Bronwyn Hancock

[redacted]

# Re: Public Health and Wellbeing Amendment (No Jab, No Play) Bill 2015

## Amendment of the Public Health and Wellbeing Act 2008

### Submission - The Bill's objective of reducing risk from infectious diseases

#### 1. Limited scope of this submission

The *Scrutiny of Acts and Regulations Committee* is required to consider whether the Bill, directly or indirectly, "trespasses unduly on rights or freedoms" (*Parliamentary Committees Act 2002* S17(a).)

Whilst it is self-evident, I believe, that this Bill would trespass upon rights and/or freedoms, the scope of this particular document relates to the word "unduly" within said clause. That is, the scope is limited to examining the degree of benefit(s) that might be reasonably expected from the Bill, and hence that may act as a counterweight to the burden of its trespass upon rights or freedoms.

Accordingly, the subject area addressed by this document is limited to an analysis of the Bill's objective of reducing whatever public health risk is posed by the targeted infectious diseases, and the level of effectiveness the Bill would likely have for achieving said objective, based almost entirely upon government publications.

I intend to cover by way of separate submission other important areas upon which this Bill would impact, especially government acknowledged serious adverse effects of vaccines and their frequencies, and the impact it would have upon inalienable human rights.

#### 2. Summary of key points

The Bill's stated purpose is "*to increase immunisation rates for young children in the community*."

In seeking to argue for acceptance of this Bill in her Second Reading Speech on 16 September 2015, the Honourable Minister for Health, Ms Jill Hennessy ("the Minister"), made various statements that she stated had been sourced from "*extensive scientific evidence and expert medical advice*", relating to:

(1) the level of public health risk that is posed today by the various targeted infectious diseases,

(2) to the extent that (1) is accepted, the predictable effectiveness in reducing the said risks by increasing vaccination rates in the targeted children, compared with alternative measures for reducing said risks, and

(3) to the extent that (2) is accepted, the predictable effectiveness of such a Bill for increasing the vaccination rates in the targeted children, compared with alternative measures for increasing the vaccination rates.

However, what she states is unambiguously contradicted by government records and publications, which hence undermine both the purpose of the Bill and its expected effectiveness.

In summary, the publications demonstrate:

- that the public health risk today ranges from zero to minimal for the different diseases,
- that increasing vaccination rates can bring no demonstrable benefit in reducing whatever risk remains,
- that alternative measures have already been demonstrably very effective (with medical research demonstrating also little known but significant other benefits for public health),
- that vaccination rates are already at or around theoretical "herd immunity" levels, are already at record highs, and are continuing to increase, and
- that unused alternative measures are available for increasing vaccination rates,

I conclude that the trespass upon on the rights or freedoms of the people of Victoria is not demonstrably "due".

## 3. Purpose of this Bill

The Bill's stated purpose is "*to increase immunisation rates for young children in the community*."

The method it takes is to require children to be fully immunised before they can attend child care or kindergarten.

Based upon the Bill's reliance upon "*the relevant standard vaccination schedule or the relevant catch up vaccination schedule determined under section 4 of the A New Tax (Family Assistance) Act 1999 of the Commonwealth*", the targeted infectious diseases would be diphtheria, tetanus, polio, pertussis (whooping cough), Hib, Hepatitis B, pneumococcal, meningococcal, measles, mumps, rubella and chickenpox.

The ultimate objective of this Bill is implied in the Bill's Explanatory Notes to be to "*control a public health risk*."

## 4. What current "public health risk" is identified and how effective would the Bill be for controlling it?

The Explanatory Notes and the Minister in her Second Reading Speech have both failed to provide any particulars as to which of the targeted infectious diseases are demonstrated to be presently posing a "public health risk" that is lacking in control.

Indeed whatever risk presently exists from any children remaining unvaccinated can be seen no more than in theory, because the Minister has failed to cite any examples to date of any adverse outcome having demonstrably occurred as a result of any of the targeted children, or indeed any children, not being vaccinated.

The closest the Minister has come to provision of such particulars has been her statement in her Second Reading Speech that "*Immunisation coverage of 95 per cent is necessary to halt the spread of particularly virulent diseases such as measles*", a higher rate than the "*current*" rate of "*around 92 per cent*" "*for children under 5 years of age*".

However,

### 4.1 With respect to measles:

The Minister's statement that the vaccination coverage needs to be increased to halt measles' spread is contradicted by information published by the Commonwealth Government that Australia was declared 'measles free' back in in 2009,[1] then again by a stricter definition in 2014[2], and that "*transmission... due to locally acquired cases has not occurred… for some time*"[3]. (Between 1998 and 2006, only THREE measles cases had occurred that "could not be directly linked to importation", and their vaccination statuses were not published.)

Although outbreaks still occur from time to time, transmission is not due to locally acquired cases and the outbreaks are brief, "self-limiting and contained", with no sequelae reported from the infection, and no deaths in 20 years,[32,4] despite vaccine-induced antibodies' limited duration.[5]

Hence reported rates of cited disease complications, which are listed on the vaccine insert also, can be calculated from government publications to be overall between 500 to 5000 times higher from the vaccine.[6,32,7]

Hence the Minister's statement that "*even a modest increase can have a significant benefit*" has no foundation.

This immediately brings into question the "*extensive scientific evidence and expert medical advice*" upon which the Minister stated that she was relying for introducing this Bill.

### 4.2 With respect to the only two common vaccine-targeted diseases - whooping cough and chickenpox:

- **Whooping cough (pertussis)**.

**(1) the level of risk posed today by whooping cough**

Although whooping cough is a relatively common disease, it is considered not dangerous now to over 6 month olds. Of the rare deaths that have been recorded (averaging 1 per year – that's 1 in 300,000 births), the ONLY deaths in those "vaccine-eligible" (over 6 weeks old) since pertussis became a notifiable disease in 1991 have been in under 6 month old infants fully vaccinated for their ages.[32,4] Approximately 400,000 children born in Australia since then have not been vaccinated and none (over 2 months – the age of "vaccine eligibility") have been reported to have suffered any sequelae.[8,32,4]

Infection in the unvaccinated is further thought to provide natural immunity lasting over 30 years[9] (or permanently), well into adulthood when the risks posed by pertussis would be higher.

Therefore, because the disease risks are higher in adults, it logically follows that for the purpose of minimising the overall risk to a person (including in their adulthood), the ideal strategy is to gain natural immunity in childhood (or young adolescence) when the infection is safe.

**(2) Extent to which any risk could be reduced by increasing vaccination rates in the targeted children**

It would be ideal to eliminate the ONE death per year, on average, from whooping cough.

However, contrary to the Minister's statement that

> "*Childhood vaccinations have been proven to significantly decrease the possibility of infection and spread of… whooping cough*",

the Commonwealth Government (PBAC) itself "*has determined that there is no clinical effectiveness*" of the "cocooning strategy" (vaccinating close contacts of newborns) "*in protecting newborns*" from whooping cough,[10] from which it follows that the vaccine is ineffective for preventing transmission of the disease. Its ineffectiveness was given as the reason for the immediate abandonment of the cocooning strategy.

Not even the vaccine manufacturers claim that the vaccine will prevent infection or transmission.[11]

On the contrary, medical research has found that vaccination may result in "*silent reservoirs*"[12] of "*readily transmitted*"[13] infection, and that increasing vaccination rates may increase the risk of transmission, one reason being found by peer-reviewed medical research to be that the vaccine **increases** susceptibility, especially to the dominant strains that are not targeted by the vaccine.[13]

This counterproductive effect found from the whooping cough vaccines has been evident in practice by such findings as that:

- with fully vaccinated rates having steadily increased over the past 20 years, to the extent that vaccination coverage has now reached record highs (90% in under 19 year olds[14] - the goal, just reached) and many adults now recently revaccinated, whooping cough notifications and deaths have been rising in vulnerable age group(s),[32,] and
- in 2011, when the "cocooning" strategy was in place, a record 38,750 notifications occurred in Australia,[20] and between 2008 and 2011 there were nine infant pertussis deaths, well up from the average rate of less than 1 death per year.[15] This tragedy may have been why the strategy was terminated so promptly in 2012. It is both perplexing and very concerning that the present Minister has just reintroduced the strategy. Notifications have increased from 2014 to 2015 but perhaps the "*expert medical advice*" received by the Minister has failed to include the disease's well known cyclic nature.
- the vaccination rate amongst reported cases has frequently been found to be 90% to 100%, similar to, or higher than, the vaccination rate in the population[32,16,12], and
- when original sources are identified in disease cases, they are almost always found to be vaccinated, and often recently.[17]

Hence, this legislation can bring no demonstrable benefit in relation to this disease.

Government-published evidence indicates the reverse.

➢ **Chickenpox:**

**(1) the level of risk posed today by chickenpox**

Described by the Government as "*generally a benign, self-limiting illness in children*"[32], chickenpox was not a nationally notifiable disease before 2006, and it is **still** not considered important enough to be notifiable in NSW.[4]

The UK Government has decided that it is safer for individuals **and** the community **not** to routinely vaccinate, let alone be pressured into vaccinating, against chickenpox because:

- "*the vast majority of children recover quickly and easily*" (from which they develop natural, lifelong immunity), whereas
- "*in adults, chickenpox is more severe and the risk of complications increases with age.*"[18]

Therefore (as with whooping cough), because the disease risks are higher in adults, it logically follows that for the purpose of minimising the overall risk to a person (including in their adulthood), the ideal strategy is to gain natural immunity in childhood (or young adolescence) when the infection is safe.

**(2) Extent to which any risk could be reduced by increasing vaccination rates in the targeted children**

The UK Government expresses concern that:

> "*If you vaccinate children against chickenpox, you lose this natural boosting so current levels of immunity in adults will drop and more shingles will occur*."[18]

Similarly, the Australian Government itself also reports that, if a vaccination coverage of 90% and vaccine effectiveness of 93% were to be assumed:

> *"An Australian study, performed to assess **the potential impact of universal varicella vaccination** based on this hypothesis, suggested that total morbidity due to varicella and herpes zoster in Australia would decrease for the first 7 years of a population program, but, for 8–51 years after vaccination commenced, **total morbidity was predicted to be higher** than pre-vaccination levels."* (Reference 34 – see *Vaccine Preventable Diseases in Australia, 2005 to 2007)*

Regardless, the vaccine does not appear to be preventing infection - subsequent to vaccination commencing, the vaccination status amongst cases has been found to be similar to or higher than the vaccination rate in the broader community. For example in 2012, of those cases where the vaccination status was available, 87% cases had been vaccinated and 13% not vaccinated.[16]

Hence, this legislation can bring no demonstrable benefit in relation to this disease.

Government-published evidence indicates the reverse.

**4.3 With respect to the other targeted diseases (notifications ranging from zero for decades to minimal):**

(Note: See Reference **19** for more details and references)

- **Tetanus** notifications have already been ZERO in children ever since it became a notifiable disease in 1991 (except for one case in a 2 year old in 2000) and "Tetanus is not passed on from one person to another" - the disease is NOT contagious at all.

  Hence increasing vaccination rates can bring no demonstrable benefit in relation to this disease.

- **Diphtheria** notifications have also already been ZERO in children since June 1992[20] and "prolonged contact (e.g. sleeping in the same room as a case rather than casual contact) is usually required" for transmission to occur.[19] More than 10 million unvaccinated child years have transpired since 1992.

  Hence increasing vaccination rates can bring no demonstrable benefit in relation to this disease.

- **Polio**: Not only has Australia been certified polio-free for 15 years (since October 2000)[4], but the Government reports that polio deaths had already declined by 90% by the time the vaccine was introduced in 1956 (see graph on page 6), "the **last** reported case of locally acquired wild-type polio in Australia was in **1972**" and that "**local transmission** of wild polio virus in Australia probably ceased in **1962**." This has been in spite of the fact that **since that time, many hundreds of millions** of travellers have entered Australia **and the over 20 to 25 million unvaccinated child years have transpired.** The WHO and the Commonwealth Government inform us of various other factors that are preventing the disease occurring in Australia, including the 99.9% decrease in polio globally since 1988 and our "adequate treatment of sewerage and provision of safe drinking water and foods", and that even if after all of these obstacles a child were somehow still to become infected with the polio virus, there would be only a 1 in 1000 chance of paralysis developing.

  Hence increasing vaccination rates can bring no demonstrable benefit in relation to this disease.

- **Hepatitis B:** The annual notification rate in children is approximately **1 in 600,000**[4,32], similar to that before widespread vaccination[4,32]. For transmission to occur, "The virus must be introduced through broken skin or the placenta or come in contact with mucous membranes… Faecal-oral and vector-borne modes of transmission have **not** been demonstrated. Hepatitis B is **not** transmitted by kissing on the cheek,

coughing or sneezing, sharing food or sharing eating utensils"[19]. It is virtually impossible for the circumstances necessary for transmission to exist in the setting of a child care centre.

Hence, increasing vaccination rates can bring no demonstrable benefit in relation to this disease

- ***Haemophilus Influenzae type b* (Hib)*:*** *Haemophilus Influenzae* "is a normal part of upper respiratory tract flora" [19], the bacteria living there harmlessly, in both vaccinated and unvaccinated, but Hib **disease** itself is very uncommon - an annual notification rate of only approximately **1 in 150,000** in the targeted (highest incidence) age group, which is the 0 to 4 year age group[4,32]

  Hence it can be seen that transmission of this bacteria is not one of the significant factors that lead to the development of disease associated with Hib.

  Further to that, the vaccination status amongst cases has been found to be similar to or higher than the vaccination rate in the broader community[16].
  Hence, increasing vaccination rates can bring no demonstrable benefit in relation to this disease

- **Pneumococcal.** Like Hib: "The bacteria often live harmlessly in the throat of healthy people"[19], in a large majority of hosts,… carried with no apparent symptoms." And pneumococcal disease is also uncommon. The latest recorded (2012) annual notification rate was approximately **1 in 35,000** overall in under 20 year olds[4] for the targeted serotypes.

  Hence it can be seen that transmission of this bacteria is not one of the significant factors that lead to the development of disease associated with pneumococcal disease itself.

  Further to that, the vaccination status amongst these cases also has been found to be similar to or higher than the vaccination rate in the broader community[16].
  Hence, it is not reasonably apparent that increasing vaccination rates benefit in relation to this disease

- **Meningococcal C.** Like Hib: "Asymptomatic respiratory tract carriage of meningococci occurs in 5%–10% of the population", yet meningococcal C disease is especially rare. Since 2011, there have been 2 notifications reported children under 5 years of age, ZERO cases in 5 to 14 year olds and 2 cases in 15-19 year olds, with **no age group exceeding 1 case per 500,000**.[4,20]

  Hence it can be seen that transmission of this bacteria is not one of the significant factors leading to the development of meningococcal disease itself.

  Further, similar to diphtheria, "meningococcal bacteria are **not** easily spread from person to person and the bacteria do not survive well outside the human body. The bacteria are passed between people in the secretions from the back of the nose and throat. This generally requires close and prolonged contact with a person carrying the bacteria."[19]
  Hence, increasing vaccination rates can bring no demonstrable benefit in relation to this disease

- **Mumps** and **Rubella** notifications are similarly infrequent to measles[4,32,16] and it naturally follows that congenital rubella syndrome cases are rarer still – the number of (CRS) cases notified annually (since 2007) is usually ZERO (amongst the almost 300,000 births), otherwise one. The Australian Government reports that:

  > *"There was 1 notification of CRS between 2008 and 2012: a male aged less than 1 year of age notified in 2012 from the Northern Territory. The place of acquisition was recorded as Indonesia."*[21]

  and that:

  > *"Statistical Divisions with slightly lower than average childhood vaccination coverage do not correspond with those that have had high rubella notification rates."*[22]

  Hence, increasing vaccination rates can bring no demonstrable benefit in relation to these diseases

In summary, the degree of public health risk that is posed today by the various targeted infectious diseases ranges from zero to negligible, and whatever risk can be argued to exist cannot demonstrably be reduced by increasing vaccination rates in the targeted children.

## 5. What alternative measures might be effective for reducing any public health risk from infectious diseases?

### 5.1 Success already historically achieved by alternative methods

Of the infectious diseases that were important a century ago, only some are targeted by the relevant vaccinations. Other important diseases were tuberculosis (which caused the most morbidity and mortality), typhoid, scarlet fever and dysentery.

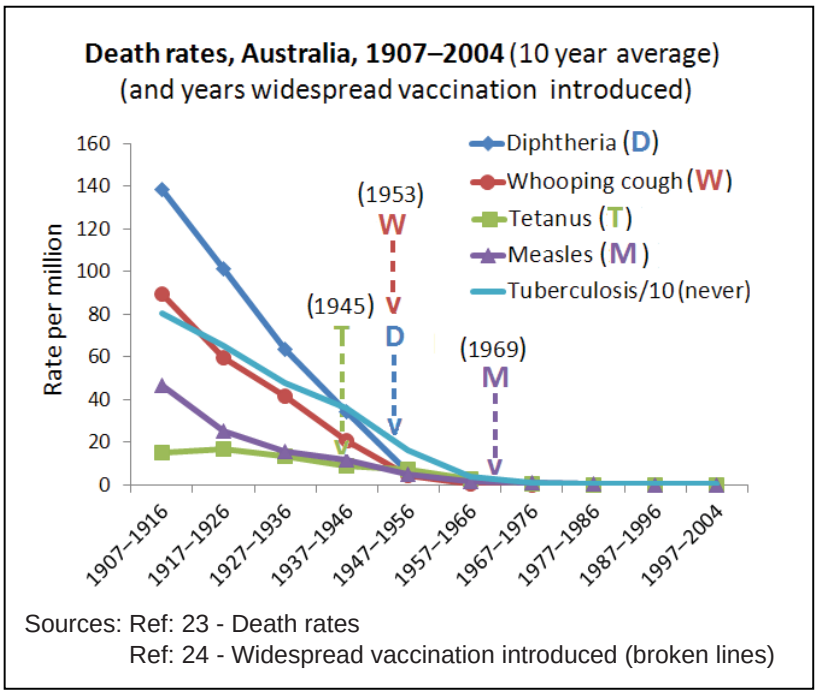
During the 19th and 20th centuries, all of these have, in parallel, dramatically declined in importance with or without vaccination, indeed mostly **BEFORE** vaccination.[23,24] (See graphs below).

Indeed,

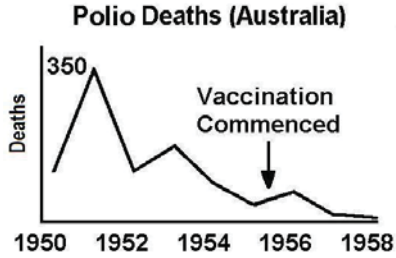
- already by 1950, the Government no longer considered whooping cough (WC) and measles important enough to be notifiable[25] (with vaccination levels now at around 95%, whooping cough is now considered more important than before any vaccination) and
- in 1956 it was declared that "*as causes of infant mortality in Australia all the infective diseases have been overcome*".[26]

Naturally the decline continued unabated after vaccination, with the ultimate result that any risk from the targeted diseases is now the lowest it has ever been.

Hence, with respect to overall public health, the Government has stated that it considers infectious diseases today to be the least important amongst the numerous causes of illness and death.[27,23]




Sources: Ref: 23 - Death rates
Ref: 24 - Widespread vaccination introduced (broken lines)




Sources: Ref: 23 - Death rates
Ref: 24 - Widespread vaccination introduced (broken lines)

(Note the almost 90% decline before polio vaccination commenced.)

### 5.2 What were the alternative measures that were so successful?

Given that in spite of the past decline, whooping cough and chickenpox do remain common infectious diseases, and that, very rarely, sequelae occur from those or other infectious diseases, what alternative measures have been so successful and that can be employed to further reduce the risk remains?

Once again, Government publications provide the main answers…

- The Government itself gives credit to improved nutrition, sanitary reform, breastfeeding, improved fitness, reduced family size, less overcrowding and general health for the past dramatic decline in importance of infectious diseases[28] and continued protection against them.[29]
- The WHO[30] and scientific research now inform how to prevent and manage infectious diseases, e.g. Vitamin A halves measles risks.[31]
- Other disease management measures are also undertaken, from which it follows that the quality of disease management must be believed in accepted medical practice to make a difference. Hence, on the very rare occasions that any harm arises from any of the targeted infectious diseases, how can we know that more informed or competent management by the medical staff involved could not have prevented that harm?
- The Government lists other factors also that are effective in preventing the transmission and/or development of the targeted diseases.[32]
- Although the Government seeks to also credit "herd immunity" from vaccination, this could not possibly cause the decline that has been observed in unvaccinated children in diseases that are impossible or difficult to contract by way of contact with other children, e.g. tetanus is not contagious at all yet has still disappeared in unvaccinated children.[32,19]
- Whatever other factors have been responsible, they are still obviously at work because although vaccines have acknowledged limited duration, adults who lack vaccine-induced immunity are not succumbing to the diseases. Indeed few adults have **ever** received Hib, Hepatitis B, pneumococcal, meningococcal C or chickenpox vaccines, and very few over 34 years of age would have received the mumps vaccine. How many members of this Parliament have received these vaccines?
- Whilst such alternative factors that have been so significant in leading to the lack of clinical infection today unfortunately provide no income to the pharmaceutical industry, rather indeed reduce it, their effectiveness has been very well documented and evidenced, and, of course, the Victorian Government is required at law to place the maintenance of public health at a higher priority than the support of industry.
- With further directed resources, the reach of these alternative measures may be extended so as to protect the evidently tiny few who may still succumb to any complication in relation to the infectious diseases. Indeed, since there does not appear to be any higher rate of transmission of the diseases from the unvaccinated than from the vaccinated, the Government has no alternative if it is serious about this objective, than to pursue these effective alternative measures.

### 5.3 Additional benefits of alternative methods – benefits of naturally acquired childhood infections

There is a further benefit medical research has found from pursuing alternative methods of preventing clinical disease instead of trying to stop infection itself. This benefit is that as long as the disease management is sufficiently competent, the infectious disease can be not just harmless, but in some cases extremely beneficial.

Properly managed natural exposure to some targeted diseases, e.g. chickenpox, measles, mumps & rubella (MMRV), has been found to prevent (by up to 93%[33]) and/or resolve[34] some cancers, heart disease, strokes and other chronic conditions. It also brings reliable lasting immunity, unlike vaccines.

Hence, to whatever extent vaccines may achieve their purpose of preventing infectious diseases or at least their natural clinical expression, which notably is almost always brief and with no ongoing adverse outcome, medical research suggests the likelihood of a corresponding increase in the burden from cancer, heart disease, stroke and other life-threatening diseases, which almost always do, at best, have serious ongoing adverse outcomes.

To draw an analogy, occasionally a runner will collapse and die from participating in a race such as Sydney's City to Surf, but does that mean that it is unhealthy, indeed life-threatening, for the rest of us to engage in regular exercise?

**6. How do the present vaccination rates compare to "herd immunity" levels?**

If, nevertheless, we were to accept the possibility of it being beneficial if vaccination rates were to reach the theoretical "herd immunity" levels, how far, if at all, below these levels is the coverage rate?

The Minister stated in her Second Reading Speech that the present coverage is a few percentage points below:

> *"the current immunisation rate for children under 5 years of age is around 92 per cent…. Immunisation coverage of 95 per cent is necessary to halt the spread of particularly virulent diseases such as measles."*

However, in this respect also, the Minister's statement is at least misleading, if not false. The latest published vaccination coverage for ONE dose of the measles vaccine at 24 months of age (which was for the year 2012) was 94.5%, which is virtually 95%, and on 1 July 2013 the second measles vaccine dose also was brought forward to 18 months of age[35]. The likely result of that change has been an increased vaccination coverage thereafter for the second dose. So the *"around 92 per cent*" coverage for children under 5 years of age" is likely to be no longer "*current"*.

Also, regardless of whether not the second dose is given, the Commonwealth Government states:

> *"Measles immunity induced by 1-dose vaccination provides long-term immunity in most recipients.[2,27] … (Only) approximately 5% of recipients fail to develop immunity to measles after 1 dose.[28]"* [36]

The occasional measles outbreaks that do still occur are attributed to reasons other than inadequate childhood vaccination coverage. A recent example of this was when "*the infant vaccination rates in the most affected part of Sydney for the measles outbreaks of 2012-13 was 95%*".[38]

It is nonsensical, with respect to **all** of the contagious targeted diseases, to determine "herd immunity" levels based upon vaccination coverage of children only, given that children mix closely with adults, amongst whom:

- the vaccination coverage is obviously far lower, and
- even for those adults who have been vaccinated, the vaccine-induced antibodies have been measured to fall to 50% within about 20 years.

Hence the Minister's statement that "*even a modest increase can have a significant benefit*" is further confirmed to have no foundation, especially with respect to childhood vaccination rates.

**7. Have vaccination rates plateaued or are they still increasing?**

If, nevertheless, we were to accept that an increase in vaccination rates in the targeted children would be beneficial for public health, is there evidence that vaccination rates will not rise without any such measures being enacted?

That might appear to be the case if we were to accept what the Minister stated in her Second Reading Speech, which was:

> *"The overall immunisation rate in Victoria has plateaued in recent years".*

However, once again, her information appears to be contradicted by Government publications. The latest publications of vaccination coverage inform us that the vaccination coverages have been steadily increasing, including between the latest 2 years published, 2011 and 2012, the percent "fully vaccinated" aged 12 months, 24 months and 60 months rising from 92.2%, 92.9% and 91% to 92.3%, 93.2% and 92.4% respectively.

Vaccination rates are already at record highs[37] and it is reasonable, extrapolating from this steady trend, to predict that vaccination rates are likely to only continue to steadily increase to higher still record levels without any such legislation being enacted.

Hence it may be too soon to determine whether or not the uptake levels at present or in the near future would already be sufficient to achieve whatever public health outcome is sought by way of increased vaccination uptake.

It ought further be considered that the Commonwealth Government has introduced its "No Jab, No Pay" Bill, which it also hopes, if the Bill is passed, will increase the vaccination rates of children attending child care, in that case by denying the child care benefit, rebate and FTB Part A end-of-year supplement to parents who choose not to vaccinate their children.

Therefore, how can the introduction of this Bill be reasonably justified when already existing trends and legislation appear likely achieve whatever this Bill is designed to achieve?

**8. What alternative measures might there be for increasing vaccination rates?**

If, nevertheless, we were to accept that for the vaccination rates to significantly increase, some kind of measure would be necessary to be taken by the Victorian Government, how effective would it be to eliminate conscientious objection option for Victorian child care and kindergarten attendance - would such a measure achieve the "modest increase" that she predicts it would cause?

Once again, Government publications indicate that it would be difficult to cause any significant increase by such a measure. The percentage of conscientious objectors and children in Victoria born in 2010 with no vaccines recorded on the Australian Childhood Immunisation Register, as assessed in 2012, was determined to be only 1% for conscientious objectors and no vaccines recorded, and only 0.6% for conscientious objectors with at least one vaccine recorded. The percentage of children in relation to which **no** conscientious objection and no vaccines have been recorded was higher than those, at 1.74%.[37] So in the case of most of the children for whom no vaccines have been recorded, no conscientious objection has been lodged.

Indeed, some pro-vaccine academics such as Julie Leask (Associate Professor, University of Sydney), Hal Willaby (Research Fellow, School of Public Health, University of Sydney) and Prof. Raina Macintyre (Head of the School of Public Health and Community Medicine at UNSW and Professor of Infectious Disease Epidemiology) have argued that not only are there alternative measures for increasing vaccination rates, but that legislation such as this would be limited in its ability to increase vaccination rates, and indeed may even decrease vaccination coverage overall.[38]

Julie Leask and Hal Willaby argue:

> *"Mandatory vaccination at any level may seem compelling but is not necessary: it's poorly targeted and ignores the low-hanging fruit already in place…. Why 'no jab, no play' won't work: The proposed legislation… may actually increase the risk by corralling unvaccinated children together where an outbreak… could spread much more rapidly…. Systematically enforced universal record checks of children's vaccination status serves to remind late parents nearly as well as bans would… listening, respectful communication, and quality information are more likely to win them over than castigation and coercion."*

Prof. Raina Macintyre argues:

> *"I will need to see more evidence to be convinced there is a problem at all. A rigorous public health approach would be to first define and understand the problem, if indeed there is one, and then address it with an appropriately targeted strategy"* and
>
> *"Introducing punitive measures may have the opposite effect to the intended effect, and may increase public mistrust of vaccination and resentment of coercion…. We have an obligation to understand and address the concerns of parents, instead of punishing them. Maintaining public confidence in vaccines and trust in immunisation programs is key to the success of these programs… In times like this, any public perception of force, coercion or punishment for non-vaccination can cause significant damage to vaccination programs. Immunisation programs are a partnership in trust… and punitive measures will erode trust. There are many historical examples of public backlash when such trust is eroded by overly dogmatic or forceful government actions…. Instituting draconian punitive measures runs the risk of driving the uncertain group to becoming hard core refusers instead of the desired effect of making them vaccinate their children."*

Therefore, if a need from increasing vaccination rates were to be accepted as at least possible, the "experts" report their findings that there are alternative measures that would be more effective.

**9. Conclusion**

Given

- the acknowledged lack of importance in infectious diseases today for public health, and
- the evident lack of demonstrable effectiveness of vaccinations in averting the little risk posed by the targeted diseases, and
- the alternative measures that have an acknowledged track record of success (plus their other added benefits),
- the already record high (and still apparently increasing) vaccination rates in children, and
- the unused alternative measures available (and preferred by academic experts) for increasing vaccination rates,

there is a lack of demonstrable benefit of this Bill for public health, especially compared to other means that have been demonstrably more effective but just not used to their fullest extent, and/or others considered by experts to be more effective but unused.

Further, given the low rates today of morbidity, and especially low mortality, from measles, it is numerically calculable that even with respect to reported complications from the vaccine that match those from the disease, the rates of the complications are significantly higher from the vaccine, for an average child under 20 years of age (see paragraph 4.1). This clearly indicates that increasing measles vaccination rates further would have an adverse impact on public health, and does not augur well for the impact on public health of increasing the rates of any of the other vaccines.

Hence there is no proper foundation for an assertion that such a Bill's trespass upon rights and/or freedoms of Victorian families could be considered "due", even remotely. This becomes especially evident still when the extent of the multiple and serious forms of said trespass upon rights and/or freedoms are considered, with many acknowledged in government publications and by academics whom the Government would call "experts".

The extent to which the Bill would trespass upon rights can be seen to include a direct denial of the most sacred of all rights – the right to life itself – as has been acknowledged to have been occasioned by vaccination upon some unfortunate infants and children, at an indisputably inestimable frequency. I intend to discuss the serious impact that the Bill would have upon that and other rights and/or freedoms in a separate document, also with authoritative substantiation.

[redacted]

Bronwyn Hancock
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## REFERENCES

Note that almost all of the references within are sourced from publications that have been either authored or endorsed by the Commonwealth or a state Government and virtually all of the remaining references are sourced from peer-reviewed medical research.

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**1** Australia declared measles free in 2009

*Australia declared measles free*, Wednesday, 11 February 2009, by Dani Cooper for the ABC *News in Science* http://www.abc.net.au/science/articles/2009/02/11/2487452.htm;

Heywood AE, Gidding HF, Riddell MA, McIntyre PB, MacIntyre CR & Kelly HA. *Elimination of Endemic Measles Transmission in Australia.* Bull WHO 2009;87:64-71. http://www.who.int/bulletin/volumes/87/1/07-046375/en/index.html

**2** Australia declared measles free in 2014

*Four Western Pacific countries and areas are the first in their Region to be measles-free.* WHO news release. Seoul 20/4/14. http://www.wpro.who.int/mediacentre/releases/2014/20140320/en/

**3** *"(Measles) Transmission... due to locally acquired cases has not occurred… for some time":* *Immunisation Myths and Realities*, 5th edn, 2013. Australian Govt Dept Health. http://www.health.gov.au/internet/immunise/publishing.nsf/content/uci-myths-guideprov

**4** Disease incidence, especially after 2007

*National notifiable diseases: Australia's notifiable diseases status: Annual report of the National Notifiable Diseases Surveillance System*. NNDSS Annual Report Writing Group, CDI, Aust. Govt Dept of Health. http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-pubs-annlrpt-nndssar.htm (annual reports from 1994 to 2012)

**5** Measles vaccine-induced antibodies' limited duration - found to fall to 50% within about 20 years

Chen et al. *Waning population immunity to measles in Taiwan*. Vaccine Vol 30, No. 47, 19 Oct 2012:6721–7. http://www.sciencedirect.com/science/article/pii/S0264410X12007207.

**6** Reported rates of cited disease complications are over 500 times higher from the vaccine

**Risk comparison calculation**

Based on measles notifications in 1 and 19 year olds in Australia in 2001-'07 (when there was an annual average of 29 measles cases in that age group), the overall chance of a child during that 19 year period contracting measles is approximately 1 in 10,000 (an annual chance of about 1 in 200,000).

To calculate the assumed higher chance for an unvaccinated than vaccinated child, then based further upon

- an assumption that the induction of antibodies from the MMR vaccine is assumed to provide immunity, and hence that the vaccine's age-weighted effectiveness is 90% for measles (taking into account the degree to which antibody levels wane after vaccination (Reference 5), and
- an average 22000 unvaccinated children per year from average of 92% coverage of a 275000 birth cohort, and
- measles complication rates from Miller (1964) (*Frequency of Complications of Measles*, 1963. BMJ Jul 11, Vol 2: 75 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1815949/pdf/brmedj02558-0019.pdf),

then…

**(1) Risk of convulsions, pneumonia, diarrhoea or otitis media from measles in an unvaccinated child**

- of the annual average of 29 measles cases, approximately 13.5 occurred in unvaccinated children, and hence…
- the chance of an unvaccinated child contracting measles in the 19 years between 1 and 19 years of age is 1 in 1600,
- the average chance of a measles-infected child in that age group suffering convulsions, pneumonia, diarrhoea or otitis media are 1 in 200 (0.5%), 1 in 27 (3.7%), 1 in 13 (7.7%) and 1 in 43 (2.3%) respectively.

- Hence, the chances of a child suffering convulsions, pneumonia, diarrhoea or otitis media from measles in those 19 years are **1 in 320000**, **1 in 43200**, **1 in 20800** and **1 in 68800** respectively.

**(2) Risk of convulsions, pneumonia, diarrhoea or otitis media from the measles vaccine**

The Priorix (MMR) vaccine product insert (TGA – Vaccine Product Inserts: https://www.ebs.tga.gov.au/) provides the frequencies of these same complications from the MMR vaccine reported in clinical trials to be as follows:

- the chances of a previously healthy child suffering convulsions, pneumonia, diarrhoea or otitis media from the Priorix vaccine, within 6 weeks afterwards, totalled for the 2 doses, are reported as**: 1 in 2000 to 1 in 1000, 1 in 1000 to 1 in 100; 1 in 50 to 1 in 5 and 1 in 50 to 1 in 5 respectively**.

**(3) Result of comparison of risks in (1) versus (2) above**

Based upon the frequencies in (1) and (2) above and comparing them,

- the differences in the chances of a previously healthy vaccinated child developing convulsions, pneumonia, diarrhoea or otitis media within 6 weeks after 2 measles vaccine doses, compared to an unvaccinated child developing these complications from measles, are respectively: 160 to 320, 43 to 430; 416 to 4160 & 1376 to 13760 times greater from the vaccine. Totalling the risks, the difference is **500 to 5000 times greater from the vaccine**.

The cited rate for **encephalitis** from measles including (in the Miller (1964) study referenced above) is 1 in 1,000 cases, which, combined with the above calculated chance of 1 in 1,600 of an unvaccinated child contracting measles between 1 and 19 years of age, works out as a chance of 1 in 1,600,000. (With the unvaccinated children per birth cohort numbering 22000, it can be estimated that only once every 75 years might a child suffer encephalitis from measles as a result of not being vaccinated.)
The rate of encephalitis from vaccination may be greatly in excess of this, given that common vaccine reactions, which include what may be symptoms of encephalitis, are routinely disregarded by doctors as “normal” rather than being investigated for that possibility. (See Reference 39)

**7** Commonwealth Government lists of serious effects that it acknowledges may occur as a result of vaccines

*The Australian Immunisation Handbook* 9th edition (2008), especially but not limited to *Appendix 6 – Definitions of Adverse Events Following Vaccination.*http://www.nevdgp.org.au/info/immunisation/handbook-9.pdf, p360-363

One form of the forms of thrombocytopenia that the Government admits that vaccination, at least the MMR vaccine, can cause, is idiopathic thrombocytopenic purpura (ITP), which is an **autoimmune disease**.

("*The Science of Immunisation*", Australian Academy of Science, 2012)
https://www.science.org.au/publications/scienceofimmunisation-q-and-a-2012/vaccine-safety

The Government proceeds to attempt to play down this risk by comparing it to the “10 times greater” risk of developing the same condition as an outcome from measles, but the comparison misleadingly fails to take into account the minimal chance of contracting measles. From Reference 6, the latter chance can be estimated for an unvaccinated child aged from 1 to 19 years, based upon the Government’s assumption of vaccine effectiveness, to be approximately 1 in 1600 (annually 1 in 30,000). The resultant ITP risk for the whole 19 year period is then **160 times greater from the vaccine**.

The Government also admits that the influenza vaccine can cause the **autoimmune disease** Guillain–Barré syndrome, though this is not one of the vaccines directly relevant to the presently proposed legislation.

The Government’s concession, in principle, that vaccines can cause autoimmune diseases is a concession of the biological plausibility of other vaccines causing other autoimmune diseases also. Such other links have been made in medical research (See Reference 40).

**8** Vaccination coverage estimates:

*Vaccine Preventable Diseases and Vaccination Coverage* reports, 1993 through 2005 - Supplements, CDI, Aust. Govt Dept of Health.
http://www.health.gov.au/internet/main/publishing.nsf/content/cdisupplements-1-lp

*Immunisation coverage annual reports*, CDI, Aust. Govt Dept of Health

*http://www6.health.gov.au/internet/main/publishing.nsf/Content/cda-immunanrep.htm reports for 2007 to 2012*

**9** Natural immunity from pertussis evidenced to last over 30 years (if/when not permanently)

Wearing et al. *Estimating the Duration of Pertussis Immunity Using Epidemiological Signatures*. PLoS Pathog. Oct 2009;5(10). http://www.plospathogens.org/article/info%3Adoi%2F10.1371%2Fjournal.ppat.1000647

**10** Government PBAS: "no clinical effectiveness" of whooping cough vaccine for protecting newborns

*States ending free parent whooping vaccine*, Australian Associated Press, 8/5/12.0

http://www.dailytelegraph.com.au/states-ending-free-parent-whooping-vaccine/story-e6freuyi-1226350174856

> *"PARENTS across Australia will no longer receive free whooping cough vaccinations because it is not effective in protecting newborns from the potentially deadly illness, a parliamentary committee has heard… 'The PBAC (Pharmaceutical Benefits Advisory Committee), which is totally independent and very expert, has determined that there is no clinical effectiveness of this strategy,' Professor Brook said. He said this had made it clear the cocooning strategy should not be continued. 'So all jurisdictions who have been in this program will be effectively ceasing the cocooning strategy as of the end of June this year'… 'There has been a national committee meet to look at this and to make decisions on the basis of the best scientific evidence available ... the evidence is that the strategy has not been effective.'* "[10]

Consequently, upon apparent acceptance of the whooping cough vaccine's ineffectiveness for preventing infection or transmission, the various states' and territories' funding of the "cocooning" program was terminated in May 2012, just 3 years after it began, with the exception of NSW which initially scaled it down but has since fully ceased the funding, and the NT which continues to provide free vaccines to "all fathers and carers in the same household of an infant under the age of 7 months".

Such unprecedented and rapid reversal of a policy may be another indication that the vaccine had been found to be not just ineffective in preventing infection or transmission but found to increase the risk for newborn infants. That conclusion was not stated but it was subsequently published that

A newly available article (accepted on 19 August 2015 for publication in *Vaccine,* and available online since 29 August 2015) studied the effect (if any) of the cocooning program in Western Australia during 2011-2012, and further confirmed that:

> *"vaccinating parents with dTpa during the four weeks following delivery did **not** reduce pertussis diagnoses in infants*."

(Carcione D. et al. *The impact of parental postpartum pertussis vaccination on infection in infants: A population-based study of cocooning in Western Australia*. Vaccine. Received 7 May 2015, Revised 10 July 2015. Available online 29 August 2015. doi:10.1016/j.vaccine.2015.08.066 http://www.sciencedirect.com/science/article/pii/S0264410X15012049)

(An article in Australian Doctor magazine describes the same research:

***Cocooning ineffective against pertussis.*** Australian Doctor. Michael Woodhead, 31 August 2015 http://www.australiandoctor.com.au/news/latest-news/cocooning-ineffective-against-pertussis)

**11** The pertussis vaccine **manufacturers** do **not** claim the vaccines will reduce risk of infection or transmission

Infanrix hexa, Infanrix IPV, Boostrix and other pertussis-containing vaccines' product inserts, available from Aust. Govt Dept of Health, Therapeutic Goods Administration www.ebs.tga.gov.au/

The pertussis vaccine manufacturers themselves do **not** claim that the vaccine prevents infection, transmission, cough severity, total duration of any chronic cough (which may come and go), or any longer term adverse outcomes) They claim only that the vaccine has been successfully tested for reducing, on average, the duration of a "typical" cough (which is "considered over when the child had had no cough for two full days.").

(Greco et al. A Controlled Trial of Two Acellular Vaccines and One Whole-Cell Vaccine against Pertussis. N Engl J Med 1996; 334:341-349

(http://www.nejm.org/doi/full/10.1056/NEJM199602083340601), referenced by Boostrix product insert)

Even if this claim (of reducing, overall, the duration of a "typical" cough) is scientifically valid, a cough is not a complication. It is a symptom that normally arises from the **defences** that the immune system may need to mount in order to protect the body from a complication or harm at a deeper level, and to develop lasting immunity. It is less desirable for the longer term to have a chronic cough, coming and going due to difficulty the body has fully resolving the infection.

It is acknowledged by vaccine manufacturer GlaxoSmithKline on its US Boostrix (pertussis-containing) vaccine product insert (page 15), that "*The role of the different components produced by B. pertussis in either the pathogenesis of, or the immunity to, pertussis is not well understood*".

(BOOSTRIX (Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine, Adsorbed) http://www.fda.gov/downloads/BiologicsBloodVaccines/UCM152842.pdf)

**12** Medical research finds vaccination may result in "*silent reservoirs*" of infection

Srugo et al. *Pertussis Infection in Fully Vaccinated Children in Day-Care Centers, Israel*. *Emerg Infect Dis*. Oct 2000;6(5). http://wwwnc.cdc.gov/eid/article/6/5/00-0512_article: "The whole-cell vaccine for pertussis is protective only against clinical disease, **not against infection**…. Our results indicate that children ages 5-6 years and possibly younger, ages 2-3 years, play a role as **silent reservoirs** in the transmission of pertussis in the community."

*Study:Is the whooping cough resurgence due to vaccinated people not knowing they're infectious?* 24 Jun 2015 BMC Medicine (http://www.santafe.edu/news/item/althouse-scarpino-whooping-cough-asymptomatic/);

**13** Medical research finds infection "*readily transmitted*" by vaccinated

Warfel, Zimmerman and Merkel. *Acellular pertussis vaccines protect against disease but fail to prevent infection and transmission in a nonhuman primate model* PNAS 2014 111 (2) 787-792.
(http://www.pnas.org/content/111/2/787.full

Does the vaccine increase susceptibility to infection with the targeted *B pertussis* strain?

Researchers have identified a flaw in relation to the whooping cough vaccines, referred to as "Original Antigenic Sin". It not only provides an explanation for the ineffectiveness of the vaccines, but explains why the vaccines may, on the contrary, increase susceptibility to the disease.

(*Vaccinating pregnant women "halves the risk of pertussis in infants' first four months" ~ A critique by Dr Suzanne Humphries.* 21 March 2013 (http://www.vaccinationcouncil.org/2013/03/21/vaccinating-pregnant-women-halves-the-risk-of-pertussis-in-infants-first-four-months-a-critique-by-dr-suzanne-humphries/)

Does the vaccine increase susceptibility to infection with **non**-targeted, and widespread, *B pertussis* strain(s)?

A 2010 study published in the Proceedings of the Royal Society B concluded that vaccination resulted in an approximately **40-fold** increase in *B. parapertussis* lung colony-forming units (CFUs).

(Long et al. *Acellular pertussis vaccination facilitates Bordetella parapertussis infection in a rodent model of bordetellosis*. Proc. R. Soc. B, 2010; published ahead of print March 3, 2010, doi:10.1098/rspb.2010.0010 1471-2954. http://www.ncbi.nlm.nih.gov/pmc/)

Research in Australia published in 2012 has further found that the *B pertussis* strains that have been predominant in Australia in recent times, circulating in this country since at least 2000, are **not** amongst those targeted by the vaccine.

(L Ruiting. *Newly Emerging Clones of Bordetella pertussis Carrying prn2 and ptxP3 Alleles Implicated in Australian Pertussis Epidemic in 2008–2010*. J Infect Dis. 2012 (http://jid.oxfordjournals.org/content/205/8/1220.full.pdf)

Research in the US has made a similar significant finding. A key antigen component of the acellular pertussis vaccine is pertactin (PRN). The CDC findings have indicated that **85%** of the *B. pertussis* strains isolated in 2012:

"*were PRN-deficient and vaccinated patients had significantly higher odds than unvaccinated patients of being infected with PRN-deficient strains. Moreover, when patients with up-to-date DTaP vaccinations were*

*compared to unvaccinated patients,* ***the odds of being infected*** *with PRN-deficient strains* ***increased****, suggesting that PRN-bacteria may have a selective advantage in infecting DTaP-vaccinated persons.*"

(http://www.cdc.gov/maso/facm/pdfs/BSCOID/2013121112_BSCOID_Minutes.pdf page 6)

Has the whooping cough vaccine (old or new) increased susceptibility to infection with *B pertussis* overall?

Pertussis notifications have been rising significantly in the United States ever since 1978-80, which was when vaccination was mandated for school entry.

(CDC *MMWR: Summary of Notifiable Diseases* http://www.cdc.gov/mmwr/mmwr_nd/)

In Australia also, since pertussis became a notifiable disease in 1991, and along with several Government incentives instituted on a number of occasions since that have increased vaccination uptake, pertussis notifications have also sustained a significant persistent overall rise in Australia.

(National Notifiable Diseases Surveillance System summary tables
http://www9.health.gov.au/cda/source/cda-index.cfm)

*Immunisation Coverage Annual Reports*
http://www6.health.gov.au/internet/main/publishing.nsf/Content/cda-immunanrep.htm)

**14** Fully vaccinated rates at record high of 90% in under 19 year olds

*Immunisation coverage, 2012*, Communicable Diseases Intelligence Sep 2014;38(3) http://www6.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi3803e.htm (See Figures 2, 3 and 4 for whooping cough in particular). It can be seen that references made by the Government and the media to "concern" about an increased number of **registered** "conscientious objectors" is misleading. In response to numerous Government measures implemented over the past 20 years, vaccination coverage itself has only increased, not decreased, and is now at a record high.

**15** Rise of whooping cough notifications and deaths in vulnerable age groups with higher vaccination coverage

A record number of 38,750 notifications had occurred in 2011 (see Reference 20), and nine infant pertussis deaths occurred between 2008 and 2011, which was well up from the previous rate of less than 1 death per year. Because it is
(http://www.abc.net.au/health/thepulse/stories/2012/08/14/3567495.htm)

**16** Vaccination rate amongst reported cases 90%-100%, similar to, or higher than, the vaccination rate in the population

There are numerous examples of this, but here are a few recent ones:

**Chickenpox**

In 2012 (the latest year assessed) in Australia, 87% cases of chickenpox cases had been vaccinated (where vaccination status was known), which was **higher** than the vaccination coverage, especially given that the vaccine was only introduced in November 2005 and initial uptake was slow - 20% for the March 2006 cohort (as at March 2008), 71% for the September 2006 cohort, 79% for the March 2008 cohort, and still only 84% in the most recently vaccinated cohort in 2012
(See Reference 4 and *Immunisation coverage annual reports* for 2007 (Fig 8) and 2012 (Fig 3) in Reference 8)

**Hib (Haemophilus Influenzae b)**

In the 3 years 2009 through 2011, there were just 21 to 23 Hib notifications in vaccine eligible children under 5 years of age. Of those cases, at least 19, and potentially 100%, were vaccinated, and 18 were fully vaccinated for their ages. (See Reference 4)

**Mumps**

"During the 2006–2007 period, there were 371 notifications of individuals born after 31 December 1980.… Of the 92 cases with vaccination status validated, 72 (78%) had been fully vaccinated, 16 (17%) partially vaccinated, 2 were unvaccinated and 2 had an unknown status." (Reference 32)

**Pneumococcal**

Notifications in 2006-2007 in vaccine-eligible children aged over 6 months whose vaccination status was known, 78% were reported to be fully vaccinated, and only 10% unvaccinated (Reference 32).
The full vaccination coverage in the wider population nationally (with 3 doses given to infants at 2, 4 and 6 months) was only 90% for those eligible over 12 months in the same period. (See Reference 8)

**Pertussis** (examples are ordered chronologically)

1) In a 1997 pertussis outbreak in the Bonner County of the Panhandle Health District in North Idaho (US), 85% cases had 4 out of 4 doses and 15% had 3 out of 4 doses (100% vaccinated). Among those who had 2 out of 4, 1 out of 4 or even no doses there were no reported cases. The CDC concluded: "*The myth of vaccine refusal played no role in this outbreak*."
(Testimony before Idaho Legislature, by Angie Vasquez, Director, South Idaho Chapter, Vaccination Information and Liberation. Burley, Idaho, Feb. 26, 2003 http://www.vaclib.org/news/boise.htm)

2) De Serres G, Shadmani R et al. *Morbidity of Pertussis in Adolescents and Adults*. J Infect Dis. (2000) 182 (1): 174-179. doi: 10.1086/315648
(http://jid.oxfordjournals.org/content/182/1/174.full. Table 1 shows that 78% + 19% = 97% of the 280 cases of whooping cough in 12 - 17 year olds were believed to be in the vaccinated)

3) Chuk et al, *Pertussis in infants: how to protect the vulnerable?* CDI 2008;32;4:449-456.
http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdi3204h.htm

This study, published by Commonwealth Government of Australia, was conducted in relation to 55 infants hospitalised with pertussis between 1997 and 2006 in the Royal Children's Hospital, Brisbane.
In summary, the results were as follows:

Of the 30 hospitalised infants who had been old enough to be eligible for vaccination

- 93% (28/30) infants had been vaccinated. Only 2 were unvaccinated, and one of those, a 3 month old, was only a little older than when the first dose is scheduled in Australia (between 2 and 2½ months). In some countries (e.g. Japan, Italy and all in Scandinavia) the first dose is not scheduled before 3 months of age[16]. The other unvaccinated infant was 5 months of age. The disease in neither unvaccinated infant was serious enough to require admission to intensive care (unlike 5 infants who had been vaccinated), and

- 83% (25/30) had been vaccinated "on time", meaning within 2 weeks after reaching the scheduled age. In the population at large, on average only 69% infants are given the 3rd vaccine dose "on time".[16]

- The single death among the "vaccine eligible" was in an infant aged less than 2 months who had, in fact, **been vaccinated** at just 6 weeks of age, a week before presenting with clinical pertussis.

  The infection source, which was not identified, may have been the vaccine that the infant had just been given. This would appear to be a reasonable possibility because:

  - pertussis is a toxin-mediated disease

    (Pittman M. *The concept of pertussis as a toxin-mediated disease*. Pediatr Infect Dis. 1984 Sep-Oct;3(5):467-86. http://www.ncbi.nlm.nih.gov/pubmed/6093069)

  and

  - the pertussis "toxoid" in the vaccine (both the old and new vaccines) can remain pathogenic.

    (J. H. Menkes, M. Kinsbourne. *Workshop on Neurologic Complications of Pertussis and Pertussis Vaccination.* Neuropediatrics 1990; 21(4): 171-176. https://www.thieme-connect.com/DOI/DOI?10.1055/s-2008-1071488)

  The infant's susceptibility may have been further increased by the mother having been vaccinated herself in the past, as it may weaken an infant's transplacental immunity

  (Mullholland K, *Measles and pertussis in developing countries with good vaccine coverage*. Lancet 1995.; 345: 303-307)

- Of the 15 hospitalised infants aged 2 months, 9 (60%) had received the 1st (2 month) dose and in 7 of those 9 cases no contact was identified, so some or all of those also may have contracted pertussis from the vaccine.
- Of the 20 infants older than 3 months, the only one who required admission to intensive care was a 9 month old who had been fully vaccinated, and on time. He also required ventilation. The generally accepted upper age limit today for the potential danger period from pertussis may therefore be higher than 6 months for the vaccinated.
- Only one of the 6 infants who were at least 7 months of age had not had the 3rd dose (he was just 7 months, and had received the other 2 doses). The other 5 (83%) had received the 3rd dose on time.
- In the cases of those 5 who were more than 2 weeks "overdue", the average period of time that they were "overdue" was less than 1½ months.

4) In an outbreak in the Triad (North Carolina) in 2012, it was reported in February (2012) that **100%** of confirmed cases to date had received the pertussis vaccine.
(*Whooping Cough Is In The Triad*, WFMY News 2 (Mark Geary), Feb 24, 2012
http://www.digtriad.com/news/article/216176/57/What-You-Need-To-Know-About-Whooping-Cough)

5) *15 Falmouth High Students Diagnosed With Whooping Cough.* November 14, 2014 8:29 PM
http://boston.cbslocal.com/2014/11/14/whooping-cough-outbreak-on-cape-cod/
"A school official tells WBZ that all the students had been immunized."

6) In January 2015 it was published that in Parana, Brazil, in 2007-2013, of the cases where vaccination status was available, 98% of the 1-9 year olds, and 96% of the 1-19 year olds were vaccinated, and 91% and 90% respectively had had 3 or more doses.
(Torress et al. *Resurgence of pertussis at the age of vaccination: clinical, epidemiological, and molecular aspects.* Jornal de Pediatria. Received 2 June 2014, Accepted 8 September 2014, Available online 23 January 2015. doi:10.1016/j.jped.2014.09.004
http://www.sciencedirect.com/science/article/pii/S0021755715000066)

7) *19 kids in Summit Co. (Utah) diagnosed with whooping cough despite being up to date on vaccinations.* March 27, 2015, by Kiersten Nuñez
http://fox13now.com/2015/03/27/19-kids-in-summit-co-diagnosed-with-whooping-cough-despite-being-up-to-date-on-vaccinations/ "all of the children infected are up to date on their vaccinations."

8) *70 diagnosed with Whooping Cough in Reno County* (Kansas) Eyewitness News, Jul 30, 2015
http://www.kwch.com/news/local-news/70-diagnosed-with-whooping-cough-in-reno-county/34378784
"Hutchinson Schools' spokesman, Ray Hemman… says the cases the district has heard about were people who've been vaccinated"

Many more examples, in relation to both chickenpox, pertussis and **other** targeted diseases, can be found, *inter alia*, in References **4** and **32** and by emailing vaccinfo@mycg.org.

It is not being asserted by the citing of these examples that in all outbreaks the vaccination rate amongst **reported** cases is as high as (or higher than) the vaccination rate in the population. However, it is important to note that:

- with respect to cases that are reported as unvaccinated, the reason for their not having been vaccinated is not included. Those who suffer from **pre-existing health conditions** are less likely to be vaccinated (whether or not officially medically contraindicated), and ill health itself is known to increase susceptibility to infectious diseases, and
- doctors diagnose diseases based primarily upon a historically determined checklist of disease symptoms. Any alteration by vaccination of how the body subsequently expresses a disease will hence reduce the likelihood of diagnosis (e.g. **atypical measles** – see adverse effects in Reference 36), and
- doctors are taught that vaccines are effective, and hence have been found to be consequently affected by **bias.** This also leads to misdiagnosis and underreporting of disease cases in the vaccinated.

(Harnden A. *Whooping cough in school age children with persistent cough: prospective cohort study in primary care. BMJ* 22 July *2006; 333:174* http://www.bmj.com/content/333/7560/174)

**17** Sources of infection found to be vaccinated. Infection and transmission can occur as a direct result of vaccination

In the case of the recent (March 2015) well publicised tragic death of 4 week old Riley Hughes in Western Australia from whooping cough, his mother "Catherine told Mamamia that her whole family is immunised and that they had also asked their friends and families to have boosters. The Department of Health says it does not know how the child contracted the respiratory disease, also known as pertussis." (http://www.dailymail.co.uk/news/article-3007109/Grieving-parents-baby-died-whooping-cough-forced-defend-anti-vaxxers.html)

The advice from Catherine's doctor had been that her vaccination "just three years earlier" would protect her during her pregnancy but she herself now believes that advice to be incorrect (http://www.mamamia.com.au/parenting/whooping-cough-vaccine-in-pregnancy/#myUsAEch0fHxBZ7Z.99), which appears to indicate that she herself contracted whooping cough during her pregnancy. "Research has found that… the single most common source of infection seems to be their mother if she has whooping cough herself." (http://www.health.nsw.gov.au/news/Pages/20120622_00.aspx).

This indicates that, ironically, Riley appears to have contracted whooping cough from his fully vaccinated mother or, given that she had ensured that the only people with whom he came into contact were vaccinated, by way of carriage from an asymptomatic, recently vaccinated, family member or friend. (See References 12 and 13)

**18** *Why isn't the chickenpox vaccination part of the routine childhood immunisation schedule?*
Chickenpox vaccine FAQs. National Health Service (NHS) (UK)

http://www.nhs.uk/Conditions/vaccinations/Pages/chickenpox-vaccine-questions-answers.aspx#routineschedule

**19** Most of the targeted diseases – very difficult or impossible to develop from day-to-day contact. Other factors important.

NSW Health Fact Sheets: www.health.nsw.gov.au/Infectious/factsheets/Pages/default.aspx

NSW Health Control Guidelines:

http://www.health.nsw.gov.au/Infectious/controlguideline/Pages/default.aspx

**Diphtheria**: not very contagious - "The probability of spread depends on the closeness and duration of contact.
Prolonged contact (eg sleeping in the same room as a case rather than casual contact) is usually required."
(http://www.health.nsw.gov.au/Infectious/controlguideline/Pages/diphtheria.aspx)

**Tetanus**: "Tetanus is not passed on from one person to another."
(http://www.health.nsw.gov.au/Infectious/factsheets/Pages/Tetanus.aspx)

**Haemophilus Influenzae B (Hib)**: *"Haemophilus influenzae* is a Gram-negative coccobacillus that is a normal part of upper respiratory tract flora… Before Hib immunisation, invasive disease caused by Hib **rarely** occurred **after** the age of 5 years. This was because the prevalence of antibody to Hib progressively increased from the age of 2 years, thought to be related to exposure to Hib (or cross-reacting organisms) colonising the nasopharynx or other sites."

(In other words, by 5 years of age natural immunity will develop in an unvaccinated child, normally asymptomatically.)
(*The Australian Immunisation Handbook* 10th edition (2013), *4.3.1 Bacteriology*
http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-3,)

and "Hib bacteria can live harmlessly in the throat of healthy people."

(http://www.health.nsw.gov.au/Infectious/factsheets/Pages/Haemophilus_Influenzae_B.aspx)

Yet Hib disease itself is very uncommon. Hence it can be seen that transmission of this **already** ubiquitous bacteria is not one of the significant factors leading to the development of disease associated with Hib.

**Meningococcal C**: Like Hib, "Asymptomatic respiratory tract carriage of meningococci occurs in 5%–10% of the population." (http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi3901g5.htm#other)

Yet meningococcal disease is rare. Hence it can be seen that transmission of this bacteria is not one of the significant factors leading to the development of meningococcal disease itself.

Further, "meningococcal bacteria are not easily spread from person to person and the bacteria do not survive well outside the human body. The bacteria are passed between people in the secretions from the back of the nose and throat. This generally requires close and prolonged contact with a person carrying the bacteria." http://www.health.nsw.gov.au/Infectious/factsheets/Pages/Meningococcal_disease.aspx

**Pneumococcal**: Like Hib, "The bacteria often live harmlessly in the throat of healthy people." (http://www.health.nsw.gov.au/Infectious/factsheets/Pages/Pneumococcal-Disease.aspx)

"In a large majority of hosts, pneumococci are carried with no apparent symptoms." (http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-13).

Yet pneumococcal disease is uncommon. Hence it can be seen that transmission of this bacteria is not one of the significant factors leading to the development of pneumococcal disease itself.

**Hepatitis B**: "is usually transmitted by contact with bodily fluids (such as blood, semen, vaginal secretions or saliva) of an infected (HBsAg positive) person… The virus **must** be introduced through broken skin or the placenta or come in contact with mucous membranes for infection to occur… Faecal-oral and vector-borne modes of transmission have **not** been demonstrated. Hepatitis B is **not** transmitted by kissing on the cheek, coughing or sneezing, sharing food or sharing eating utensils." (http://www.health.nsw.gov.au/Infectious/controlguideline/Documents/hepatitisB.PDF)

**Polio**: Not only has Australia been (officially) certified polio-free ever since 2000 (See Reference 4) but the Government reports that "The last reported case of locally acquired wild-type polio in Australia was in 1972."

*(Poliomyelitis vaccines for Australian children*, NCIRS Fact sheet: December 2009 http://www.ncirs.edu.au/immunisation/fact-sheets/polio-fact-sheet.pdf)

However, that case was "not confirmed virologically… Virological investigations of stored viruses from Victoria indicate that the last wild poliovirus was isolated from a patient with clinical poliomyelitis in 1967…. it is possible that wild poliovirus may have disappeared from Australia in the 1960s and that cases notified later were all VAPP or imported cases, as were all the cases notified after 1972." (http://www.health.gov.au/internet/main/publishing.nsf/content/cda-pubs-cdi-2002-cdi2602-cdi2602l.htm)

Hence, the Government reports: "**Local transmission** of wild polio virus in Australia probably ceased in **1962**." *Vaccine–associated paralytic poliomyelitis, Margaret A Burgess, Peter B McIntyre, NCIRS,* Vol 23, No 10, 30 Sep 1999 http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-pubs-cdi-1999-cdi2303-cdi2303g.htm

Since 1972, more than 20 million, and since 1962, about 25 million, unvaccinated child years have transpired.

Based upon this, it is reasonable to conclude that the **only** possible sources for transmission are:

- vaccination itself. The Government has not admitted, though, the possibility of that occurring from the currently used vaccine, IPV (in spite of it acknowledging that vaccine associated paralytic polio (VAPP) occurred when the IPV vaccine was formerly the vaccine recommended and funded, which was between 1956 and 1966), or
- importation from overseas. In spite of the many millions of people who have entered Australia from overseas in the past half century, there have been **only 2** cases reported of imported wild polio virus **since the 1950s or 1960s** – they were in 1977 (assumed acquired in Turkey) and 2007 (acquired in Pakistan). No secondary clinical cases, i.e. no transmission resulted. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2857217/)

The WHO states, e.g. in its most recent update (2014), that with the number of cases having globally declined by an estimated 99.9% from 1988 (27 years ago) when it was endemic in more than 125 countries, polio remains endemic in only 3 countries. Hence the risk of importation could be estimated to be about 1000 times less still than in 1988. Further, of the 3 strains of wild poliovirus (type 1, type 2, and type 3) included in the vaccine, wild poliovirus type 2 was considered globally eradicated in 1999. (Poliomyelitis Fact sheet N°114 Updated October 2014. World Health Organisation http://www.who.int/mediacentre/factsheets/fs114/en/)

If a third case **were** to occur of importation of wild polio virus, the Government itself states: "Transmission occurs primarily from person to person via the faecal-oral route" and that the "likelihood of local transmission following importation will be dependent upon… the living conditions, primarily relating to the likelihood of faecal contamination of the water supply." It cites only "rural and remote areas of Australia" as areas where "such contamination remains a possibility". (See References 4 and 32). It states that elsewhere, i.e. in urban areas, "adequate treatment of sewerage and provision of safe drinking water and foods" is an important factor for preventing the disease from spreading. (http://www.health.nsw.gov.au/Infectious/factsheets/Pages/Poliomyelitis.aspx)

Even if polio virus transmission were to occur, the Government admits that "*There may be… up to **1,000** cases of asymptomatic infection for each paralytic case in children*":

(*Immunisation Myths and Realities, 5th edition* (2013). Aust. Govt Dept of Health http://www.health.gov.au/internet/immunise/publishing.nsf/content/uci-myths-guideprov)

**20** Diphtheria, polio and tetanus - notifications in children zero, zero and two respectively
*National Notifiable Diseases Surveillance System* summary tables, NNDSS Annual Report Writing Group, CDI, Aust. Govt Dept of Health (http://www9.health.gov.au/cda/source/cda-index.cfm)

**21** *Australian vaccine preventable disease epidemiological review series: rubella 2008–2012,* CDI Vol 39 No 1 - March 2015*,* Aust. Govt. Dept Health http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi3901c.htm

**22** *Rubella in Australia: can we explain two recent cases of congenital rubella syndrome?* Gidding HF, Young M, Pugh R, Burgess M, CDI Vol 27 No 4 - 2003*,* Aust. Govt. Dept Health *http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-2003-cdi2704-pdf-cnt.htm/$FILE/cdi2704v.pdf*

**23** Death rates from diphtheria, tetanus, whooping cough, measles and tuberculosis, 1907 – 2004

*Australia's Health 2006*, The tenth biennial report of the Australian Institute of Health and Welfare, pg 115 (http://www.aihw.gov.au/publication-detail/?id=6442467855);

Commonwealth Year Books, ABS (www.abs.gov.au)

The Commonwealth Year Books from the early 1900s also show that those diseases that are being targeted by vaccines are only some of the infectious diseases that used to plague mankind, and they were not even the most important. The death rate from tuberculosis was about 5 to 50 times higher. Deaths from typhoid were also more common and scarlet fever and dysentery also caused many deaths. These and other infectious diseases dramatically declined well prior to any significant medical interventions such as antibiotics, and have disappeared from developed countries without widespread vaccination or any vaccine being used;

*Child Health Since Federation*, by Prof. Fiona J Stanley, Australian Bureau of Statistics Year Book 2001 http://www.abs.gov.au/ausstats/abs@.nsf/0/3CE0381F7CBAB608CA2569DE0024ED6D

**24** Dates widespread vaccination introduced
*The Australian Immunisation Handbook* 10th edition (2013), Aust. Govt Dept of Health, *Appendix 7*: *Overview of vaccine availability in Australia*
http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10-tools~handbook10-appendices~handbook10-appendix7

**25** Whooping cough (WC) and measles not notifiable from 1950

Commonwealth Year Book, Jan 1953, Chapter 8, pg 289.
http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/6D34CFB7F684C572CA257AF30015A5C3/$File/13010_1953%20section%208.pdf

**26** "As causes of infant mortality in Australia all the infective diseases have been overcome"
Lancaster, H.O. 1956a, "Infant Mortality in Australia". The Medical Journal of Australia, 2:104.

**27** "*Long term mortality trends*", Australian Bureau of Statistics Year Book 2001
http://www.abs.gov.au/ausstats/ABS@.nsf/Previousproducts/1301.0Feature%20Article192001

**28** Factors credited by Government for overcoming infectious diseases
"Improvements over time in the general health of the population and in medical care are also important factors."
*Immunisation Myths and Realities 5th edition* (2013) (page 43)
(http://www.health.gov.au/internet/immunise/publishing.nsf/content/uci-myths-guideprov) (page

*Coercive and Mandatory Immunisation*, by Judy Wilyman. Australasian College of Nutritional & Environmental Medicine 10/2008; Vol 27(No 2):p 6-9, quoting

- Gillespie J.A., 1991, "The Price of Health: Australian Governments and Medical Politics 1910 – 1960", Cambridge University Press, Cambridge, UK.
  (re impact of **sanitary reform,** greater emphasis placed on **social** medicine and public health officials becoming aware that **malnutrition** increased the susceptibility of children to disease by weakening the immune system)

- O'Connor K., 1989, "A History of 75 years of baby health services in NSW". NSW Department of Health
  (re impact of the medical profession's increased support for **breastfeeding** in 1929 and new relief policies regarding the **minimum nutritional requirements** in food provisions for the unemployed)

- Lancaster, H.O., 1956, "The Mortality of childhood in Australia: Part 1 Early Childhood", Medical Journal of Australia, 2: p. 889-894.
  (re decline of pertussis before routine immunisation programs were implemented, and its high sensitivity to **social conditions and hygiene**)

- Lancaster, H.O. 1956a, "Infant Mortality in Australia", The Medical Journal of Australia, 2: p.100-108;

- Burnet, M., 1952 and Lewis MJ. (ed.), 1989.
http://www.researchgate.net/publication/228389163_Coercive_and_Mandatory_Immunisation

**29** Factors credited by Government for continued protection against infectious diseases
*Australia's Food & Nutrition 2012*. Australian Government AIHW 2012.
"Good nutrition contributes to quality of life, helps maintain healthy body weight, protects against infections, and reduces the risk of chronic disease and premature death" etc (pages 9 and 103 and 184 - nutrition, 141 – breastmilk)
http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737422837

**30** *Joint WHO/UNICEF statement on vitamin A for measles*. Expanded Programme on Immunization. Wkly Epidemiol Rec 1987;62:133-134. Measles fact Sheet for tsunami affected populations (WHO)
(http://www.searo.who.int/entity/emergencies/documents/general_information_measles100105.pdf
http://www.searo.who.int/LinkFiles/General_Information_Measles100105.pdf);

Sudfeld CR, Navar AM, Halsey NA; Effectiveness of measles vaccination and vitamin A treatment. Int J Epidemiol. 2010 Apr;39 Suppl 1:i48-55. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845860/)

**31** Scientific research now informs how to prevent and manage infectious diseases

Stephens D, Jackson PL, Gutierrez Y. *Subclinical vitamin A deficiency: a potentially unrecognized problem in the United States*. Pediatr Nurs. 1996 Sep-Oct;22(5):377-89, 456. http://www.ncbi.nlm.nih.gov/pubmed/9087069;

Beck M. *The role of nutrition in viral diseases*, Nutritional Biochemistry 7:683-690, 1996;

McCormick WJ, *Vitamin C in the Prophylaxis and therapy of Infectious Diseases*, *Archives of Pediatrics*, Vol 68:1, Jan 1951, pp. 1-9, 1951, http://www.seanet.com/~alexs/ascorbate/195x/mccormick-wj-arch_pediatrics-1951-v68-n1-p1.htm;

Levy T, "*Vitamin C, Infectious Diseases, and Toxins: Curing the Incurable*", 2002 p30;

Note also that Dr Frederick Klenner published and presented a paper to the American Medical Association in 1949 detailing the complete cure of 60 out of 60 of his patients with polio using high doses of intravenous sodium ascorbate (Vitamin C)

(Klenner, FR. *The Treatment of Poliomyelitis and Other Virus Diseases with Vitamin C.* Southern Medicine & Surgery; Volume 111; No. 7, July 1949:209-214. http://www.seanet.com/~alexs/ascorbate/194x/klenner-fr-southern_med_surg-1949-v111-n7-p209.htm)

**32** Disease incidence, 1993 to 2007

*Vaccine Preventable Diseases and Vaccination Coverage* reports, 1993 through 2007 - Supplements, CDI, Aust. Govt Dept of Health. http://www.health.gov.au/internet/main/publishing.nsf/content/cdisupplements-1-lp

**33** Properly managed natural exposure to some targeted diseases prevents some cancers and other chronic conditions

- Rønne T. *Measles virus infection without rash in childhood is related to disease in adult life*. The Lancet 1985, Vol 325, Issue 8419:1-5

  http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2885%2990961-4/abstract

  "*Rønne could associate a missing history of measles in childhood with increased cancer risk for a variety of tumors in a historical prospective study. Out of 353 individuals with a negative history of measles 21 developed cancer versus only 1 case out of 230 controls with a positive history of measles ($p < 0.001$)*."

  (Kleef R, Dieter Hager E. *Fever, Pyrogens and Cancer. In: Madame Curie Bioscience Database [Internet]*. Austin (TX): Landes Bioscience; 2000 (http://www.ncbi.nlm.nih.gov/books/NBK6084/)

- Kondo N et al. *Improvement of food-sensitive atopic dermatitis accompanied by reduced lymphocyte responses to food antigen following natural measles virus infection*. Clin Exp Allergy 1993; 23: 44-50.

- Shaheen SO et al. *Measles and atopy in Guinea-Bissau*. Lancet 1996; 347: 1792-96.

- Albonico HU, Braker HU, Husler J. *Febrile Infectious Childhood Diseases In The History Of Cancer Patients And Matched Controls,* Dept of Mathematical Statistics, University of Berne, Switzerland. Medical Hypotheses 1998 Oct; 51(4):315-20.

- Wrensch M et al. *Prevalence of antibodies to four herpesviruses among adults with glioma and controls*. Am J Epidemiol. 2001;154:161–165. (http://aje.oxfordjournals.org/content/154/2/161.full.pdf)
  "*Glioblastoma cases were (*60%) *less likely than controls to have immunoglobulin G antibodies to varicella-zoster virus*"

- Cramer et al. *Mumps and ovarian cancer: modern interpretation of an historic association* Cancer Causes Control. 2010 Aug; 21(8): 1193–1201 10.1007/s10552-010-9546-1 (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2951028/pdf/nihms235805.pdf)
  *"…suggesting a 19% decrease in risk of ovarian cancer associated with history of mumps parotitis."*

- M L Newhouse, *A case control study of carcinoma of the ovary*. Br J Prev Soc Med. 1977 Sep; 31(3): 148–153. PMCID: PMC479015. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC479015/
  Infective disease histories were found to reduce the risk of ovarian cancer by 39% for measles, 53% for mumps, 38% for rubella, and 34% for chicken-pox (Table 10).

- Kubota et al. *Association of measles and mumps with cardiovascular disease: The Japan Collaborative Cohort (JACC) study*. Atherosclerosis. 2015 Jun 18;241(2):682-686

  http://www.atherosclerosis-journal.com/article/S0021-9150%2815%2901380-5/abstract

  Highlighting the most significant results, men who had had mumps had a **48%** reduced risk of **total stroke** and **79%** reduced risk of **hemorrhagic stroke**. Men who had had both measles and mumps had a **20%** reduced risk of **cardiovascular disease, and 29%** reduced risk of **myocardial infarction**.

- Maletzki et al. Cancer Immunology, Immunotherapy. August 2013, Vol 62, Issue 8, *Table 1 Anti-correlation between acute, cured infections, and the likelihood to develop cancer*, on pages 1284-1285.

**34** Properly managed natural exposure to measles resolves some cancers

- Pasquinucci G. *Possible effect of measles on leukaemia*. Lancet. 1971 Jan 16;1(7690):136.
- Bluming A, Ziegler J. *Regression of Burkitt's lymphoma in association with measles infection*. Lancet. 1971 Jul 10; 298(7715):105–106
- Ziegler JL. *Spontaneous remission in Burkitt's lymphoma*. Natl Cancer Inst Monogr. 1976 Nov;44:61-5.
- H C Mota. *Infantile Hodgkin's disease: remission after measles*. Br Med J. 1973 May 19; 2(5863): 421.
- Taqi et al. *Regression of Hodgkin's Disease After Measles* (Letters to the Editor) Lancet,16 May 1981; 317(8229): 1112.
- Stephen J. Russell, M.D., Ph.D. and Kah Whye Peng, Ph.D. *Measles virus for cancer therapy*. Curr Top Microbiol Immunol. 2009; 330: 213–241.

**35** Second dose of measles vaccine was brought forward to 18 months of age from 1 July 2013

*Measles, Mumps, Rubella, Varicella Vaccine Information for Parents,* Immunise Australia Program, Aust. Govt. Dept. Health. http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/IT0169-cnt#2 (Page last updated: 20 April 2015)

**36** Government claims that 95% of recipients develop immunity to measles after 1 dose

*The Australian Immunisation Handbook* 10th edition (2013), in *Section 4.9.4 (Measles):* http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-9#4-9-4

(page last updated 16 July 2015)

Note that it is also easy to do a blood test for the presence of antibodies to measles, mumps or rubella.

**37** Vaccination coverage rates

*Immunisation coverage, 2012*, Communicable Diseases Intelligence Sep 2014;38(3) http://www6.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi3803e.htm (See Figures 2, 3 and 4 for whooping cough in particular). It can be seen that references made by the Government and the media to "concern" about an increased number of **registered** "conscientious objectors" is misleading. In response to numerous Government measures implemented over the past 20 years, vaccination coverage itself has only increased, not decreased, and is now at a record high.

**38** Academics: Such legislation is limited in its ability to increase vaccination rates, and may decrease them

*Abbott government vaccination plan won't work: expert*. SMH. April 14, 2015 http://www.smh.com.au/federal-politics/political-news/abbott-government-vaccination-plan-wont-work-expert-20150413-1mjyhw.html

*With vaccination rates stable, 'no jab, no play' rules are beside the point*. 22 May 2013 Julie Leask and Hal Willaby. http://theconversation.com/with-vaccination-rates-stable-no-jab-no-play-rules-are-beside-the-point-14522

*Opinion: Taking the big stick to vaccine conscientious objectors might backfire*. 13 Apr 2015. Raina Macintyre https://newsroom.unsw.edu.au/news/health/taking-big-stick-vaccine-conscientious-objectors-might-backfire

**39** Neurological disorders

**Meningitis or encephalitis symptoms**

Adverse effects reported include many symptoms that are possible symptoms of some degree of meningitis or encephalitis, and are reported quite commonly within 48 hours after the vaccination. Those symptoms include various symptoms that:

- are directly identifiable as neurological in nature:
  convulsions, abnormal crying, irritability, somnolence, headache, neck stiffness, and
- are of a more general nature:
  fever (>38°C), fatigue, reduced appetite, malaise, abdominal pain, diarrhoea, vomiting, arthralgia, myalgia & rash).

(James F. Bale Jr, MD, Current Management in Child Neurology, Third Edition, © 2005 Bernard L. Maria, Chapter 79, Meningitis and Encephalitis http://web.squ.edu.om/med-Lib/MED_CD/E_CDs/CHILD%20NEUROLOGY/docs/ch79.pdf;

H Schmidt et al. Sleep disorders are long-term sequelae of both bacterial and viral meningitis. Neurosurg Psychiatry. 2006 April;77(4): 554–558. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2077506/;

J. H. Menkes, M. Kinsbourne. Workshop on Neurologic Complications of Pertussis and Pertussis Vaccination. Neuropediatrics 1990; 21(4): 171-176. https://www.thieme-connect.com/DOI/DOI?10.1055/s-2008-1071488)

A young child with encephalitis or meningitis may have only 2 or 3 of the above symptoms.

- small children with meningitis "*may only be irritable and look unwell*"

(Sáez-Llorens X, McCracken GH *Bacterial meningitis in children.* Lancet, June 2003. 361 (9375): 2139–48. http://www.thelancet.com/journals/lancet/article/PIIS0140673603136938/abstract)

- young children or infants with encephalitis may present only "*irritability, poor appetite and fever*"

(*Symptoms of Encephalitis. NHS.* Retrieved 5 Jan 2015. http://www.nhs.uk/Conditions/Encephalitis/Pages/Symptoms.aspx)

These symptoms themselves will usually be temporary, but that does not mean that there has been no lasting effect.

In the case of several of these symptoms, when they are seen in circumstances other than vaccination, they meet with a concerned response by doctors. However, when seen after vaccination they are considered "normal" or "expected" and dismissed with no investigation or explained reason. Doctors' usual only response is to advise the parent to give the child an antipyretic.

Gerhard Buchwald, MD stated (in 2002):

*"For every vaccination, minimal encephalopathy (does not lead to clinically overt cognitive dysfunction, but can be demonstrated with neuropsychological studies) destroys brain cells. As a result, in Germany, there are 1.2 million children who have contracted hyperkinetic syndrome who are then treated with Psychopharmeca (a drug similar to Ritalin) used to calm them down... We have hundreds of thousands of so-called minimal cerebral dysfunction cases and millions of neurodermatitis patients"*

(Testimony of Dr Gerhard Buchwald MD before the Quebec College of Physicians Medical Board. Extracted to here: http://www.doctorbob.com/vd--dr-buchwald-testimony.html from *The Trial of the Medical Mafia,* by Jochim Schafer, ISBN 2921783029, with permission of *Here's The Key Inc.,*CP309, Waterloo, Qc JOE 2NO, Canada.)

In addition to these symptoms frequently reported after vaccination, encephalitis, meningitis and encephalopathy are explicitly included on several vaccine manufacturer product inserts in their lists of adverse effects reported (e.g. Engerix B hepatitis B vaccine, pertussis vaccines, Priorix MMR vaccine and Priorix Tetra MMRV vaccine – Reference 36 provides the location of these product inserts).

Some medical researchers have named a syndrome “Autoimmune Syndrome Induced by Adjuvants ( in vaccines)” (http://www.biomedcentral.com/1741-7015/11/118/), after they concluded that,

"*in some cases, vaccination may be the triggering factor for autoimmune and neurological disturbances in genetically predisposed individuals, and physicians should be aware of this possible association.*"

(de Carvalho J.F., Shoenfeld Y. Status epilepticus and lymphocytic pneumonitis following hepatitis B vaccination. *European Journal of Internal Medicine* 2008;19(5):383-385. http://www.sciencedirect.com/science/article/pii/S0953620507002944)

A finding published in April 2013 concluded that the aluminum adjuvant in vaccines can penetrate the brain:

*“Nanomaterials (in vaccines) can be transported by monocyte-lineage cells to DLNs, blood and spleen, and, similarly to HIV, may use CCL2-dependent mechanisms to* ***penetrate the brain****. This occurs at a very low rate in normal conditions explaining good overall tolerance of alum despite its strong neurotoxic potential. However, continuously escalating doses of this poorly biodegradable adjuvant in the population may become* ***insidiously unsafe****, especially in the case of overimmunization or immature/altered blood brain barrier or high constitutive CCL-2 production.”*

(Khan Z, Combadière C et al. Slow CCL2-dependent translocation of biopersistent particles from muscle to brain, *Biomed Central Medicine.* 2013, 11:99 http://www.biomedcentral.com/1741-7015/11/99)

Medical research publishes known and possible mechanisms by which vaccine-induced neurological damage occurs. For example, Menkes and Kinsbourne (1990) suggested this mechanism for how the whooping cough vaccine is able to cause brain damage, suggesting that the **pertussis toxin** itself has a central role:

*“In implicating pertussis vaccination in the evolution of subsequent neurologic residua, a careful consideration of the mechanism for* ***vaccine-induced brain damage*** *plays an important supporting role. Pertussis toxin has been shown to alter cellular signalling. It also affects the catecholaminergic and GABAergic systems in brain. Although normally a protein of the size of pertussis toxin would not be able to cross the blood-brain barrier, factors known to disrupt the blood-brain barrier include brief hypertensive episodes such as might occur during a coughing paroxysm, hypoxia, and prolonged seizures, whether or not they are accompanied by hypoxia. In addition, a direct, endotoxin-mediated attack on the endothelial cells could create a local defect of the blood-brain barrier.”*[39]

(J. H. Menkes, M. Kinsbourne. Workshop on Neurologic Complications of Pertussis and Pertussis Vaccination. Neuropediatrics 1990; 21(4): 171-176. https://www.thieme-connect.com/DOI/DOI?10.1055/s-2008-1071488)

This research in effect states that the attempt to inactivate or suppress the toxicity of pertussis toxin vaccine ingredient has limited success. It remains relevant to the currently used acellular pertussis vaccine.

**40** Autoimmune disease

Autoimmunity is the destruction by the immune system of the host’s own tissue.

Because autoimmune disease progresses gradually, the symptoms are likely to not appear immediately.

However, there is significant evidence of a link between vaccines and autoimmune diseases.

The first disease to be recognized as an autoimmune disease was Hashimoto's thyroiditis or chronic lymphocytic thyroiditis. It was not recognised and described until 1912, which was after vaccination had been implemented on a large scale. We now have an epidemic of autoimmune diseases.

(Nakazawa, Donna (2008). *The Autoimmune Epidemic*. New York: Simon & Schuster. pp. 32–35. ISBN 978-0-7432-7775-4.)

The Government admits vaccines can cause thrombocytopaenic purpura, and also that Guillain-Barré syndrome may occur as an effect of the influenza vaccine, but that vaccine is not (yet) included on the childhood vaccination schedule).

Here are some examples of evidence of the effect of autoimmunity extending to other autoimmune diseases:

**Injection of antigen, repeatedly - autoimmunity evidenced to become inevitable**

An “antigen” is any substance that when introduced into the body stimulates the production of an antibody.

The result of research published in 2012 on mice was that:

> *“Repeated immunization with antigen causes systemic autoimmunity in mice otherwise not prone to spontaneous autoimmune diseases.”*

In all mice tested, their being vaccinated with an antigen at least 8 times was sufficient for autoimmunity to become not just possible, but inevitable. It found:

> *“Systemic autoimmunity appears to be the inevitable consequence of over-stimulating the host's immune 'system' by repeated immunization with antigen, to the levels that surpass system's self-organized criticality.”*
>
> (Tsumiyama K, Miyazaki Y, Shiozawa S. *Self-Organized Criticality Theory of Autoimmunity*. PLoS ONE, 2009; 4(12): e8382. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0008382)

**A.S.I.A. Syndrome (Autoimmune Syndrome Induced by vaccine Adjuvants)**

Some medical researchers have named a syndrome “Autoimmune Syndrome Induced by (vaccine) Adjuvants” (http://www.biomedcentral.com/1741-7015/11/118/), having concluded that "*in some cases, vaccination may be the triggering factor for autoimmune and neurological disturbances in genetically predisposed individuals, and physicians should be aware of this possible association*."

> (de Carvalho J.F., Shoenfeld Y. *Status epilepticus and lymphocytic pneumonitis following hepatitis B vaccination*. *European Journal of Internal Medicine*, 2008. 19 (5) , pp. 383-385. http://www.sciencedirect.com/science/article/pii/S0953620507002944)

**Insulin-dependent Diabetes (Type 1)**

The autoimmune disease diabetes mellitus type 1 has been linked to various vaccines, including, *inter alia,* the hepatitis B and Hib vaccines.

> (Classen JB. *The diabetes epidemic and the hepatitis B vaccines*. N Z Med J. 1996 Sep 27;109(1030):366. http://www.ncbi.nlm.nih.gov/pubmed/8890866
>
> Classen JB, Classen DC. *Association between type 1 diabetes and hib vaccine.* Causal relation is likely. BMJ. 1999 Oct 23;319(7217):1133. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1116914/);
>
> Classen JB, Classen DC. *Clustering of cases of insulin dependent diabetes (IDDM) occurring three years after hemophilus influenza B (HiB) immunization support causal relationship between immunization and IDDM*. Autoimmunity. 2002 Jul;35(4):247-53. (http://www.ncbi.nlm.nih.gov/pubmed/12482192)

“Diabetes mellitus” is also listed on the US product insert for the M-M-R II vaccine (for measles, mumps and rubella)

**Multiple Sclerosis**

Multiple sclerosis (MS) has also been associated with various vaccines and is listed on the Hepatitis B vaccine product inserts.

MS-like symptoms have been reported multiple times after HPV vaccinations. A 2009 study found that five cases of MS patients who had such symptoms within 21 days of receiving the Gardasil (HPV) vaccine “may be explained by the potent immuno-stimulatory properties of HPV virus-like particles which comprise the vaccine.”[40]

> (http://www.realfoodhouston.com/2012/07/30/gardasil-and-cervarix-whats-the-controversy-about-the-hpv-vaccine/
>
> Sutton I, Lahoria R, Tan I, Clouston P, Barnett M. CNS demyelination and quadrivalent HPV vaccination. Mult Scler. 2009 Jan;15(1):116-9. http://www.ncbi.nlm.nih.gov/pubmed/18805844)

Multiple sclerosis is also listed on the product insert for both Hepatitis B vaccines (Engerix B and H-B-Vax-II)

**Injection of genetically-engineered yeast linked to autoimmune diseases**

Research highlighting the danger or uncovering of adverse effects of bypassing the digestive process have accumulated over decades. Research published in 2013 highlighted that one such example, **yeast**, (*Saccharomyces cerevisiae)* which, in genetically-engineered form, is in the Hepatitis B-containing vaccines, may be a significant factor in causing the enormous rise in the rate of incidence of autoimmune diseases, such as rheumatoid arthritis, Crohn's disease, inflammatory bowel disease, systemic lupus erythematosus, anti-phospholipid syndrome, multiple sclerosis, diabetes mellitus type 1 and heart disease.

(Rinaldi R, Perricone R, Blank M et al. Anti-Saccharomyces cerevisiae Autoantibodies in Autoimmune Diseases: from Bread Baking to Autoimmunity; *Clinical Reviews in Allergies and Immunology*. October 2013, Volume 45, Issue 2, pp 152-161. http://link.springer.com/article/10.1007%2Fs12016-012-8344-9)

Of additional significance is that the study found that "ASCAs (anti-*S. cerevisiae* autoantibodies) may be present years before the diagnosis of some associated autoimmune diseases", which is obstructive to the recognition or acceptance of any causal link that may exist. A recent review of this subject cited a temporal relationship of 2 to 3 months between vaccines and autoimmune reactions.

(Shoenfeld Y & Aron-Maor A, Vaccination and autoimmunity-'vaccinosis': a dangerous liaison? J Autoimmunity, Feb 2000;14(1):1-10 http://www.sciencedirect.com/science/article/pii/S0896841199903463)

**Injection of mycoplasma, other bacteria and pathogens, linked to autoimmune disease**

The injection process allows dangerous mycoplasma (which are resistant to antibiotics) and other bacteria and pathogens in vaccines to enter the bloodstream, which in normal, natural circumstances is sterile, free from such organisms (even though there is a great proliferation of normally friendly bacteria in other parts of the body, especially the gut).

(Harrison C. Stetler, Paul L. Garbe, Diane M. Dwyer, Richard R. Facklam, Walter A. Orenstein, Gary R. West, K. Joyce Dudley, and Alan B. Bloch. Outbreaks of Group A Streptococcal Abscesses Following Diphtheria-Tetanus Toxoid-Pertussis Vaccination. Pediatrics 1985; 75:299-303. http://pediatrics.aappublications.org/content/75/2/299.short)

One example is the contaminant *Campylobacter J* bacteria in egg. The said report provides the information that this contamination is one of the theories for the acknowledged causal link of the influenza vaccine to Guillain-Barre syndrome, an autoimmune attack of the nerve ganglia rendering the patient partially or fully paralysed, and that this "contamination, coupled with allergy to eggs, has prompted the switch to manufacture flu vaccines in a different manner". Children have a right not to be the subject of what is, in effect, ongoing experimentation with vaccines.

**Injection of aluminium, linked to autoimmune and other disorders**

Aluminium compounds are also included in vaccines deliberately as "adjuvants", meaning to invoke a significant enough immune response in the form of the production of antibodies, which does not occur naturally with injections. Immunologist Tatyana Obukhanych (PhD) explains:

"*It appears that alum's adjuvant effect depends on its ability to kill cells, its 'cytotoxic' property. This cellular damage releases intracellular contents, such as DNA and uric acid into the extracellular space, which is now accessible to the cells of the immune system to act upon. This cellular damage is sensed by the immune system, which then initiates the immune response against a "foreign" protein that showed up in the context of such damage. Without alum and without damage that it creates, the immune system would simply disregard the injected foreign protein as innocuous and not make any antibodies against it. But since the whole point of vaccination is to induce antibody production, then whatever alum is doing to induce antibody production, is considered favorable*."

(http://www.vaccinationcouncil.org/2012/06/13/interview-with-phd-immunologist-dr-tetyana-obukhanych-by-catherine-frompovich/)

So it appears that it may be due only to its cytotoxic effect that aluminium achieves the “purpose” of its inclusion in vaccines – to provoke an antibody response, i.e. sensitise the immune system. It is not inconceivable that it may provoke an antibody response to proteins that the body makes itself, after it causes them, as a result of such cytotoxic damage, to be released into different parts of the body where they do not belong. Aluminium salts are increasingly being identified, along with some other vaccine ingredients, as a contributing cause of autoimmune disease and other disorders in vaccinated populations.

(http://www.greenmedinfo.com/toxic-ingredient/aluminum-hydroxide)

**Genes in those genetically susceptible to autoimmune disease may be switched on by vaccine ingredients**

The role of pre-existing risk factors including genetic predisposition and environmental factors in autoimmunity is largely accepted. “Vaccination could enhance the risk of autoimmunity in genetically susceptible individuals when exposed to certain environmental chemicals”, and many such triggers are themselves found in vaccines - heavy metals, chemicals, viruses and bacteria.

(Ravel G[1], Christ M, Horand F, Descotes J. Autoimmunity, environmental exposure and vaccination: is there a link? Toxicology. 2004 Mar 15;196(3):211-6. http://www.ncbi.nlm.nih.gov/pubmed/15036747)

Also see Reference 41

**41** Disorders that have been linked to vaccines. These are not limited to neurological disorders (Reference 39 herein), autoimmunity (Reference 40 herein), cancer and DNA changes. Nor is the research that has linked to those conditions them limited to the examples cited herein under those headings. For more information and references, email vaccinfo@mycg.org.