

PUBLIC HEALTH POST

Public Health for Primary Care in Wellington, Wairarapa and the Hutt Valley

Also available online at www.rph.org.nz

April 2015

DISNEYLAND MEASLES OUTRAGE: HOW TO FRAME VACCINESDr. Osman David Mansoor, Public Health Physician, Regional Public Health

"In an hour, she was unconscious. In twelve hours she was dead." Roald Dahl's 1986 letter describes how his 7-year-old daughter, Olivia, died from measles encephalitis in 1962. Dahl was promoting measles vaccine, knowing how happy Olivia would be if "her death had helped to save a good deal of illness and death among other children."

Dahl's letter, urging parents to vaccinate their children, became topical again following a US measles outbreak that spread widely, as a result of failure to vaccinate. The first cases, reported in early January 2015, identified a common exposure: Disneyland. By mid-February, CDC reported that 125 confirmed measles cases in the US had been linked to Disneyland. In 2014, an infected traveller caused a larger outbreak (nearly 400 cases) in an unvaccinated Amish community. That outbreak was barely reported. Why has there been such a storm over this outbreak? And what can we learn from it?

<u>reports</u> that there were 283 cases in 2014; a similar number for a population that is nearly 100 times smaller. And it is only recently that immunisation coverage levels in New Zealand have been close to the 95% needed for elimination.

Even though the anti-vaccine movement is as old as vaccines themselves, a key event was the 1998 Lancet paper suggesting a link between MMR vaccine and autism (based on a case study of 12 children). Despite many studies failing to find any evidence for such a link, as well as retraction of the 1998 article, vaccines continued to be viewed with suspicion. A 2014 US survey, found that a third of parents continue to believe "vaccinations can cause autism".

<u>Chris Mooney</u> describes the failure of scientific evidence to change opinions and concludes: "don't lead with the facts in order to convince. You lead with the values – so

U.S. Measles Cases by Year

700
600
400
300
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014* 2015*

*Provisional data reported to CDC's National Centre for Immunisation and Respiratory Diseases

Measles was declared eliminated from the US in 2000. Measles cases continued to occur from importations and limited local spread. <u>Vaccine hesitancy</u> has been increasing in the US since 2000, and with it increasing numbers of unvaccinated children. In contrast to the US, NZ has relatively more measles cases: The <u>Ministry of Health</u>

as to give the facts a fighting chance."

The outrage about the Disneyland outbreak may be the dissonance of the 'happiest place in the world' being the source of infection. The multi-state spread reinforced anxieties about the return of a disease that had been eliminated; perhaps also the frustration about failure of

science to persuade. The predominant public reaction has been anger and to characterize 'anti-vax' parents as stupid. A New Yorker cartoon shows a doctor examining a boy covered in spots, saying: "If you connect the measles, it spells out 'My parents are idiots."

When parents hesitate about vaccines, what should health-care providers say?

Dealing with <u>vaccine-hesitant parents</u> is challenging. A 2013 <u>review</u> of interventions 'for reducing parental vaccine refusal and vaccine hesitancy' concluded that there was no good quality evidence on which interventions work. Adding to this, a <u>2014 study</u> found that none of four different types of messages (1. Scientific evidence debunking the link with autism; 2. Information about vaccine and disease risks; 3. A mother's description of her son's measles; 4. Pictures of children with the disease) helped to change intent to vaccinate, and may be counter-productive in the vaccine-hesitant.

More research is needed to guide communication efforts; but there are some useful pointers. Firstly, as with any communication, there is a need to understand the audience. Leask et al. provide a framework based on a literature review to propose five categories: 'unquestioning acceptor' (30-40%), 'cautious acceptor' (25-35%); 'hesitant' (20-30%); 'late or selective vaccinator' (2-27%); 'refuser' of all vaccines (<2%). Poland and Poland offer a framework based on the different cognitive styles that people use for decision-making (Denialist, Innumerate, Fear-based, Heuristic, Bandwagoning, Analytical), and suggest an approach for each of these styles.

Motivational interviewing aims to help individuals resolve their own ambivalence and thus improve intrinsic motivation. A meta-analysis found it moderately effective for a wide range of behaviour change. For some, this will be needed; but in the case of immunisation, most parents will only need the reassurance that it is the norm. The vaccine conversation can be framed as a scheduling question rather than offering information about vaccines

and disease. "It's time for his/her vaccines." This approach has been shown to be associated with a higher uptake; but would obviously not work for all. However, it may be a good starting point that emphasises the fact that the practitioner supports immunisation, and also reinforces the social norm of vaccination, that vaccines are an act of love, the safest way to protect your child.

Is there sufficient support available for vaccine hesitant patients and parents?

Existing information resources are available to support immunisation decisions and conversations. Chapter 3: Vaccination questions and concerns, Immunisation Handbook 2014 available at: http://www.health.govt.nz/publication/immunisation-handbook-2014 answers specific questions about vaccination, and addresses general concerns about vaccination safety. The Immunisation Advisory Centre (IMAC) website (http://www.immune.org.nz/frequently-asked-questions) is an excellent resource for people wanting further information. Regional Public Health is interested in your views regarding available support for when a patient or parent declines vaccinations. Suggestions can be emailed to osman.mansoor@huttvalleydhb.org.nz or contact Dr. Mansoor by phone on 04 570 9002.

Measles Eradication Possible?

Rinderpest, a viral cow infection, was declared eradicated through veterinary vaccination in 2010. This is the second disease to be eradicated; smallpox was eradicated in 1977. Rinderpest is believed to be the origin of the measles virus.

DISEASE NOTIFICATION – HOW YOUR GENERAL PRACTICE CAN HELP

In 2013 Regional Public Health launched the *Public Health Disease Notification Manual* to assist in the disease notification process.

Updates for this manual are located at http://www.rph.org.nz/content/510fd7e9-eba9-4e7b-93f2-3e2718b13838.html

To enable our staff to promptly initiate disease follow up we need your help in the following ways:

- 1. Inform your patient of the illness they have been diagnosed with or exposed to and that public health staff may be in contact
- Notify Regional Public Health of the disease within a timely fashion (after the case has been informed) by phone
 for urgent notifications (as soon as you are aware), or by faxing a case report form for non-urgent (within one working
 day). For a list of urgent vs. non-urgent notifications go to http://www.rph.org.nz/content/77725edc-9633-4143b161-75a4ca3d2c2b.cmr
- 3. Complete all sections of the form found at http://www.rph.org.nz/content/9bb56554-2f2d-4b09-ad05-bc22074eb102.html, especially:
 - work/school/early childhood centre information
 - name of parent or guardian for a child under 16 years old.

The 3D HealthPathways includes a pathway on reporting notifiable diseases: http://3d.healthpathways.org.nz

POLIO – INTERNATIONAL



The World Health Organization advised in March 2015 that the spread of polio continues to constitute a Public Health Emergency of International Concern. This is in the context of advising affected countries of measures to reduce the spread of polio. WHO Advice concentrates on exit screening from affected countries rather than recommending point of entry measures.

The WHO classifies countries with current or recent polio cases into three different groups as follows:

'States currently exporting wild poliovirus' are Cameroon, Equatorial Guinea, Syrian Arab Republic and Pakistan, with possible status improvement for Cameroon, Equatorial Guinea and Syrian Arab Republic in March or April 2015 if no further 'exports' occur.

'States infected with wild poliovirus but not currently exporting' are **Afghanistan**, **Nigeria**, **Somalia**, **Ethiopia**, **Iraq** and **Israel**, again with possible improvement in status in March or April, this time for Ethiopia, Iraq and Israel, if no further cases are detected.

'States no longer infected by wild poliovirus, but which remain vulnerable to international spread': If there are no further detections of wild poliovirus in **Ethiopia** by 16 March, in **Syria** by 17 March, in **Israel** by 28 April, and in **Iraq** by 19 May then these countries will meet the criteria for this category.

Immigration New Zealand gives information about polio to people who are travelling to New Zealand from affected countries. This advice is a health notice provided in correspondence from Immigration New Zealand (part of the Ministry of Business, Innovation and Employment) to prospective visitors, stating (excerpt):

- Polio vaccination is strongly recommended before travelling to New Zealand.
- If you are travelling from a country affected by Polio and have **not** received a Polio vaccination in the previous 4 weeks to 12 months, please ensure you receive one before you depart. You should have a vaccination even if your travel is urgent. Polio vaccination can be the oral polio vaccine (OPV) or inactivated poliovirus vaccine (IPV). Please bring the vaccination documentation with you when you travel.
- When you arrive in New Zealand, telephone the free Healthline on 0800 611 116 for information about how you can complete your vaccination requirements in New Zealand.

Primary care opportunity:

- If your patients are travelling to an affected country then a polio vaccine booster may be required. Detailed up to date advice is available at: http://wwwnc.cdc.gov/travel/newsannouncements/polio-guidance-new-requirements
- In a general practice setting, migrants from affected countries should be reminded about vaccination against polio, and against other conditions.
- Where appropriate this may be by making use of an interpreter (such as Language Line provided by the Office of Ethnic Communities, available at: http://ethniccommunities.govt.nz/browse/ language-line), to enable primary care doctors and nurses to fill in gaps in migrants' health care after their arrival.

Sources

- WHO Statement on the Fourth Meeting of the International Health Regulations Emergency Committee regarding the International Spread of Wild Poliovirus. 27th February 2015. Available at: http://www.who.int/mediacentre/news/ statements/2015/polio-27-february-2015/en/
- 2. Correspondence: Ministry of Health to Regional Public Health, 6/3/2015.
- 3. Polio Image: CDC 1995, Public Health Image Library (PHIL) #5575.

WHAT ARE YOU REPORTING

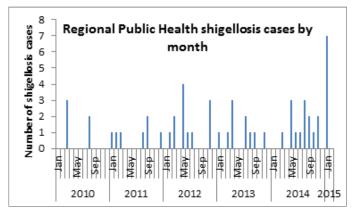
THREE MONTHS OF NOTIFIABLE CASES IN THE HUTT VALLEY, WAIRARAPA AND WELLINGTON

Notifiable Condition	Number of confirmed cases (with additional 'probable' cases in brackets)			
	Hutt	Wairarapa	Wellington	Totals
Botulism			0 (1)	0 (1)
Campylobacteriosis	96	17	178	291
Chikungunya fever	1		3	4
Cryptosporidiosis	2	2	7	11
Dengue fever			2	2
Gastroenteritis - unknown cause	1		1	2
Gastroenteritis / foodborne intoxication	3		7	10
Giardiasis	6	7	47	60
Hepatitis A		1		1
Hepatitis C	2		2	4
Legionellosis		1	2	3
Leprosy	0 (1)			0 (1)
Leptospirosis		1		1
Listeriosis			1	1
Pertussis	2 (0)	0 (1)	19 (3)	21 (4)
Rheumatic fever - initial attack	1			1
Salmonellosis	11	3	14	28
Shigellosis	1		6	7
Tuberculosis disease - new case	2		5	7
Yersiniosis	3		11	14
Totals	131 (1)	32 (1)	305 (4)	468 (6)

Table 1. Notifiable cases in the Hutt Valley, Wairarapa and Wellington 1/12/2014 - 28/02/2015.

Notes:

- The probable botulism case ingested a suspect food source and will be reported in more detail in a subsequent edition of the Public Health Post.
- The rheumatic fever case was a 14-year-old Maori female from Upper Hutt who presented with lower limb pains and reduced ability to walk, with a new heart murmur, raised ESR, evidence of recent group A streptococcal infection, and a history of sore throat two weeks before for which she had not received any treatment. She was from a large family who lived in a large poorly heated home. One brother had previously had rheumatic fever, as had two grandparents. Intervention points include appropriate sore throat management and referral for healthy housing support.
- All seven cases of shigellosis were notified in January 2015, a high monthly total as illustrated by the associated chart.
 Three cases of Shigella flexneri were identified in females aged three to 37 years from the same family, with probable exposure in Tonga. No common exposures were found for the other four cases of Shigella sonnei in males aged 20 to



65 years from diverse areas in the Wellington region.

• The 'probable' case of leprosy is under investigation, and has not been confirmed.

Sources

- 1. ESR. Episurv database of notifiable conditions accessed 2/3/2015, 16/3/15.
- 2. Regional Public Health case notes.

BCG UPDATE

Bacillus Calmette-Guérin (BCG) vaccination is available through Regional Public Health for neonates and young children who are at risk of tuberculosis (TB) exposure.

Although estimates of efficacy vary, BCG is considered to provide protection against TB meningitis and disseminated TB in children, particularly in newborns and young infants. BCG vaccines do not prevent primary infection, are unreliable against adult pulmonary TB and are not effective against reactivation of latent infection.

During 2014, a global shortage of BCG vaccine impacted on supply to New Zealand, and neonatal BCG vaccination services were interrupted for several months. Supply was renewed late in 2014 and additional catch-up clinics were held to provide BCG vaccination to the backlog of neonates who had not been vaccinated.

Babies are eligible for neonatal BCG vaccination if they:

- Will be living in a house or family/whānau with a person with either current TB or a past history of TB.
- Have one or both parents or household members or carers who (within the last five years) have lived for a period of six months or longer in a country with high rates of TB (estimated annual rate ≥ 40 cases per 100,000).
- Will be living for three months or longer (during their first five years) in a country with high rates of TB and will be likely to be exposed to those with TB.

In general, the following places are considered to have a high **TB** rate (\geq 40 cases per 100,000):

- Most of Africa.
- Much of South America.
- Russia and former Soviet states.
- The Indian subcontinent.
- China, including Hong Kong; Taiwan.
- South East Asia (except Singapore).
- Some Pacific nations (particularly Papua New Guinea and Kiribati; does not include Cook Islands, Niue, Samoa, Tokelau or Tonga).

A more complete list of countries with estimated tuberculosis incidence ≥ 40 cases per 100,000, based on 2009 World Health Organization estimates, can be obtained from http://www.health.govt.nz/system/files/documents/topic_sheets/tb-rates-list-jun11.doc.

Babies considered to meet these criteria who have not already been vaccinated can be referred to the Regional Public Health BCG service. Please make the referral by completing the BCG Eligibility Form (available at http://bit.ly/1Ek7vle) and sending the completed form to BCG@huttvalleydhb.org.nz or fax to 04 473 5726.

PUBLIC HEALTH ALERTS

Regional Public Health communicates public health alerts to primary care practices by fax and by email. These communications often contain information that needs to be urgently taken on board by general practitioners and primary care nurses.

Please contact Regional Public Health on 04 570 9002 if you have not been receiving alerts, or to check and confirm that we have your correct details.

If you are not yet receiving alerts by email, and would like to, then you can provide your email address via phoning the number above.

Ordering pamphlets and posters:

To order any Ministry of Health resources, please contact the Health Information Centre on 04 570 9691 or email laurina.francis@huttvalleydhb.org.nz

Produced by: Regional Public Health Private Bag 31-907, Lower Hutt 5040 Ph: 04 570 9002, Fax: 04 570 9211 For enquiries regarding the Public Health Post, please contact Dr Jonathan Kennedy, medical officer, Regional Public Health, by email **jonathan.kennedy@huttvalleydhb.org**. **nz** or by phone **04 570 9002**. Alternatively contact one of the regional medical officers of health: **Dr Jill McKenzie**, **Dr Craig Thornley**, **Dr Annette Nesdale and Dr Stephen Palmer**.

Note: Active hyperlinks when present in articles can be accessed using the web based Public Health Post available on the Regional Public Health website **www.rph.org.nz**

HEALTH 4 LIFE SHORT COURSE

Fealth 4 Like

Healthy eating and keeping active for pregnant women, new mothers, and families

Ora Tonū; Koutou e ngā wahine hapū me ngā whanau hoki, e kai ora, me korikori tinana



Total of eight hours of professional development. Light refreshments will be provided.

The Health 4 Life short course aims to help health professionals and health workers deliver consistent messages on staying active and eating healthily to pregnant women and new parents.

The workshop will provide tools and strategies for practitioners to best help clients make healthy changes.

ABOUT THE COURSE

- Latest clinical evidence on nutrition and physical activity for pregnant women and new mothers and their whānau.
- Launch of Health 4 Life key messages, tools, and resources.
- New practical multi-cultural tools to enable healthy conversations.

FREE WORKSHOP AND FREE RESOURCES

The course consists of a three hour workshop and online learning component which:

- Delivers strategies for encouraging and supporting behaviour change.
- Provides access to new resources including Health 4 Life's conversation guide for health workers and resources for pregnant women in Te Reo and English.
- Provides education on the Health Promotion Agency's first foods resources.
- Discusses the clinical evidence on nutrition, breastfeeding and physical activity.
- Demonstrates the importance of understanding cultural/social beliefs when engaging with women and their whānau.

This free workshop is for child birth educators, midwives and any health care professionals and health workers caring for pregnant women, infants and family in the Wellington region.

For more information about this course, please contact Anne-Marie Ngan, Programme Coordinator, Professional Development, PaCE, Massey University

Email: a.m.ngan@massey.ac.nz Ph: 0800 627 739 extn 63184

online registration: https://eiconferences.massey.ac.nz/ei/getdemo.ei?id=64&s= 6500Y51CY

2015 DATES	TIME	VENUE	
Monday 30 March	9.30am-12.30pm	Massey University, Wgtn Campus	
Wednesday 1 April	9.30am-12.30pm	Massey University, Wgtn Campus	
Wednesday 8 April	9.30am-12.30pm	Porirua Union Health Service, Cannons Creek	
Saturday 11 April	9.30am-12.30pm	Education Centre, Kenepuru Hospital, Porirua	
Saturday 18 April	9.30am-12.30pm	South Wairarapa Workingmens Club, Greytown	
Tuesday 21 April	9.30am-12.30pm	Compass Health offices, Masterton	
Friday 24 April	5.00pm-8.00pm	Pomare Union Health, Lower Hutt	
Wednesday 29 April	5.00pm-8.00pm	Kokiri Marae, Seaview, Lower Hutt	
Saturday 2 May	9.30am-12.30pm	Waiwhetu Marae, Lower Hutt	
Monday 4 May	5.00pm-8.00pm	Kapiti Health Centre, Paraparaumu	

PRESENTERS



Tom Gorte: Professional clinician, School of Nursing, Massey University.



Dr Jill Wilkinson: Researcher and lecturer, School of Nursing, Massey University.



Laura Walker, Health Promotion Agency (HPA): HPA is a Crown agency that leads and delivers innovative, high quality, and cost-effective programmes.

















