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## **Outbreak of Gastroenteritis in Wairoa and Napier**

In early March Public Health became aware of an increase in gastroenteritis in the Wairoa community. Vomiting of less than 12 hours duration was the main symptom. Whilst one primary school and an early childcare centre in Wairoa were asking for assistance, we became aware of other similar 'vomiting' outbreaks in wider Hawke's Bay.

Initial advice was sent out via Wairoa school newsletters, emphasising at least 48 hours exclusion from school post illness and strict attention to hygiene. An equivalent media release was sent out to all of Hawke's Bay simultaneously.

Drinking and recreational water sources were investigated but not implicated. A person to person transmission pattern of spread was apparent.

Laboratory results showed a mixed picture where one early childcare centre comprised cases of norovirus, sapovirus (a human calicivirus which typically infects under 5 year olds) and a cluster of 3 cases of giardia (probably incidental). Another early childcare centre had two positive results for norovirus.

This outbreak demonstrated:

- The important role that Public Health Nurses play in early identification of outbreaks
- Laboratory testing of cases in institutional outbreaks ideally needs to be coordinated through Public Health to allow linking of cases
- The reduction of illness burden to communities is facilitated if working parents are permitted sufficient time off for their children to make a full recovery before returning to school.

### **How do I know when to notify acute gastroenteritis?**

Not every case of acute gastroenteritis is necessarily notifiable, only those where there is a suspected common source or from a person in a high risk category (for example, a food handler, a health care worker, attendance at an early childhood service (staff and children)) or single cases of chemical, bacterial, or toxic food poisoning such as botulism, toxic shellfish poisoning (any type) and disease caused by verotoxin or Shiga toxin- producing Escherichia coli.

### **Notifying and testing of notifiable diseases on suspicion**

Notifiable diseases are specific communicable diseases to be notified by medical practitioners and laboratories under the Health Act 1956 and Tuberculosis Act 1948. A list of Notifiable Diseases is outlined in Schedules 1 and 2 of the Health Act 1956 available via the Ministry of Health website <http://www.health.govt.nz/> and on the Hawke's Bay PHO portal. A full list is also attached with this bulletin.

Recently in Hawke's Bay we've had suspected cases of **Measles, Mumps, TB and Pertussis**. Please note that it's also important to notify on suspicion. For the conditions mentioned it is important that a) the Medical Officer of Health is notified immediately (Phone 06 834 1815 or Fax a notifiable disease form to 06 834 1816.), and b) that testing is carried out as soon as possible.

Notification triggers a significant public health response involving contact tracing and ensuring appropriate testing, exclusion and isolation criteria are met. If you are in any doubt please ring and discuss with Public Health. The laboratory services (either Hawke's Bay DHB Laboratory or Southern Community Laboratories) are also available to assist if you are unsure about which tests to perform.

## Zika Virus

Zika is an emerging infection of international public health importance and a notifiable disease in New Zealand. Zika infection is a mild febrile viral illness transmitted by mosquitoes. Mosquitoes that are able to transmit Zika virus are not normally found in New Zealand. For a list of countries where Zika infections are currently occurring please refer to the Ministry of Health website.

Public Health staff run a robust mosquito surveillance and monitoring system to identify mosquitoes at the port and airport, and in Hawke's Bay this year there have to date been no exotic mosquitoes competent for transmitting Zika or related infections of Dengue or Chikungunya. In Auckland on 4th March exotic mosquito larvae were detected and identified as *Aedes aegypti* (commonly called the yellow fever mosquito). This mosquito can transmit a number of human diseases including Yellow Fever, Dengue Fever, Ross River virus, and Zika virus. A response was immediately mounted and there have been no subsequent finds of exotic mosquitoes.

For all advice pertaining to travellers departing or returning to countries affected by Zika please refer to the Ministry of Health website. In particular see the latest guidelines for Midwives, GPs and other health professionals dealing with Zika virus in pregnancy.

## WorkSafe Changes

*The new Health and Safety at Work Act 2015* requires Medical Officers of Health to advise WorkSafe New Zealand (WorkSafe) of work-related notifiable disease or hazardous substances injury. This requirement has been in effect from 4 April 2016 and this advice applies in cases of:

1. a notification under section 74 of the Health Act 1956 of a notifiable disease that he or she reasonably believes arises from work; and
2. a notification under section 143 of the Hazardous Substances and New Organisms Act 1996 of an injury caused by a hazardous substance that he or she reasonably believes arises from work.

WorkSafe requires anyone notifying WorkSafe of a work-related notifiable disease or hazardous substances injury to use the form provided by WorkSafe. The form states that:

- personal information (about clients/patients) may be provided to WorkSafe only with the consent of the relevant person
- medical records will be accessible only to medically qualified persons working for WorkSafe and the registrar who may collate the information and
- personal information will not be published in a form that enables any person to be identifiable.

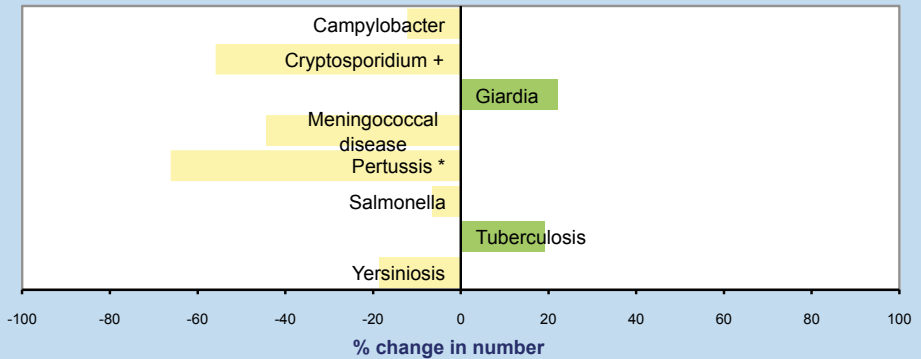
## BCG Update

BCG vaccine supplies are available again but in scarce supply. The Ministry of Health is carefully distributing limited supply of BCG vaccine and Hawke's Bay DHB Public Health nurses are now managing the back-log of referrals.

Both Napier and Flaxmere have held clinics and there will be a clinic in Central Hawke's Bay later this month (April). The situation is expected to improve next month when more supply will be available.

# Disease Surveillance Summaries

Selected Hawke's Bay disease notifications for October 2015 to March 2016 compared to the average for the same period during 2010-2015



Note: \*denotes p<0.001 +denotes p<0.005

Selected notifications April 2015 to March 2016

Disease	Hawke's Bay		New Zealand	
	Cases	rate*	Cases	rate*
Campylobacter	249	155.1	6,261	136.2
Chlamydia	1,520	<b>947.0</b>	29,471	<b>641.1</b>
Cryptosporidium	26	16.2	753	16.4
Giardia	89	<b>55.5</b>	1,600	<b>34.8</b>
Gonorrhoea	149	<b>92.8</b>	3,422	<b>74.4</b>
Hepatitis B	2	1.2	36	0.8
Hepatitis C	2	1.2	5	0.1
Invasive pneumococcal disease	16	10.0	450	9.8
Legionella	11	6.9	298	6.5
Leptospirosis	10	<b>6.2</b>	58	<b>1.3</b>
Malaria	2	1.2	40	0.9
Meningococcal disease	3	1.9	67	1.5
Mumps	2	1.2	19	0.4
Pertussis	20	<b>12.5</b>	1,252	<b>27.2</b>
Rheumatic fever - initial attack	3	1.9	105	2.3
Salmonellosis	27	16.8	1,046	22.8
Tuberculosis - new case	10	6.2	293	6.4
Latent Tuberculosis Infection	23	<b>14.3</b>	292	<b>6.4</b>
VTEC/STEC Infection	2	<b>1.2</b>	430	<b>9.4</b>
Yersinia	12	<b>7.5</b>	655	<b>14.2</b>

\* Annualised crude rate per 100,000 population calculated from 2015 mid-year estimates.

Rates in bold - statistically significant

Note: The figures for Chlamydia & Gonorrhoea are for the 12 months ending Dec 2015.

# Immunisation Issues

## Upcoming Training

TRAINING	DATES	TIMES	VENUE	COST
Immunisation Awareness Workshop	3 May	8:30am–12:30pm	Education Centre HB Hospital	Free

### Cervical Cancer, Human Papillomavirus (HPV) and Vaccination

High-risk types of HPV (predominantly HPV 16 and 18) are the most important risk factor for the development of cervical cancer and play an important role in other anogenital and oropharyngeal cancers in both women and men. Low risk HPV types (predominantly 6 and 11) cause genital warts.

HPV infection is very common, with initial infection occurring soon after sexual debut and a lifetime risk of over 80%. Most HPV infections are transient and clear through a complex immune response within 12-30 months. In clearing a natural HPV infection only 50% of women develop antibodies.

HPV vaccine (Gardasil) was introduced onto the New Zealand National Immunisation Schedule in 2008, offered to 12 year old girls (with catch up offered to young women born on or after 1 January 1990). It covers four strains of HPV; 16, 18, 6 and 11 responsible for approx. 70% of cervical cancer and 90% of genital warts.

The vaccine is available through the school based programme in year 8 or primary care and is available free in New Zealand to:

- girls from 9 years of age to young women under 20 years of age
- individuals aged under 26 years with HIV infection
- following solid organ transplant.

In clinical trials the vaccine has shown that it is highly effective and more immunogenic in younger rather than older girls. Immunisation with three doses of vaccine produces antibody responses in more than 99% of vaccine recipients and antibody titres are greater than that following clearance of natural infection. The vaccine has demonstrated immune memory response and currently there is no indication that booster doses are required. There is extensive scientific data on the safety of this vaccine and over 165 million doses have been administered world wide.

In Australia cervical abnormalities, cancer and rates of external genital warts are declining dramatically since the introduction of the vaccine in 2007.

### Have your say!

**We will be undertaking a review of this bulletin within the next few months and are keen to get your input as to:**

- what kind of information is useful / not useful for us to share with you?
- what is the best way to communicate with you with respect to public health advice?

Please e- mail your ideas to Rachel Eyre at [Rachel.Eyre@hbdhb.health.nz](mailto:Rachel.Eyre@hbdhb.health.nz).

Public Health Advice is also available on the  
Hawke's Bay District Health Board website:

<http://www.hawkesbay.health.nz/page/pageid/2145871321>