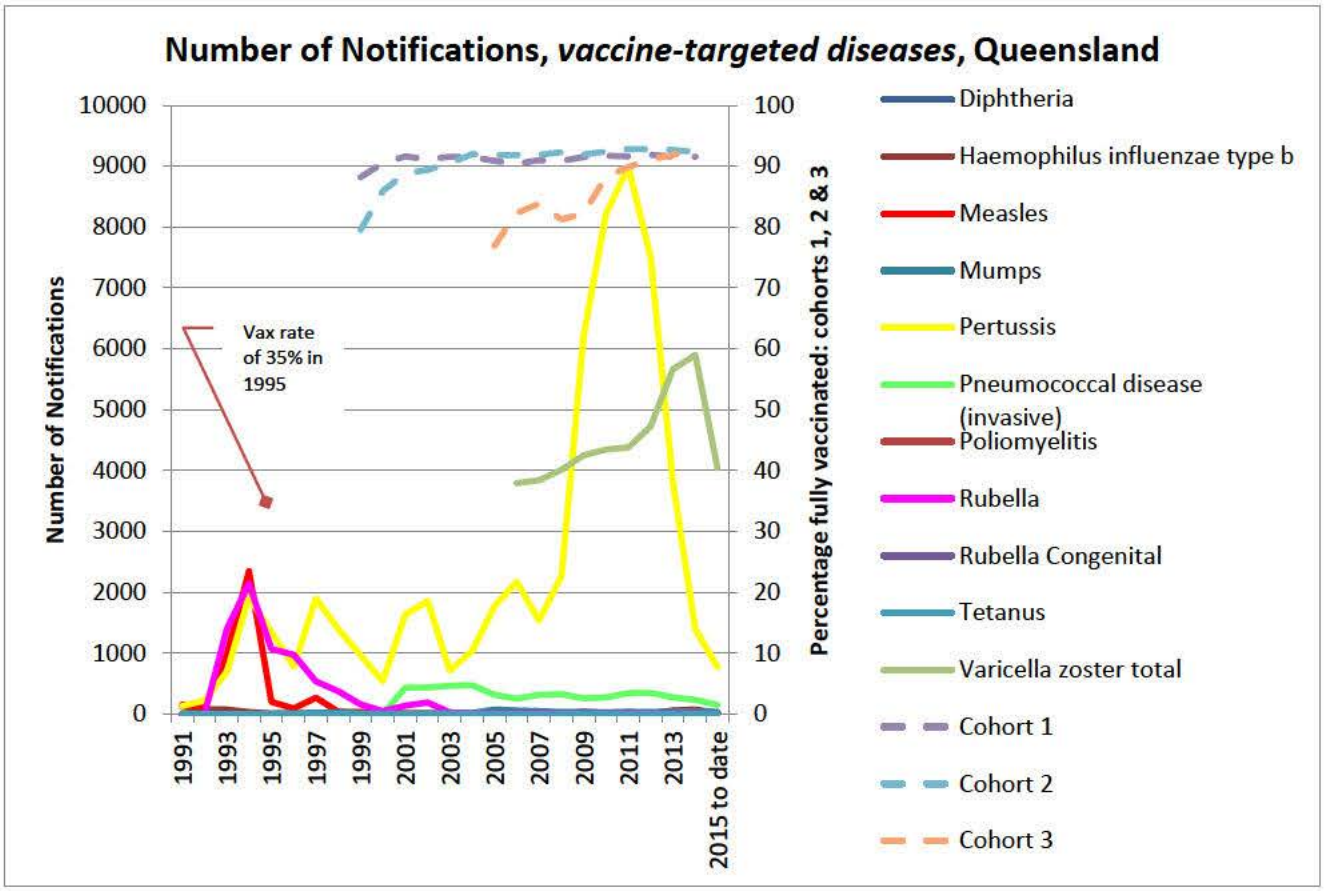
It is unlikely that we are ever going to reach 95% vaccination because additional vaccines or vaccine doses will be incorporated to the schedule. To quote the ACIR: *"The coverage rate has dropped because the criteria to be assessed as fully immunised now includes more vaccines. The more vaccines included in the assessment, the higher the likelihood of reduced coverage rates."*

[27] http://www.abs.gov.au/ausstats/abs@.nsf/mf/4813.0.55.001#4.%20RESULTS%20-%20VACCINATION%20COVERAGE
[28] www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/acir-ann-cov-hist-data.htm

3.2 The childhood vaccination schedule and morbidity

In 1999, when the ACIR started to report coverage rates, there were fewer vaccines, fewer doses to vaccines, less compliance with the schedule and also less media and government fear-mongering and lower notification rates of the various diseases.

Below is a graph plotting the number of notifications[29] from the National Notifiable Diseases Surveillance System (NNDSS) along with percentage of children fully vaccinated in the three age cohorts. It is important to note that disease notification rates may be influenced by the awareness of a disease through its publicity and improvements in detection techniques (for example PCR). Alternatively, the vaccination status of a patient is often used as a criterion for diagnosis of a disease, such that guidelines are present to help a doctor decide what disease a patient has; for example, for rubella '*history of rubella vaccination usually absent*'[30] So whether the vaccines worked or not there is a tendency to under-report a disease in patients who have been vaccinated. Naturally with these guidelines, when a vaccine is introduced and given to large numbers of people, a reduction in disease reports would be expected.



[29] Note: usually disease notification rates (ie number per 100 000 of population) are reported, but unfortunately the NNDSS are having problems with their on-line reports and the number of notifications is being replicated incorrectly as the notification rate. The number of notifications is correct, but the notification rates are incorrect and as such were NOT used. They expect to fix the problem by the end of August 2015.

[30] Beattie 1997 ' Vaccination a Parent's Dilemma', cites Current Pediatric Diagnosis and Treatment

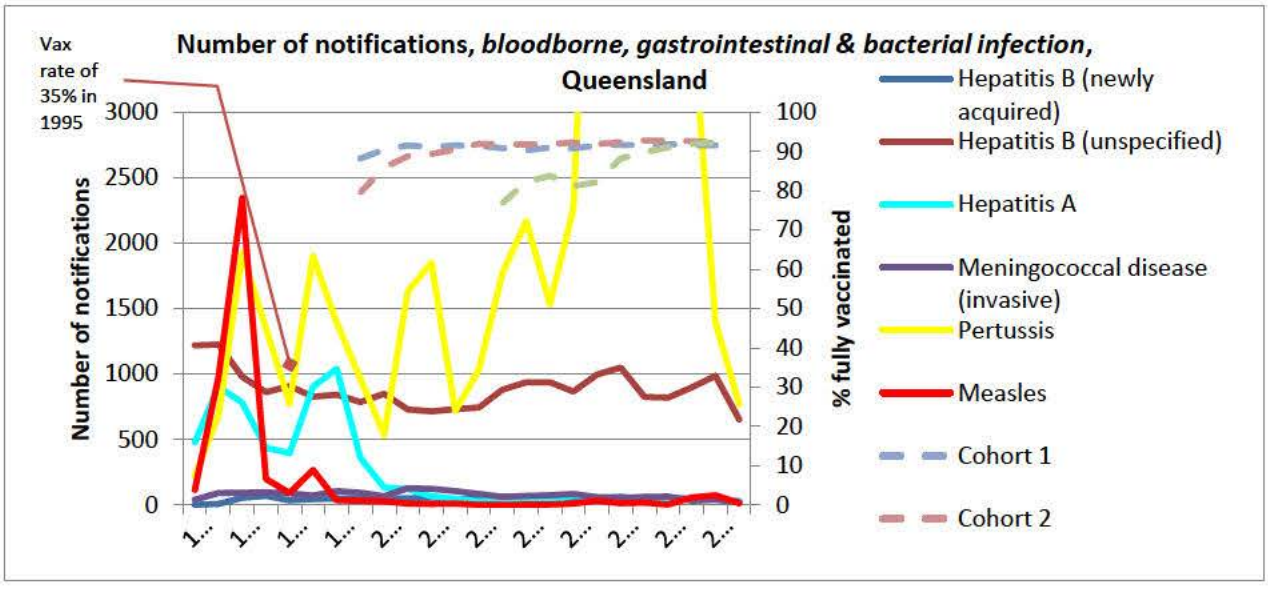
The number of notifications for the entire Queensland population are plotted (not just children), as it is often claimed that we need high vaccination rates for herd immunity and children under five are less than 7% of the total 'herd'.

To summarise the information represented in the graph:

- Pertussis cyclical and upward linear trend
- Varicella increasing since the vaccine was funded in November 2005 (prior to 2005 wasn't even a 'notifiable' disease).
- Measles although generally trending down, is on a bit of an upward swing at the moment.
- Mumps very low, trending slightly up, but also a bit cyclical
- Rubella, pneumococcal, Hep A, Hep B & HIB trend down.
- Diphtheria, Polio and congenital rubella mostly 0 since 1991 (i.e. before the N.I.P[31].)
- Tetanus at 1 -2 cases a year
- Rotavirus is monitored under a separate surveillance program

In short, the occurrence (or 'reportage' if preferred) of these diseases is behaving independently of the vaccination (compliance) rates, that is, there is no correlation between the 'vaccination rate' and 'disease notifications'. One would expect that **if the vaccination schedule was working as intended, we should be seeing a decline in all vaccine-targeted diseases as the vaccination rates increase.** So either we have a problem with the reporting systems (and) /or a problem with some vaccines. This is important because the different levels of government are coercing people into complying with the vaccination schedule when the vaccination schedule cannot be validated as effective.

It situation is very similar for the *'bloodborne disease'* Hepatitis B, the '*gastrointestinal disease'* Hepatitis A and the '*bacterial infection'*, invasive meningococcal disease (as classified by the NNDSS). Their occurrence has been plotted below with a comparison to the *'vaccine preventable diseases'* measles and pertussis.



[31] N.I.P. = National Immunisation Program

3.2.1 Unknown vaccination schedule of the future

There are nearly 300 vaccines currently being developed and so we can expect at least some to make their way onto the Childhood Immunisation Schedule. Legislating to coerce compliance to the unknown and untested schedule of the future (without the option of conscientious objection), will fail to protect individuals in the community from unsafe, ineffective vaccines and medical tyranny.

3.3 Herd Immunity

The National Health Performance Authority and the National Immunisation Strategy 2013-2018 have stipulated 95% vaccination (compliance) rates because (as Mr Dick states[32]): '*when 95% of the population is immunised, herd immunity prevents the transmission of highly contagious conditions , such as measles*'. This rational has several problems:

1. Measles is being used to justify compliance to the **entire** schedule when:
    a. Different communicable diseases have different herd immunity thresholds (HIT's) - Diphtheria = 85%, Polio = 80-86%, Rubella = 83-85%, Mumps = 75-86%. [33] and Pertussis = 92-94%[34],
    b. The schedule also includes diseases to which the hypothesis of herd immunity does not apply (e.g. tetanus)
2. The concept of herd immunity also applies to naturally acquired immunity (the proposed legislation has not made any provision for natural immunity).
3. The herd immunity threshold for measles for vaccine acquired immunity is **83**-95%[35].
4. Prior to measles vaccination, researcher A.W. Hedrich concluded that epidemics of measles could only occur when the number of immune children was less than 68%.[36] So naturally acquired immunity only requires a herd immunity of 68% while vaccine acquired immunity to measles requires its upper limit of 95%!
5. Vaccine acquired herd immunity may not be possible because: [37]
    a. There can be more than one strain of an organism that causes the disease which may not be included in the vaccine, for example rotavirus, HIB.
    b. Humans may not be the only reservoir for the disease. The virus/bacteria may be found in other animals for example rotavirus again.
    c. The viruses/bacteria can mutate and the vaccine may not contain the mutated strain.

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[32] Explanatory speech

[33] http://www.bt.cdc.gov/agent/smallpox/training/overview/pdf/eradicationhistory.pdf page 17

[34] Embarrassed to say https://en.wikipedia.org/wiki/Herd_immunity but it is the most mainstream of mainstream sources

[35] http://www.bt.cdc.gov/agent/smallpox/training/overview/pdf/eradicationhistory.pdf page 17

[36] http://vaccinechoicecanada.com/about-vaccines/general-issues/herd-immunity/herd-immunity-the-misplaced-driver-of-universal-vaccination/ cites "Monthly estimates of the child population 'susceptible' to measles, 1900-1931, Baltimore, Maryland"; A W Hedrich; American Journal of Epidemiology; May 1933 – Oxford University Press.

[37] (Wilyman, Questioning Herd Immunity, 2013) http://vaccinationdecisions.net/wp-content/uploads/2014/02/Questioning-Herd-Immunity-Created-by-Vaccination.pdf

6. As stated previously, we are putting the burden of vaccination on less than 7% of the population, and as such our population herd immunity can be estimated to be less than 50%. To explain:
    a. The immune response lasts between 2 and 20 years[38] depending on the vaccine and depending on the individual.
    b. For ease, **assume best case for all diseases and all people** of 20 years and vaccine immunity would disappear by age 25.
    c. The percentage of the Australian population under 25 years of age is approximately 31%[39]: Allowing for the occasional booster for travellers etc., **over half the Australian population are unvaccinated**.

While the media and the government refer to '*vaccination rates required for herd immunity*', the ACIR more accurately refer to *'coverage rates'* and '*percentage fully vaccinated'* and not align these with herd immunity.

3.4 Vaccine Action….

3.4.1 …and Herd Immunity

When claiming that high vaccination rates are needed for herd immunity to protect the community, then only diseases which are readily contagious should be considered. From the current childhood vaccination schedule, this would then exclude;

- **Hepatitis B**. In Australia all babies are recommended to have hepatitis B vaccine within 24 hours of birth as a means of treating a baby that may have contracted the virus **from the mother** during the birth. '*The hepatitis B virus lives in blood or other body fluids. It is spread through blood-to-blood contact with an infected person which may include:*
    - *sharing needles or syringes*
    - *coming into contact with inadequately sterilised instruments (such as those used for tattooing and body piercing)*
    - *sexual contact (hepatitis B is one of the most common sexually transmitted infections in the world).'*[40]

  These are not usually risks associated with a childcare centre!

  However, Jane Orient, MD. Association of American Physicians and Surgeons states:

  "Children under 14 are three times more likely to be killed or seriously injured by the Hepatitis B vaccine than to catch the disease."

[38] MMR lasts 20 years http://www.nhs.uk/Conditions/vaccinations/Pages/mmr-questions-answers.aspx#long Rotavirus approximately 2-3 years http://sites.path.org/rotavirusvaccine/rotavirus-faq/#how_long & http://www.nhs.uk/Conditions/vaccinations/Pages/rotavirus-vaccine-questions-answers.aspx#long

[39] https://en.wikipedia.org/wiki/Demographics_of_Australia where 0 to 24 years = 31.3%

[40] http://conditions.health.qld.gov.au/HealthConditions/6/Child-Health/154/Immunisation/848/Hepatitis-B

- **Hepatitis A** is on the schedule for Aboriginal and Torres Strait Islander children. *'The virus is usually spread when faeces from an infected person contaminates something which is transferred to another person's mouth. The virus can be passed on by:*
    - *food that has been handled by or shared with an infected person*
    - *drinking contaminated water*
    - *hands after touching infected faeces, nappies, linen and towels*
    - *oral or anal sex* [41]

Hand washing and good hygiene practices are essential and are the most effective ways of reducing the spread of hepatitis A infection'. [42]

- **Polio** is another 'poo-pathogen' and '*is usually spread directly from person-to-person when faeces from an infected person contaminate something which then goes into another person's mouth. Hand washing and good hygiene practices are essential to reducing the spread of poliomyelitis infection".* [43]
- **Tetanus** - the environmental bacterium *Clostridium tetani*, commonly found in soil, dust and manure requires anaerobic (i.e. wounds that don't bleed) conditions to reproduce and produce the toxin which causes muscle spasms. As *'tetanus is not directly transmitted from person to person*'[44] it does not respond to the hypothesis of herd immunity.

3.4.2 ….and Preventing Transmission

The proposed legislation should exclude vaccines that are not capable of **preventing transmission** of a disease. This would then exclude the current vaccines for:

- **Pertussis.** The Pertussis vaccine is an acellular, toxoid vaccine. As an acellular vaccine, it's not even theoretically possible for the vaccine to prevent the colonisation and transmission of the bacteria responsible for whooping cough. The vaccine targets the toxins produced by the Pertussis bacteria, but does not prevent the colonisation or transmission of the bacteria to either immunised or unimmunised people, including babies who are too young to be vaccinated. The vaccine is, at most, only capable of reducing the severity of the disease, not the incidence of the disease.

[41] http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/41/Viral-Infections/958/Hepatitis-A
[42] http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/41/Viral-Infections/958/Hepatitis-A
[43] http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/41/Viral-Infections/938/Poliomyelitis-polio
[44] http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/6/Bacterial-Infections/857/Tetanus

(FDA)*'.research suggests that although individuals immunized with an acellular pertussis vaccine may be protected from disease, they may still become infected with the bacteria without always getting sick and are able to spread infection to others, including young infants who are susceptible to pertussis disease'*.[45]

This means that people vaccinated for whooping cough catch it, don't show any symptoms but go around spreading for weeks or months, that is, they are asymptomatic carriers. As an asymptomatic carrier if you contract the infection, you are more dangerous, as you are more likely to pass it on as you go about your business.

As such, the current acellular pertussis vaccine, cannot prevent transmission and cannot induce herd immunity. It is outrageous to legislate for compliance to such a vaccine while stating it is for herd immunity and '*protect*(ing) *those … most vulnerable and at-risk … including babies and children who are too young to be immunised'*.[46]

- **Diphtheria** The vaccines for diphtheria and tetanus are also toxoid vaccines inducing an immune response that prepares the body for future exposure to the original toxin[47][48]. As the vaccines do not work against the bacterium itself, a vaccinated person can still become infected. The diphtheria infection can still be transmitted from person-to-person spread mostly from the respiratory tract and sometimes from infected skin lesions.[49] Therefore these are personal vaccines and cannot induce herd immunity.
- **Polio** and **HIB** A US-based Immunologist, Tetyana Obukhanych PhD, recently published an open letter to legislators[50], in which she eloquently identifies vaccines that are not capable of producing a herd immunity effect and are only capable of offering protection to individual vaccine recipients. These include Inactivated Polio Vaccine (IPV), Tetanus, Diphtheria, Whooping Cough, HIB (via a shift in strain dominance under pressure from the vaccine), and Hepatitis B. http://thinkingmomsrevolution.com/an-open-letter-to-legislators-currently-considering-vaccine-legislation-from-tetyana-obukhanych-phd-in-immunology/

45 http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm376937.htm#.VSHvmQkv_CQ.facebook

46 Public Health (Childcare Vaccination) and Other Legislation Amendment Bill 2015 - Explanatory Notes

47 http://www.healthcentre.org.uk/vaccine/toxoid-vaccine.html

48 http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/dip.pdf

49 http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/dip.pdf

50 http://thinkingmomsrevolution.com/an-open-letter-to-legislators-currently-considering-vaccine-legislation-from-tetyana-obukhanych-phd-in-immunology/

3.4.3 ……and Shedding

The vaccines for rotavirus and the various versions (i.e. brands) of the measles, mumps, rubella and chicken pox vaccines are all live vaccines[51] and as such can be 'shed' for a period of time after the administration of the vaccine. While these vaccines can theoretically induce herd immunity, there should be a period of exclusion after administration of the vaccine to prevent shedding to infants too young to be immunised. As one example:

- The **rotavirus vaccines** (RotaTeq & Rotarix) are live vaccines which can also be transmitted by the faecal-oral route. The Merck Product Information statement for RotaTeq states:

  '*RotaTeq was shed in the stools of 8.9% of vaccine recipients tested after the first dose…… The 2 mL solution for oral administration of 5 live human-bovine reassortant rotaviruses which contains a minimum of 2.0 – 2.8 x 10^6 infectious units (IU) per reassortant dose, depending on the serotype, and not greater than 116 x 10^6 IU per aggregate dose'*[52]

3.4.4 …..and Outbreaks in Fully Vaccinated Populations

However outbreaks can still occur in fully vaccinated populations, potentially due to vaccine failure, waning efficacy or (as in the case of the pertussis vaccine) it is simply not designed to stop the spread of infection. For example:

- Pertussis

  Pertussis Infection in Fully Vaccinated Children in Day-Care Centers, Israel[53]. (Emerg Infect Dis 2000) discusses a pertussis outbreak in two fully vaccinated childcare centres using the DTP vaccine The vaccine components include diphtheria and tetanus toxoids and killed whole cells of the organism that causes pertussis (wP).

  Nosocomial pertussis infection of infants: still a risk in 2009 [54] (Commun Dis Intell **2010;34(4):440–443.)**

  A fully immunised, Sydney health care worker spreads Pertussis to four neonates.

- Measles (note the measles vaccine (allegedly) lasts 20 years)

  Measles outbreak in a vaccinated school population: epidemiology, chains of transmission and the role of vaccine failures.[55] Am J Public Healthv. 1987

  An outbreak of measles occurred in a high school with a documented vaccination level of 98 per cent.

[51] Australian Immunisation Handbook 10th edition table 2.1.3
[52] http://www.merck.com/product/usa/pi_circulars/r/rotateq/rotateq_pi.pdf
[53] http://wwwnc.cdc.gov/eid/article/6/5/00-0512
[54] http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi3404e.htm
[55] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1646939/

Investigation of a measles outbreak in a fully vaccinated school population including serum studies before and after revaccination.[56] Pediatr Infect Dis J. 1993

A measles outbreak in early 1989 among approximately 4200 students at a high school and two intermediate schools in suburban Houston, TX. Seventy-seven cases occurred (71 at the high school, 6 at intermediate schools).

Measles Outbreak in a Fully Immunized Secondary School Population. N Engl J Med. 1987 Mar 26;316(13):771-4. [57]

An outbreak of measles occurred among adolescents in Corpus Christi, Texas, in the spring of 1985, even though vaccination requirements for school attendance had been thoroughly enforced.

Measles Outbreak among vaccinated high school students - Illinois[58] CDC MMWR. June 22, 1984. 33(24);349-51.

From December 9, 1983, to January 13, 1984, 21 cases of measles occurred in Sangamon County, Illinois. Nine of the cases were confirmed serologically. The outbreak involved 16 high school students, all of whom had histories of measles vaccination after 15 months of age documented in their school health records. Of the five remaining cases, four occurred in unvaccinated preschool children, two of whom were under 15 months of age, and one case occurred in a previously vaccinated college student.

Effect of subclinical infection on maintaining immunity against measles in vaccinated children in West Africa.[59] The Lancet. Jan. 9, 1999. Vol 353, Issue 9147, pp 98-102.

Despite a high coverage with measles vaccines in parts of west Africa, epidemics of measles occur with reduced severity in an increasing proportion of older children who have been vaccinated. We examined the effect of exposure to natural measles on immunity in vaccinated children.

Given that we have never achieved 95% childhood vaccination rates and children are indeed a part of our community (and not living on a separate island) and so making a small contribution to the total herd's immunity; it cannot be expected for the current morbidity rates to change, let alone change dramatically. Vaccination rate increases, to a maximum of; 7% of the child population or 0.5% of the entire population, are going to have little (if any) effect on those diseases which respond to herd immunity, but absolutely no effect on diseases which are not readily transmissible or whose vaccines cannot prevent transmission.

[56] http://www.ncbi.nlm.nih.gov/pubmed/8483623
[57] http://www.ncbi.nlm.nih.gov/pubmed/3821823
[58] http://www.cdc.gov/mmwr/preview/mmwrhtml/00000359.htm
[59] http://www.ncbi.nlm.nih.gov/pubmed/10023894 or http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2898%2902364-2/fulltext?version=printerFriendly

4.0 The proposed legislation is not lawful

The explanatory notes[60] accompanying the proposed legislation, state that

'*refusing to allow the enrolment or attendance of a child at an approved education and care service based solely on the child's immunisation status could not be considered discriminatory.* ***The Anti-Discrimination Act 1991 prohibits discrimination on the basis of a number of attributes, including disability or religious belief,*** (emphasis added) *however immunisation status is not a recognised attribute*".

This statement is misleading as being unvaccinated is considered to meet the definition of disability under the Commonwealth Disability Discrimination Act and that refusing to vaccinate may be the action of a religious belief. This is discussed specifically in sections 4.2 and 4.3.1.

The Queensland Anti-discrimination Act 1991 states in the section of Parliaments Reasons Clause 6

- *'everyone should be equal before and under the law and have the right to equal protection and equal benefit of the law without discrimination';*
- *'the quality of democratic life is improved by an educated community appreciative and respectful of the dignity and worth of everyone'*

In the explanatory notes, the Health Minister is ignoring the **principle** of the Antidiscrimination Act - which is fairness and equality for all people. Denying a child childcare on the basis of vaccination status, is in essence a form of discrimination, and children have a right[61] not to be treated in a discriminatory fashion. This is primarily because vaccination status **does not preclude** a child's ability to attend childcare. Also a healthy partially vaccinated or unvaccinated child poses no greater risk (refer section 3) than a healthy fully vaccinated child. The legislation would there enact an Orwellian concept of 'some are more equal than others'.

4.1 Rights of a Child

Dr Paula Gerber, an Associate Professor and the Deputy Director of the Castan Centre for Human Rights Law in the Faculty of Law at Monash University stated in 2013:

> *'It is not in the best interests of children to try to increase one right (health) by denying access to another right (education)……. Using punitive measures to try to improve immunisation rates violates the core principles of the Convention on the Rights of the Child.'*[62]

Some of the applicable articles in the UN Convention on the Rights of a Child (CRC)[63] are:

> **Article 2 -** no child should be treated unfairly on any basis. This would include vaccination status and the beliefs of the parents.

[60] http://www.legislation.qld.gov.au/Bills/55PDF2015PubHealthChVaccOLAB15E.pdf
[61] Human Rights and Equal Opportunities Act 1986- Convention on the Rights of a Child
[62] http://monash.edu/news/show/two-wrongs-dont-make-a-right-bringing-a-human-rights-perspective-to-the-debate-surrounding-the-vaccination-of-children
[63] http://www.earlychildhoodaustralia.org.au/wp-content/uploads/2014/08/Rights_overview.pdf

Article 18 - the Convention does not take responsibility for children away from their parents and give more authority to governments.

Article 28 - all children have the right to a primary education. The amendment bill refers to 'an education or care service' that is family daycare, kindergarten, limited hours care and outside school hours care. As the legislation will effect early learning and special needs learning, this inevitably effect a child's capacity for primary school education and being able to integrate special needs or disabled children into mainstream primary schools.
The first or fundamental education a child receives in kindergarten and early learning centres help in children developing their personality and abilities and learning to live peacefully, protecting the environment and respectful of other people, that is,
Article 29

4.2 The Constitution - civil conscription and practical compulsion

The proposed legislation contravenes the Australian Constitution Section 51 which enables constituents to choose a medication or medical treatment while *'Parliament shall have the power to make laws… with respect to… medical and dental services' (but does not as to authorise any form of civil conscription)*'.

The legal concept of 'practical compulsion' was defined in British Medical Association v Commonwealth:

> *"To require a person to do something which he may lawfully decline to do but only at the sacrifice of the whole or a substantial part of the means of his livelihood would, I think, be to subject him to practical compulsion... If Parliament cannot lawfully do this directly by legal means it cannot lawfully do it indirectly by creating a situation, as distinct from merely taking advantage of one, in which the individual is left no real choice but compliance."*[64]

Whether called 'civil conscription' or 'practical compulsion' is semantics, as the aim or intended outcome is still the same: *compulsory vaccination.*

4.3. Commonwealth Disability Discrimination Act

As I understand it, the reason that NSW included philosophical exemptions in its No Jab No Play laws which commenced in January 2014, was because of the concern that not including exemptions would violate the Commonwealth Disability Discrimination Act (DDA).

Being unvaccinated is considered to meet the definition of disability under the DDA. This is the position Greg Beattie argued in his case (Beattie v Maroochy Shire Council). "The Inquiry Commissioner, W Carter QC, noted that the definition includes:

[64] http://www.austlii.edu.au/au/cases/cth/HCA/1949/44.html

> *The presence in the body at any future time of organisms which cause, or are capable of causing, illness or disease. Such diseases, on the evidence, may include diphtheria, pertussis, measles, poliomyelitis, and others against which vaccination is available.* [65]

Although the children did not presently have any infectious illness, the fact that they had not been immunised against childhood illnesses meant they could, at some time in the future, contract such an illness and as such were subject to a 'disability' as required by the Act. Having established that the children were in fact suffering from a disability, the complaint that they were treated less favourably by the council on account of that disability prima facie amounted to unlawful discrimination.[66]

4.4 Discrimination based on philosophical beliefs and conscience.

'*The objective of the Bill is to promote immunisation and empower approved education and care services to refuse, cancel or place a condition on the enrolment or attendance of a child who is not vaccinated, or not up to date with their scheduled immunisations'*[67] As the only exemption that would be allowed is a medical contraindication, this violates the human right to freedom of thought, conscience or religion as stipulated in the following International treaties.

- The International Covenant on Civil and Political Rights (ICCPR)- Article 18[68]- protects the right to freedom of thought, conscience and religion. Such that a belief - whether informed by religious doctrine, conscience or something different altogether – is to be protected under law.
- The Declaration on the Elimination of All Forms of Intolerance and of Discrimination Based on Religion or Belief [69](DEAFIDBRB), protects the right to freedom of thought, conscience and religion, and under Article 2, constrains the State from engaging in discrimination on such a basis.

4.4.1 Religious discrimination

Precise definition of the concept of religion, or of what generally constitutes 'a religion', is difficult, if not impossible, because of the intangible and wide-ranging nature of the topic. Generally, a religion is regarded as a set of beliefs and practices, usually involving acknowledgment of a divine or higher being or power, by which people order the conduct of their lives both practically and in a moral sense. This method of defining religion in terms of a mixture of beliefs, practices, and a Supernatural Being giving form

[65] Childhood Vaccination: The legal dimensions http://www.parliament.nsw.gov.au/prod/parlment/publications.nsf/0/70D1A2403572707ACA256ECF00180536/$File/OP06-97.pdf
[66] Childhood Vaccination: The legal dimensions http://www.parliament.nsw.gov.au/prod/parlment/publications.nsf/0/70D1A2403572707ACA256ECF00180536/$File/OP06-97.pdf
[67] C. Dick, 2015, Explanatory speech
[68] http://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx
[69] http://www.un.org/documents/ga/res/36/a36r055.htm

and meaning to existence was used by the High Court of Australia in 1983.[70] The High Court stated that "For the purposes of the law, the criteria of religion are twofold:

- first, belief in a Supernatural Being, Thing or Principle; and
- second, the acceptance of canons of conduct in order to give effect to that belief, though canons of conduct which offend against the ordinary laws are outside the area of any immunity, privilege or right conferred on the grounds of religion."

Although the above definition may be regarded as useful in going some way toward describing the nature of the entities included in the classification, it is by no means all-inclusive. Some of the entities included in the classification do not fit the definition, but are regarded, either universally or widely, as religions. For instance, Buddhism is universally accepted as a religion although it does not acknowledge a personal God. Similarly, Confucianism is regarded as a religion, even though it involves no belief in the supernatural, because it provides the moral code of its adherents.[71]

There are two modern religions that specifically discourage the use of vaccines;

1. Church of Christ, Scientist: more generally known as the Christian Scientists, a Christian denomination which eschews medicine and currently has a religious vaccine exemption.[72]
2. Church of Conscious Living: reject orthodox vaccination, for adults, children and animals, and more generally avoid the consumption, inhalation or injection of synthetic drugs, both legal and illegal.[73] [74] (Pagan)

As most religions predate vaccination, there is no canon stating 'you will not vaccinate'. However all religions have as a fundamental principle a respect for life specifying essentially that one should not kill. The degree to which this is interpreted and enacted will depend on the particular religion (and the devotion of the individual), as examples:

- Christian - According to the Bible not all killing is murder. Murder is the unlawful taking of a human life. The command not to murder applies to human beings and not to animals. God gave animals to mankind for his use (Genesis 1:26-30; 9:1-4). But, this does not mean that humans have the right mistreat animals and the environment (Genesis 2:15; Deuteronomy 22:6-7; 25:4; Proverbs 12:10).
- Roman Catholic- Pope Gregory IX in the Decretals of 1230 treated both contraception and abortion as "homicide." In 1930 the encyclical Casti Connubii of Pope Pius XI decided to tidy up the tradition by saying that contraception and sterilisation were sins against nature and abortion was a sin against life. Both contraception and abortion were generally forbidden.[75]

[70] http://www.abs.gov.au/ausstats/abs@.nsf/0/775012EF0058A77DCA25697E00184BDC?opendocument
[71] http://www.abs.gov.au/ausstats/abs@.nsf/0/775012EF0058A77DCA25697E00184BDC?opendocument
[72] http://www.smh.com.au/federal-politics/political-news/vaccinationexempt-church-revealed-as-christian-scientists-20150414-1mkmj8.html#ixzz3hiAvqBIr
[73] http://churchofcl.com/
[74] Note: When the 'Church of Conscious Living' was established 'guidelines from the Attorney General's department in Canberra were followed'. (Personal communication, 2 September 2013)
[75] http://www.religiousconsultation.org/News_Tracker/moderate_RC_position_on_contraception_abortion.htm

- Buddhists refrain from deliberately causing the death of any living being and as such are vegetarians according to their religious belief - and there is NO vaccine which is vegetarian. All vaccinations have to be cultured on animal and human tissue and blood products. *'Scientists depend upon animal tissue to produce the viral strains found in vaccines. The Measles, Mumps, and Rubella (MMR) vaccine, for instance, contains live strains of each of these three viruses.'* [76]. Buddhists and others of vegetarian philosophies would be in conflict with vaccination.
- In Islam, prohibitions on illegal acts or objects are observed by Muslims in accordance to their obedience to the Quranic commands. Actions that are *haram* result in punishment, and are therefore considered a sin if carried out by a Muslim. An Islamic principle related to *haram* is that if something is prohibited, then anything that leads to it is also considered *haram*. There are two types of haram, one of which, *al-harām li-dhātihi*, is **prohibited because of the harm it causes to an individual.** This includes 'actions' such as premarital sex, murder, or getting a tattoo and 'food and drinks', such as pork and alcohol. (refer section 4.4.1.2)
- Paganism. As people who venerate nature, Pagans do not condone cruelty to animals. They may choose to be vegetarian or avoid foods that are ethically compromised (pork, cage-laid eggs etc.) or environmentally unsustainable[77]

Vaccination has always carried with it a risk of (disability and) death, which is in conflict with Christian, Islamic, Buddhist and Pagan beliefs. To illustrate the risk of death associated with vaccines, in 1927 twelve children died from the diphtheria vaccine in Bundaberg and in 2010, two year old Ashley Epapara[78] died in Brisbane after a receiving a 'flu' vaccine[79].

Vaccines also contain fragments of a line of aborted foetal cells, are grown on animal tissue and/or a tested on animals (frequently mice), this would be in conflict with Roman Catholic, Buddhist and Pagan principles. This is discussed further in section 4.4.1.1

People may choose to accept or reject vaccines based on religious beliefs. These religious beliefs are many and varied, some can be defined in religious literature (see sections 4.4.1.1 and 4.4.1.2), others more generally revere the lives of humans and animals. Children unvaccinated for religious reasons will be treated less favourably by this legislation which amounts to unlawful discrimination by the attribute of religious belief.

[76] http://www.vaccineriskawareness.com/Vaccines-A-Religious-Contention- cites vegfamily.com
[77] www.paganawareness.net.au
[78] http://www.couriermail.com.au/news/toddler-ashley-jade-epapara-2-dies-after-flu-vaccination/story-e6freon6-1225857803417
[79] http://www.abc.net.au/news/2010-09-10/flu-vaccine-cant-be-ruled-out-in-toddlers-death/2256142

4.4.1.1 Biblical Wisdom, Health Science and Vaccination

Obviously there was no vaccination in biblical times, but there were several references on what should and should NOT be put into the body, leading to the conclusion that vaccines are contrary to religious philosophy. Below are listed selected biblical prohibitions and the corresponding vaccines that contain the prohibited substances.

Genesis 9:3-4 [KJV] and Leviticus: **3:17** and **Leviticus 17:10-14 Acts 15:28-29 [KJV]** prohibit the consumption of blood. Vaccines that contain blood cells or blood products can be found in the table below.

Vaccines that contain blood cells or blood products [80]

VACCINIE	BRAND NAME	BLOOD PRODUCT CONTAINED:
Adenovirus		human serum albumin fetal bovine serum
DTaP-IPV	Kinrix	calf serum
DTaP-HepB-IPV	Pediarix	calf serum,
DTaP-IPV/Hib	Pentacel	bovine serum albumin CMRL 1969 medium [supplemented with calf serum]
Hep A	Vaqta	bovine albumin
Japanese Encephalitis	Ixiaro	bovine serum albumin
MMR	MMR-II	fetal bovine serum
MMRV	ProQuad	bovine calf serum
Polio IPV	Ipol	calf serum protein
Rabies	Imovax	albumin
Rabies	RabAvert	human serum albumin
Rotavirus	RotaTeq	fetal bovine serum
Smallpox/Vaccinia	ACAM2000	human serum albumin
Varicella	Varivax	fetal bovine serum
Zoster/Shingles	Zostavax	bovine calf serum

[80] CDC's February 2012 Excipient & Media Summary - Source of vaccine excipients [February 2012]: http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf

Leviticus 11:7 and 11:29 prohibit the consumption of unclean animals such as swine, weasel, mouse. [KJV]. The table below lists vaccines with porcine ingredients.

Vaccines with Pig (unclean) ingredients[81]:

VACCINIE	BRAND NAME	PORCINE PRODUCT CONTAINED:
Influenza	FluMist	hydrolyzed porcine gelatin
Rotavirus	RotaTeq	"DNA from porcine circoviruses [PCV] 1 and 2 has been detected in RotaTeq. PCV-1 and PCV-2 are not known to cause disease in humans."
Rotavirus	Rotarix	"Porcine circovirus type 1 [PCV-1] is present in Rotarix. PCV-1 is not known to cause disease in humans.
Zoster/Shingles	Zostavax	hydrolyzed porcine gelatin

Leviticus 11:20 - 11:23 [NIVUK] states that all flying insects that walk on all fours are to be regarded as unclean (with the exception of locust, katydid, cricket or grasshopper). The Human Papillomavirus/HPV vaccine (Cerverix) contains insect cell [moth] and viral protein

Two additional ingredients that are frequently interpreted as being unclean or biblically prohibited are **monkey cells** and **human diploid cells** used in the culture of vaccines. **Polio IPV** (Ipol), **DTaP-HepB-IPV** (Pediarix) and **DTaP-IPV** (Kinrix) vaccines contain **monkey kidney cells**.
Whole **human diploid cells** from **aborted babies** are not present in the final product, the vaccine fluids. However, fragments of the continuous cell lines that originate in tissue from aborted babies do remain in vaccines. Human diploid cells are used in the culture of **Adenovirus**, **DTaP-IPV/Hib** (Pentacel), **Hep A** (Vaqta), **Hep A/Hep B** (Twinrix), **MMR** (MMR-II), **MMRV** (ProQuad), **Rabies** (Imovax), **Varicella** (Varivax) and **Zoster/Shingles** (Zostavax) vaccines.

4.4.1.2 Quran

In terms of haram meat, Muslims are prohibited from consuming flowing blood. Some meats that are considered haram, such as pork, dog, cat, monkey, or any other haram animals,[82] There are a number of Quranic verses regarding the prohibition of

[81] CDC's February 2012 Excipient & Media Summary]Source of vaccine excipients [February 2012]: http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf
[82]. https://en.wikipedia.org/wiki/Haram

meat in Islam, for example: *He hath forbidden you only carrion, and blood, and swineflesh, and that which has been immolated to (the name of) any other than God. But he who is driven by necessity, neither craving nor transgressing, it is no sin for him. Lo! God is Forgiving, Merciful.'* (Quran 2:173). As detailed in the previous section, vaccines contain the blood serum / albumin from a number of different animals including pig.

The Quran prohibits the consumption of substances that cause harm to the individual (*al-harām li-dhātihi*), these include alcohol, drugs, tattoos, tobacco, and cigarettes; also nutmeg, vanilla extract and gelatine because they contain alcohol or porcine products. Vaccines can cause harm and also contain harmful substances, as examples:

- MENJUGATE SYRINGE (Meningococcal Group C -CRM197 Conjugate Vaccine)
  Immune System Disorders: lymphadenopathy, anaphylaxis including anaphylactic shock, hypersensitivity reactions including bronchospasm, facial oedema and angioedema.
  Nervous System Disorders: dizziness, convulsions including febrile convulsions, faints, hypoaesthesia and paraesthesia, hypotonia. [83].
  No carcinogenicity, mutagenicity or fertility studies have been conducted with MENJUGATE SYRINGE.[84]
  Each 0.5 mL dose of the reconstituted vaccine contains: **Aluminium hydroxide** (1.0 mg) , mannitol, sodium phosphate monobasic monohydrate, sodium phosphate dibasic heptahydrate, sodium chloride, water.
  The manufacture of this product includes exposure to **bovine** derived materials. No evidence exists [85] that any case of vCJD (considered to be the human form of Bovine Spongiform Encephalitis(BSE)) has resulted from the administration of any vaccine product.[86]

- **Aluminium hydroxide**, aluminium phosphate and calcium phosphate are commonly used as adjuvants which are used to enhance the immune response to an antigen. Aluminium has been implicated as a cause of brain damage, suspected factor in Alzheimer's Disease, dementia, convulsions and comas.
  The FDA states[87]:

  > *'The alumin(i)um content of large volume parenteral[88] (LVP) drug products used in total parenteral nutrition (TPN) therapy must not exceed 25 micrograms per liter ([micro]g/L*)'

[83] MENJUGATE® SYRINGE Product Information, 2013, p10
[84] MENJUGATE® SYRINGE Product Information, 2013, p 5
[85] 'No evidence exists' this literally mean no research has been undertaken therefore no evidence exists, that is 'undone science'.
[86] MENJUGATE® SYRINGE Product Information, 2013, p1
[87] http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=201.323 Unfortunately I couldn't find an Australian or NHMRC reference for recommended IV maximum of aluminium

Referring to the table below, at birth a baby will receive 86.5 micrograms of aluminium and at each of the 2, 4 and 6 month vaccinations the infant will receive a total of 945 micrograms of aluminium each time/ day. For each of the 2, 4 and 6 months vaccinations this is 37 times greater than the recommended IV amount for an adult and this given to children when the levels of aluminium absorption into the bloodstream, then excretion into the urine and out of the body, when it is injected into the skin and muscle of human infants have never been measured. The FDA and AAP documents state that **there may be a problem, it hasn't been studied it yet, so the aluminium in injectable solutions should be limited.** However no one is considering the levels in vaccines.

Age	'Recommended' immunisations[89]	Vaccines used in Queensland	Product information statement	Aluminium content
Birth	Hep B	HBVaxII (paediatric)™	*'each 0.5 mL dose of the paediatric formulation vaccine contains 5 µg of hepatitis B surface antigen adsorbed onto approximately 0.25 mg aluminium hydroxide'*,[90]	0.25 milligrams is 250 micrograms Aluminium hydroxide($Al(OH)_3$) is 34.6% aluminium so each vaccine dose contains **86.5 micrograms** of elemental aluminium
Scheduled vaccines at 2, 4 and 6 months	Hep B, diphtheria, tetanus, pertussis, HIB & polio	Infanrix hexa™	0.82 mg of aluminium per 0.5 mL dose [91]	820 micrograms
	Pneumococcal	Prevenar 13™	0.5 mL dose contains 0.125 mg aluminium[92]	125 micrograms
	Rotavirus	RotaTeq™	nil & taken orally not injected	nil

- The mercury compound thimerosil is still used as an adjuvant in the influenza vaccine. It is the second most poisonous element known to man (next to uranium)
- Formaldehyde (embalming solution) - used in vaccines as a tissue fixative. Fewer than 20% but perhaps more than 10% of the general population may

[88] **Parenteral** dosage forms are intended for administration as an injection or infusion. Common injection types are intravenous (into a vein), subcutaneous (under the skin), and intramuscular (into muscle). Infusions typically are given by intravenous route.

[89] https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/immunisation/schedule/default.asp#atsi

[90] Product information sheet http://www.biocsl.com.au/docs/482/535/H-B-VaxII_PI_A141021,0.pdf

[91] Was only listed in the GSK product information sheet as 'absorbed onto aluminium salts and no quantities. But found quantities here http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Scientific_Discussion/human/000296/WC500032501.pdf

[92] Product information sheet http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Product_Information/human/001104/WC500057247.pdf

be susceptible to formaldehyde and may react acutely to any exposure level. Formaldehyde is oxidised to formic acid which leads to acidosis and nerve damage. Acidosis can be described as a condition in which the acidity of the body tissues and fluids is abnormally high.

- Methanol
- Borax - traditionally used as a pesticide. Suspected cardiovascular or blood toxicant, endocrine toxicant, gastrointestinal or liver toxicant and neurological toxicant. Found to cause reproductive damage and reduced fertility in a study on rats
- Monosodium glutamate - an excitotoxin. Injections of glutamate in laboratory animals have resulted in damage to nerve cells in the brain.[93]
- **The interactive and cumulative effects of all the vaccines on the childhood schedule are unknown.**

4.4.1.3 Medical Beliefs

In Beattie v Maroochy Shire Council, the Maroochy Shire Council offered Professor John Pearn from the Royal Children's Hospital in Brisbane as an expert witness. Prof Pearn had a deep faith in vaccination and when Beattie questioned him asking him if he could provide any evidence to demonstrate that only the unvaccinated get the disease he stated '*Well it's fundamental - it would be **a basic axiom of medical belief** that if you weren't protected either by a previous wild type infection or by immunisation you're likely to get the disease. I don't have any figures because it's such **a fundamental doctrine of holy writ in medicine**….*' (emphasis added).[94]

It is also an accepted belief (which is the premise of the proposed legislation) that *healthy* unvaccinated children present a risk to vaccinated children and public health.

Question:

What evidence exists that an uninfected unvaccinated child can pass on a vaccine-preventable disease to a fully immunised child?

There is also the medical belief that the introduction of vaccination brought about a huge decline in deaths from diseases such as diphtheria, measles and whooping cough. Although incorrect, it is often neglectfully promoted by medical authorities and the government alike without attempting to validate the belief. Examples of the realities are:

- between 1880 and the introduction of the whooping cough vaccine in the 1940's, the death rate from whooping cough declined by over 80%[95] and

[93] FDA web page 'FDA and Monosodium Glutamate (MSG)'
[94] Beattie, 1997, Vaccination- A parent's dilemma
[95] (Beattie, 2010) uses data from Commonwealth Year Book, the Australian Bureau of Statistics and the Commonwealth Department of Health and Human Services

- between 1880 and the introduction of the diphtheria vaccine in the 1930's, the death rate from diphtheria declined by approximately 85%[96].
- mortality rates for scarlet fever declined at similar rates without a vaccine[97]

Modern western medicine is a mixture of science and belief, and as such should not be favoured over another belief system. Hippocrates the father of modern medicine in western culture stated; '*First do no harm'* and the oath which was named after him and is taken by all new physicians includes; '*Above all, I must not play at God.'*[98]

4.5 Indirect discrimination[99] [100].

The proposed legislation is not reasonable, as it cannot be applied equally and particularly disadvantages children based on socio-economic status, geography and race and as such is indirect discrimination.

4.5.1 Discrimination based on race

The 'main' childhood vaccination schedule has 38 doses to 13 vaccines by the age of four. Aboriginal and Torres Strait Islanders have an additional three doses and one vaccine (that is, one dose of pneumococcal and two doses of the hepatitis A vaccine).

According to the proposed legislation section 160A Definitions:

> ***immunisation status "up to date"****, for a child, means the child, for each vaccine preventable condition— (a) is age appropriately immunised for the condition in accordance with the recommendations stated in the Australian Immunisation Handbook*

Due to race-based assumptions of living conditions, Indigenous children are expected to have three extra vaccine doses to comply with the 'recommendations'.

Question:

> **Is the 4.6 % gap in the immunisation rates of Aboriginal and Torres Strait Islander children compared to non - indigenous children (i.e. 87.5% compared to 92.1%) a result of requiring more vaccine doses to be considered 'fully vaccinated'?**

[96] Beattie, 1997, Vaccination A Parent's Dilemma uses data from Commonwealth Year Book, the Australian Bureau of Statistics and the Commonwealth Department of Health and Human Services also available at http://www.vaclib.org/sites/debate/web1.html

[97] Beattie, 1997, Vaccination A Parent's Dilemma uses data from Commonwealth Year Book, the Australian Bureau of Statistics and the Commonwealth Department of Health and Human Services also available at http://www.vaclib.org/sites/debate/web1.html

[98] https://en.wikipedia.org/wiki/Hippocratic_Oath

[99] http://www.adcq.qld.gov.au/resources/brochures-and-guides/fact-sheets/indirect-discrimination

[100] https://www.humanrights.gov.au/quick-guide/12049

4.5.2 Discrimination based on socio-economic status or geography

The legislation cannot be applied fairly across the population as those choosing not to fully vaccinate and with the financial means, are able to meet the expense of a stay-at-home-parent, nanny or au pair.

In remote or regional areas where childcare places are already at a premium, families will face additional pressure to fully vaccinate their children.

Many of the treaties or legisalation cited in this section, are '*subject only to such limitations as are prescribed by law and are necessary to protect public safety, order, health, or morals or the fundamental rights and freedoms of others.*'[101] However sections 2 and 3 of this submission have already detailed how public health will not and cannot be improved by coercing compliance with the Childhood Immunisation Schedule.

5.0 Alternative ways of achieving policy objectives

Consultation on the proposed amendments was undertaken only with external childcare industry stakeholders, **health experts were not consulted**. This demonstrates a need for wider consultation with public health experts to determine evidence-based ways to increase vaccination rates. Coercive vaccination policies are polarising for immunisation-hesitant or selectively immunising parents, and have unintended consequences. Vaccination rates can be increased by positive policies and greater administrative hurdles without the need to resort to coercive policies.

One strategy that has proven successful is an education campaign. The resultant improvement in vaccination rates as a result of the campaign (when compared with NSW which introduced legislation for the same period), should make this the preferred option.

Discontinue the use of the herd immunity threshold for measles as a target for 'percentage fully vaccinated' rates and encourage the use of the pertussis vaccine for personal protection only. The integrity demonstrated in doing so, should improve public confidence in the immunisation program.

6.0 Conclusion

This legislation is a rework of the 2013 Public Health Exclusion of Unvaccinated Children from Childcare amendment bill, as it also allowed childcare centres to choose to exclude children who were not fully vaccinated. However this incarnation is lacking in that it does not include **natural immunity** and has not adopted the recommendation to include provision for **Immunisation Conscientious Objection**; consequently it should experience the same fate and not be passed.

[101] http://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx Article 18, point 3