

Public Health Information Quarterly

COMMUNICABLE DISEASES

For general practitioners and practice nurses

Two Cases Of Suspected Measles

In March in Christchurch, C&PH responded to the notification of two suspected cases of measles that were subsequently considered not to be cases after further tests, consideration of their circumstances and wider consultation.

Although they met certain criteria, there were several factors that influenced the decision to denotify the cases. They included the absence of travel or an index case, the lack of subsequent spread, the immunisation status of the cases (both had had either a previous measles or MMR¹ vaccination) and the presence of other viruses in the community that could mimic some measles signs and symptoms.

A key aspect of the decision was the interpretation of laboratory results in a low prevalence, high immunisation environment. In this situation, the positive predictive value decreases despite the test being very sensitive and very specific.²

Practice Points

- **Notify on suspicion.** Measles is a serious illness and notified cases will be followed up urgently by public health staff to limit further spread.
- **Confirm the diagnosis** by a nasopharyngeal swab (or buccal swab if under 5 years) for PCR **and** by serology. Both are recommended for sporadic cases of suspected measles.

April 2015

Contents

- Two cases of suspected measles
- Eligibility for publicly funded health services - correction
- Northern Hemisphere Influenza Season
- Influenza Vaccine 2015 (NZ)
- Influenza Surveillance
- Tuberculosis In Patients From High Incidence Countries
- Summary of selected notifiable diseases Jan-Mar 2015 and 2014

Community and Public Health

Canterbury
District Health Board
Te Poari Hauora o Waitaha

- When measles is **not** circulating in the community, travel history and contact history are important aspects of the clinical picture.
- **Koplik spots.** An infectious disease specialist can review a photograph (eg by using a mobile telephone and emailing to C&PH³) of possible Koplik spots if it is helpful in assisting with the diagnosis.

1. *One and two MMR will result in immunity in approximately 92% and 97.5% respectively of recipients. However even when vaccinated cases develop measles they often have a modified illness with fewer and less severe symptoms.*

2. *Bellini, W. J., & Helfand, R. F. (2003). The challenges and strategies for laboratory diagnosis of measles in an international setting. Journal of Infectious Diseases, 187 (Supplement 1), S283-S290.*

3. CPHHealthProtection@cdhb.health.nz

Community & Public Health

Eligibility For Publicly Funded Health Services: Correction

The item in the previous edition that referred to the costs to the patient for investigations and treatment of notifiable infectious diseases (particularly tuberculosis) was written to highlight the inclusion of non-New Zealand residents in publicly funded health services, but should have distinguished between the public and private health sectors. The following clarifies the situation:

Publicly funded services are available to non-New Zealand residents who would otherwise be ineligible for funded services if they are suspected of having tuberculosis or any of the infectious and quarantinable diseases scheduled under the Health Act 1956.

The relevant services are all or any of the following to the extent appropriate in the circumstances to address risks to other persons:

- *Surveillance of a person who has, or is suspected of having, a (notifiable) infectious disease who is liable to quarantine*
- *Diagnosis and/or treatment of a person's (notifiable) infectious disease*
- *Follow-up services and/or contact tracing associated with a person's (notifiable) infectious disease.*

In practice

For tuberculosis this means:

- *Management and investigations in the DHB system are free.*
- *Treatment including medications is free whether the case is an inpatient or an outpatient. No co-payment is required.*
- *GP visits are subsidised as per usual (but are not free).*
- *CXRs done in the DHB system including at Canterbury Community Radiology, are free.*

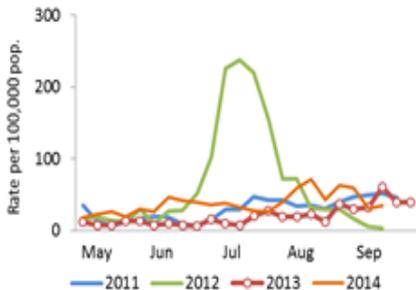
- *CXRs done privately (outside the DHB) are not subsidised at all.*
- *A Quantiferon–Gold blood test for a case or contact is free whether it is done at Canterbury Health Laboratories or Southern Community Laboratory.*

Northern Hemisphere Influenza Season

The rates of influenza in the US and Europe this year have been higher than usual affecting particularly the elderly. The influenza subtype that has been responsible for the increased mortality and morbidity has been H3N2. This was the predominant subtype that resulted in a high rate of disease in Canterbury in 2012 (Fig. 1).

Figure 1. Canterbury Influenza-like illness rates 2011-2014

Influenza Vaccine 2015 (NZ)



The Southern Hemisphere vaccine this year contains three influenza antigens including the inactivated A(H3N2) virus that has been the main subtype circulating in the Northern Hemisphere this year. The composition of the vaccine is :

- A/California/7/2009 (H1N1)pdm09-like
- A/Switzerland/9715293/2013 (H3N2)-like
- B/Phuket/3073/2013-like virus.

Influenza Surveillance

The national surveillance programme that documents the rate of influenza-like illness (ILI) by DHB began in the last week of April and will continue through to the end of September.

For reliable data it is necessary to have the population of participating practices being at least 10% of the population of the DHB. This is not always easy to achieve and we would appreciate more practices becoming involved.

The benefit to patients is that results for nasopharyngeal swabs for influenza are available within 24 hours at no charge. The benefit to the community is that a detailed understanding of regional influenza activity is obtained that informs the local response. Results also contribute to the national and international understanding of influenza incidence and isolates, further analysed by the WHO, help to determine the composition of subsequent vaccines.

In Canterbury during winter, in addition to the community ILI rates, South Island rates and CDHB influenza admissions are also monitored (Figs. 2-4).

If any practice is interested in participating, Samantha Hawkins in the Christchurch office can provide further information.

Figure 2. Canterbury admissions for suspected influenza: Jan - Oct 2014



Figure 3. Canterbury rates of hospital admissions by age due to suspected influenza: Jan - Oct 2014

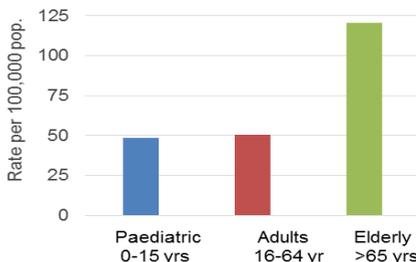
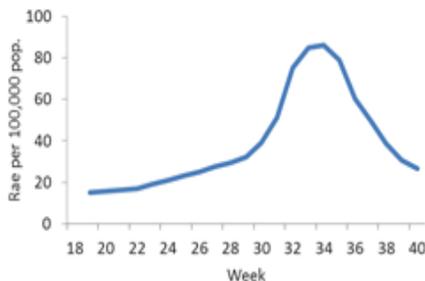


Figure 4. Average South Island influenza - like illness rate: 2012 - 2014



Tuberculosis In Patients From High Incidence Countries

Doctors are reminded to consider the diagnosis of tuberculosis in patients presenting with clinically compatible symptoms such as fever, weight loss, night sweats, fatigue and cough, particularly if they were born in a country with a high incidence of TB.*

In the past three years, of the 63 cases of tuberculosis notified in Canterbury, 78% were born in a high incidence country, including 44% who were born in South Asia (Indian sub-continent). Only two cases had occupations that were associated with the rebuild. Three of three cases in South Canterbury and West Coast were born in high incidence countries.

*** Countries with a high TB incidence:**
Most of Africa, much of South America, Russia and the former Soviet states, the Indian sub-continent, China including Hong Kong, Taiwan, S-E Asia except Singapore

and some countries of the Pacific (eg Papua New Guinea and Kiribati). For a list of high incidence countries refer to the references on p. 479 of the Immunisation Handbook (2014).

Summary Of Selected Notifiable Diseases By District Health Board January - March 2015 And 2014

	Canterbury		South Canterbury		West Coast		TOTALS	
	Cases Jan-Mar 2015	Cases Jan-Mar 2014						
Enteric Diseases								
Campylobacteriosis	180	214	36	67	16	15	232	296
Cryptosporidiosis	13	13	1	4	1	-	15	17
Gastroenteritis	10	14	-	1	3	-	13	15
Giardiasis	39	49	4	9	1	3	44	61
Hepatitis A	3	1	-	-	-	-	3	1
Listeriosis	2		-		-		2	
Paratyphoid	2	3	-	-	-	-	2	3
Salmonellosis	59	49	5	4	1	3	65	56
Shigellosis	4	3	-	1	-	-	4	4
Typhoid	1	2	-	-	-	-	1	2
VTEC	6	4	2	-	-	-	8	4
Yersiniosis	36	17	5	2	-	1	41	20
Other Diseases								
Dengue Fever	2	3	-	1	1	-	3	4
Haemophilus influenzae b	-	1	-	-	-	1		2
Hepatitis B	1	3	-	-	-	-	1	3
Hepatitis C	5	5	2	-	-	-	7	5
Lead absorption	-	3	-	1	-	-		4
Legionellosis	4	7	-	1	2	1	6	9
Leptospirosis	3	1	1	1	2	-	6	2
Malaria	1	-	-	-	-	-	1	
Measles	-	-	-	-	-	-		
Meningococcal Disease	-	-	-	1	-	-		1
Mumps	1	-	-	-	-	-	1	
Pertussis	19	45	1	-	1	4	21	49
Pneumococcal Invasive Dis	4	6	-	1	-	-	4	7
Rheumatic fever (initial attack)	1	2	-	-	-	-	1	2
Rubella	-		-	-	-	-		
Tuberculosis (new case)	7	4	1	1	1	1	9	6