

# Public Health Information Quarterly

## COMMUNICABLE DISEASES

For general practitioners and practice nurses

### The Dangers Of Drinking Raw Milk

Seven cases of campylobacteriosis were notified in March that were associated with drinking raw milk purchased from a vending machine on a dairy farm near Timaru. Their ages ranged from 15 months - 34 years. Fortunately none of the cases required admission to hospital. The Ministry for Primary Industries was also involved in the investigation. On the West Coast there was a case of campylobacteriosis who had consumed raw milk from a similar farm-based vending machine.

More recently four school children became unwell after drinking raw milk during a visit to a dairy farm in South Canterbury. Two were admitted to hospital with verotoxin-producing *E. coli* (VTEC) infection. Since 2010 there have been 25 outbreaks (average of four cases per outbreak) reported in New Zealand associated with unpasteurised milk.

Besides *Campylobacter*, unpasteurised milk has been the source of other pathogenic organisms including *Giardia*, *Cryptosporidium*, *Listeria*, *Salmonella*, *Tuberculosis*, *Yersinia* and verotoxin-producing *E. coli* (VTEC) as well as non-zoonotic organisms such as *Streptococcus* and *Staphylococcus aureus*.

Scientifically the only significant difference between unpasteurised and pasteurised milk is the taste and despite what the purveyors of raw milk state about their product they cannot guarantee it is free from potentially harmful bacteria.

**April 2014**

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### Community and

### Public Health

**Canterbury**

District Health Board

Te Poari Hauora o Waitaha

### Practice Point

- Everyone who drinks unpasteurised milk is at risk but especially the young, the old, the immune compromised and pregnant women.
- Information on:
  - raw milk is available from CDC ([www.cdc.gov/Features/RawMilk/](http://www.cdc.gov/Features/RawMilk/))
  - home pasteurisation is available from C&PH ([www.cph.co.nz/files/MED\\_0176.pdf](http://www.cph.co.nz/files/MED_0176.pdf)).

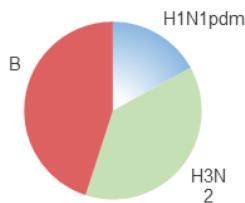
### Influenza

Christchurch had an unseasonal increase in influenza in the first fifteen weeks of the year with 42 isolates, 75% of which were the pandemic strain A (H1N1)pdm09. Geraldine also had increased activity due to H1N1pdm in the first quarter. This strain was predominant in 2009 and 2010 but was less common in 2011-13 (Figure 1).

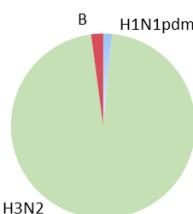
### Community & Public Health

**Figure 1 Types and relative incidence of influenza isolates in Canterbury 2011–2013**

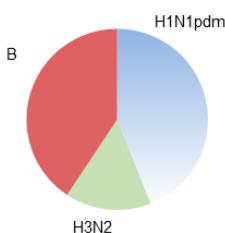
2011



2012



2013



2011 and 2013 were unusually quiet years for influenza and it is likely that this year will be more severe. The predominant type of influenza during the past Northern Hemisphere season was A(H1N1)pdm09 which affects the younger and middle age groups relatively more than the elderly, in contrast to the other types.

By early April relatively good coverage of influenza vaccination was being achieved in the elderly and under 18 age groups in Canterbury. Health care

staff are encouraged to be vaccinated to give themselves the best chance of avoiding illness and of not being a source of infection to their patients.

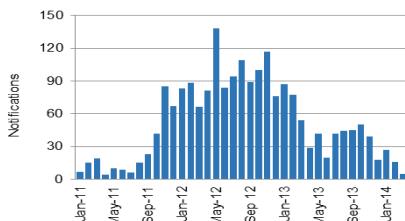
### Practice Point

- Vaccination is recommended for everyone aged 6 months and over, especially for pregnant women, those at risk because of medical conditions, health care workers and possibly international travellers.
- Recommendation from a health professional has been shown to be a major factor in patients choosing to be vaccinated.

### Pertussis Epidemic Over?

The epidemic is over in South Canterbury and West Coast and is continuing to wane in Canterbury where in March, only five cases were notified, compared with an average of 63 for the previous 31 months (Fig. 2).

**Figure 2. Canterbury pertussis notifications 1997– March 2014**



During the epidemic in Canterbury 71 patients required hospital admission including 41 infants under one. The hospitalisation rate for this age group was 43%; one infant died. In South Canterbury nine patients required hospitalisation and in West Coast four.

Management of cases and contacts during the epidemic was facilitated by the introduction of funding for azithromycin.

### Practice Point

Testing: In the absence of an outbreak and where it is important to confirm a diagnosis, suspected cases of pertussis should have a nasopharyngeal swab taken for PCR (if within three weeks of onset of symptoms) or culture (if within two weeks of onset). If a retrospective diagnosis is required, do serology (except if it is within 12 months of a pertussis vaccination).

Don't test if the patient is a contact of a case, or the result won't influence the management of the case or contacts.

### Zika Virus Outbreak In Oceania

Zika virus is a notifiable arboviral disease caused by a flavivirus and transmitted to humans mainly by certain species of *Aedes* mosquitoes. It has spread from French Polynesia to the Cook Islands in recent months and 7 cases (four probable and three under investigation) have been notified in New Zealand. Although Zika virus is related to yellow fever, dengue, West Nile, and Japanese encephalitis viruses, it produces a comparatively mild disease in humans.



Symptoms may include fever, headache, red eyes, rash, muscle aches, joint pains, gastrointestinal disorders and distal oedema. The illness lasts 4-7 days but in some cases debilitating arthralgia may continue for many weeks or months.

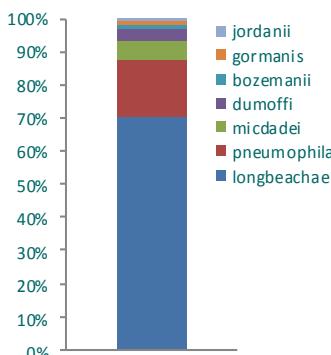
### Practice Point

In patients with a history of recent travel to the Pacific who present with fever, arthralgia and rash, Zika fever should be considered. Laboratory confirmation is by serology testing with blood samples sent to Australia.

### *Legionella longbeachae*

In the past five years in the C&PH region, there were 271 cases of legionellosis (Legionnaires' disease) notified. Of those cases where the species was identified 70% were due to *L. longbeachae*. The percentages of cases in each DHB due to *longbeachae* were similar. The rate of legionellosis in Canterbury was 7 times that in South Canterbury and 1.5 times that in West Coast and high compared with other parts of the country. A research project is being conducted in Christchurch to better understand the link between exposure to potting mix/compost and acquiring the disease.

Figure 3 Percentages of Legionella species (when known) in the C&PH region 2009-13



### Increased Norovirus Activity

There is currently increased norovirus activity in the community particularly in rest homes. There have been 21 outbreaks so far this year in Canterbury and one suspected outbreak in Westport.

Norovirus is highly infectious with as few as 18 particles resulting in infection. A person is infectious before becoming symptomatic. Viral shedding can occur at extremely high levels and shedding may continue for more than three weeks after symptoms have resolved in 25% of cases. The virus survives for a prolonged time in

the indoor environment. Management requires, strict infection control practices including hand washing (soap and water are more effective than

alcohol gel) and terminal cleaning of the environment. In rest homes cohorting of staff and affected residents is indicated.

## Summary Of Selected Notifiable Diseases By District Health Board January - March 2014 And 2013

	Canterbury		South Canterbury		West Coast		TOTALS	
	Cases Jan-Mar 2014	Cases Jan-Mar 2013						
<b>Enteric Diseases</b>								
Campylobacteriosis	214	197	67	45	15	13	296	255
Cryptosporidiosis	13	28	4	5	-	-	17	33
Gastroenteritis	14	6	1	-	-	-	15	6
Giardiasis	49	54	9	4	3	3	61	61
Hepatitis A	1	1	-	-	-	-	1	1
Paratyphoid	3	1	-	1	-	-	3	2
Salmonellosis	49	42	4	6	3	2	56	50
Shigellosis	3	-	1	-	-	-	4	-
Typhoid	2	-	-	-	-	-	2	-
VTEC	4	3	-	2	-	-	4	5
Yersiniosis	17	19	2	3	1	-	20	22
<b>Other Diseases</b>								
Dengue Fever	3	2	1	-	-	-	4	2
Haemophilus influenzae b	1	-	-	-	1	-	2	-
Hepatitis B	3	2	-	-	-	-	3	2
Hepatitis C	5	4	-	-	-	-	5	4
Hydatid	-	1	-	-	-	-	-	1
Lead absorption	3	4	1	-	-	2	4	6
Legionellosis	7	14	1	1	1	-	9	15
Leptospirosis	1	1	1	-	-	-	2	1
Malaria	-	2	-	-	-	-	-	2
Measles	-	-	-	-	-	-	-	-
Meningococcal Disease	-	3	1	-	-	-	1	3
Mumps	-	-	-	-	-	-	-	-
Pertussis	45	219	-	29	4	14	49	262
Pneumococcal Invasive Dis	6	7	1	3	-	-	7	10
Rheumatic fever (initial attack)	2	-	-	-	-	-	2	-
Rheumatic fever (recurrent)	1	-	-	-	-	-	1	-
Rubella	-	-	-	-	-	-	-	-
Tuberculosis (new case)	4	2	1	-	1	-	6	2