Canterbury District Health Board
MEDICAL OFFICERS OF HEALTH

Public Health Information Quarterly

COMMUNICABLE DISEASES

For general practitioners and practice nurses

April 2018

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Community and Public Health
Canterbury
District Health Board
Te Poari Hauora o Waitaha

Measles Outbreaks

1: January-February

In January—February this year there were four confirmed cases of measles notified in Christchurch. The index case had returned from India in January and presented to his GP 16 days later with a sore throat and was treated with penicillin and paracetamol. The following day he presented to the Emergency Department with influenza-like symptoms and a reaction to the penicillin. The antibiotic was changed to azithromycin and the patient was discharged. He returned to his GP four days later with symptoms diagnostic of measles at which time serology and a PCR were done, with positive results.

Three contacts subsequently developed measles. One contact was a sibling of a case but for the other two, exposure had been in the waiting room of the medical centre and in ED. In total 167 contacts were traced at the medical centre, a school, a church, a restaurant and a play-ground.

2: April

At the time of writing there has been another measles outbreak with seven notifications so far in Southern, Canterbury and Nelson Marlborough DHBs. Exposure occurred in the Queenstown airport and possibly on two domestic fights. The source case is not known but the virus has been identified as having come from Asia via Australia.

Measles—clinical description

An illness characterised by the following:
1) generalised maculopapular rash, starting on the head and neck
2) fever (at least 38ºC if measured) present at the time of rash onset
3) cough or coryza or conjunctivitis or Koplik's spots present at the time of rash onset.

Prodrome: 2 to 4 days with fever, conjunctivitis, coryza and Koplik spots.

Incubation: About 10 days (7–18)

Transmission: Highly infectious by airborne spread or by direct contact with nasal or throat secretions. Virus can persist in the environment for up to 2 hours.

Infectivity: From 5 days before to 5 days after onset of rash.

Prevention: By 'herd' immunity when a >95% immunisation coverage of the population is achieved. Disease in

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contacts may be prevented by vaccination of susceptible contacts with MMR within 72 hours of exposure or by passive immunisation with immune-globulin if 3 to 6 days after exposure. Other public health preventive measures include isolation of cases and exclusion of susceptible contacts from high-risk settings.

Prophylaxis for susceptible contacts

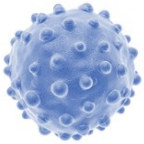
Contacts are considered to be susceptible if ***none*** of the following apply:

- born before 1969 (when measles vaccine was introduced)
- confirmed measles infection in the past
- documented vaccination with two doses of MMR vaccine
- documented immunity to measles.

Practice Points

- consider the diagnosis (and look for Koplik spots) in suspected cases, especially children, with symptoms
- request serology and a naso-pharyngeal swab for PCR to confirm the diagnosis
- notify on suspicion
- inform C&PH of possible susceptible contacts who require immune globulin.

Hepatitis A Review



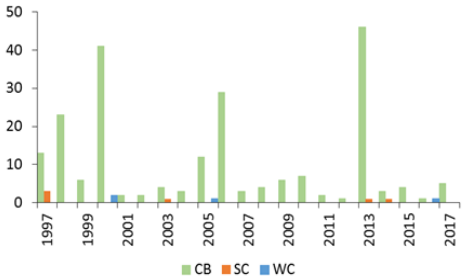
Hepatitis A is an infection of the liver caused by the hepatitis A virus (HAV). In adults, the illness can be mild or severe and can sometimes be life-threatening. Older adults are more likely to become severely unwell. In contrast, the infection is usually asymptomatic or mild in young children. Unlike hepatitis B and C, hepatitis A does not normally cause long-term liver damage.

Hepatitis A is spread via the faecal–oral route, from person to person or through food or drink that has been contaminated with faeces. Outbreaks can occur, for example, through contaminated food or water or via an infected food handler.

The virus is very stable. It can survive drying and exposure to acids and solvents. It can survive for weeks or months on contaminated surfaces and in soil, water and some foods. The ability of the virus to survive these conditions facilitates its spread.

The number of cases in New Zealand varies from year to year, with higher numbers in years in which outbreaks occur. The picture is similar in Community and Public Health regions, as shown in Figure 1. Since 1997 Canterbury has had 217 notifications, South Canterbury six and West Coast four.

Figure 1. Hepatitis A notifications in C&PH regions, 1997-2017



In 2016, there were 35 notified cases of hepatitis A in New Zealand, with no outbreaks. Of these cases, 51% were hospitalised and 57% occurred in people who had been overseas during the incubation period.

Sanitation and vaccination are important preventive measures. While hand washing will not kill the hepatitis A virus, it will dilute it and good sanitation is important in preventing its spread. Vaccination is recommended for people travelling to high risk countries, as well as for certain other people at higher risk (See Practice Points) and in some occupational groups.

Two doses provide protection for 25 years or longer in adults, and for at least 14 years in children.

Practice Points

- Hepatitis A is often asymptomatic in young children
- Sanitation and vaccination are important preventive measures
- Vaccination is recommended and funded for:
  - ⇒ close contacts of cases
  - ⇒ children with chronic liver disease
  - ⇒ transplant cases
- Vaccination is recommended but **not** funded for various groups including:
  - ⇒ travellers aged 1 year and older going overseas
  - ⇒ adults with chronic liver disease
  - ⇒ men who have sex with men
  - ⇒ occupational groups who have exposure to faeces
  - ⇒ food handlers during community outbreaks
  - ⇒ military personnel who are likely to be deployed to high-risk areas.

Mumps Testing

Immediately before obtaining a buccal swab for mumps PCR, a 30 second massage of the parotid gland is recommended to optimise virus detection.

Hepatitis C Management

A reminder that the management* of hepatitis C in primary care may involve:

- screening of those at high risk
- counselling
- referral to the hepatitis C clinic
- referral to a specialist
- following up cases to determine whether or not they become carriers
- offering hepatitis B vaccination (funded) and hepatitis A vaccination (not funded) to those non-immune.

* Refer to HealthPathways> Hepatitis C> for comprehensive guidelines.

Boostrix For Health Care Staff

Antibodies to pertussis antigens including the toxoid, have been shown to persist five years after receipt of Tdap (Boostrix). However, the duration of protection is unknown. Therefore an injection of Boostrix every 10 years is recommended (but not funded) for all lead maternity carers and other health care personnel who work in neonatal units and other clinical settings (such as GPs, practice nurses and Well Child providers), where they are exposed to infants. (Immunisation Handbook 2017, 2nd edn. March 2018)

Dangers Of Raw Milk

Cases of enteric notifiable diseases associated with the consumption of raw (unpasteurised) milk continue to be reported and last month a commercial product was withdrawn from the New Zealand market because there was a risk that it contained campylobacter.

Besides *Campylobacter*, unpasteurised milk has been the source of *Giardia, Cryptosporidium, Listeria, Salmonella, Tuberculosis, Yersinia and shiga toxin-producing E. coli (STEC/VTEC)* as well as non-zoonotic organisms such as *Streptococcus.* and *Staph. aureus.*

Everyone who drinks unpasteurised milk is at risk but especially the young, the old, the immune compromised and pregnant women.

For further information see Centers for Disease Control (Atlanta) (www.cdc.gov/Features/RawMilk/)

For home pasteurisation advice see https://myhealth.alberta.ca/alberta/pages/how-to-pasteurize-milk.aspx

Summary of Selected* Notifiable Diseases by District Health Board
January—March 2018 and 2017

	Canterbury		South Canterbury		West Coast		TOTALS	
	Cases Jan-Mar 2018	Cases Jan-Mar 2017	Cases Jan-Mar 2018	Cases Jan-Mar 2017	Cases Jan-Mar 2018	Cases Jan-Mar 2017	Cases Jan-Mar 2018	Cases Jan-Mar 2017
Enteric Diseases								
Campylobacteriosis	190	221	40	38	13	10	243	269
Cryptosporidiosis	14	24	2	-	-	2	16	24
Gastroenteritis	20	13	-	1	2	1	22	15
Giardiasis	53	29	8	2	1	1	62	32
Hepatitis A	1	2	-	-	-	-	1	2
Listeriosis	-	1	-	-	-	-	-	1
Paratyphoid	1	-	-	-	-	-	1	-
Salmonellosis	59	65	7	4	2	1	68	70
Shigellosis	4	3	-	-	-	-	4	3
Typhoid	1	-	-	-	-	-	1	-
VTEC	10	7	4	3	-	1	14	11
Yersiniosis	71	35	10	6	2	2	83	43
Other Diseases								
Dengue Fever	15	3	1	-	-	-	16	3
Haemophilus influenza b	-	-	-	-	-	-	-	-
Hepatitis B	3	1	1	-	-	-	-	1
Hepatitis C	7	2	1	-	-	-	8	2
Invasive Pneumococcal dis.	4	4	1	-	4	2	9	6
Lead absorption	-	-	-	-	-	-	-	-
Legionellosis	18	16	-	1	-	3	18	20
Leptospirosis	2	1	-	-	2	2	4	3
Malaria	-	-	-	-	-	-	-	-
Measles	4	-	-	-	-	-	4	-
Meningococcal Disease	4	-	-	-	-	1	4	1
Mumps	2	3	-	-	1	-	3	3
Pertussis	76	49	12	4	38	-	126	53
Rheumatic fever (initial attack)	-	-	-	-	-	-	-	-
Rubella	-	-	-	-	-	-	-	-
Tuberculosis (new case)	9	12	1	-	-	-	10	12

* Other notifications: 1 Hepatitis—Not otherwise specified (Canterbury)