

Public Health Information Quarterly

COMMUNICABLE DISEASES

For general practitioners and practice nurses

What Happens To Notifications?

Apart from providing data for analysis by ESR/Ministry of Health, the notification process initiates a local public health response, the purpose of which is to minimise the incidence of communicable diseases in the population.

Following notification, disease-specific protocols guide the public health investigation and management of cases and contacts. It is expected that the protocols will be accessible via Health-Pathways early in the New Year.

Information and advice are provided to cases and contacts to prevent recurrences and remedial action is undertaken where possible for individual cases and outbreaks.

Case details are documented on EpiSurv, the national notification database (ESR). Data is anonymised for central analysis and reporting and a list of reports is available on the ESR website <Health surveillance data>.

Routine feedback to the notifying doctor on individual cases is not possible due to resource limitations but doctors are able to request information on the outcomes of specific cases.

Notifiable disease data is also used locally to identify trends which may occasionally result in local or regional alerts. Finally, analyses of diseases of current interest are reported in the PHIQ.

Which Swab?

Using the incorrect swab decreases the chances of identifying the causative organism and may not even be of any use

July 2017

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Community and Public Health

Canterbury

District Health Board
Te Poari Hauora o Waitaha

at all. Measles and pertussis are two diseases that have particular swab requirements.

Measles: For a diagnostic PCR in a suspected case of measles take a nasopharyngeal swab which is then placed in viral transport media (adult-orange top, paediatric-white top).

Pertussis: For a diagnostic PCR in a suspected acute (adult) case of pertussis use a blue wire pernasal swab or orange FLOQ swab in a red topped tube, but **don't** place in transport medium. For a child use the paediatric white top swab.

In South Canterbury discuss the case with a microbiologist or Medical Officer of Health before taking a specimen for pertussis.

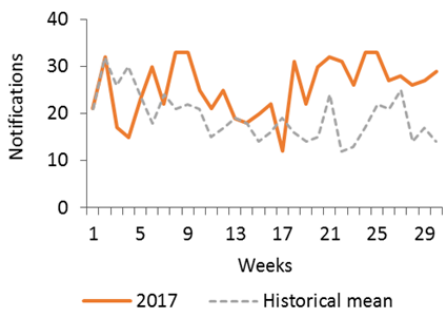
For further details refer to Health-Pathways (measles and pertussis) and the Canterbury SCL website.

Community & Public Health

National Increase In Pertussis

Pertussis is endemic with four- to five-yearly epidemic cycles. Epidemics may be sustained for 2 years or more during which there are marked increases in hospital admissions. Since February there has been an increase in pertussis notifications nationally (Fig. 1) although not in any of the three C&PH DHBs.

Figure 1. New Zealand pertussis notifications to week 30 (28th July) 2017



Advice to primary care

Pertussis can be particularly serious for infants under one year old. Making the diagnosis can be a challenge because the clinical presentation resembles other respiratory illnesses. The focus for clinicians should be on maintaining a high degree of suspicion in anyone with respiratory symptoms who comes into contact with infants under 1 year and/or pregnant women beyond 35 weeks gestation.

Late presentations to primary care and delays in notification to public health, result in lost opportunities for reducing further transmission.

The following advice is recommended to health care providers:

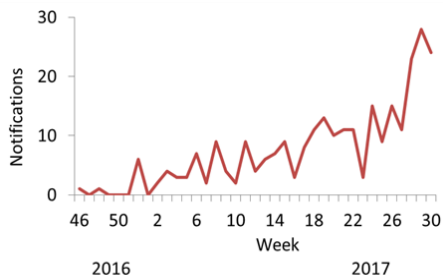
- Promote on-time vaccination for infants and children including the 11 year old vaccination event and catch up for teenagers.

- Promote vaccination during weeks 28–38 of each pregnancy to reduce disease in neonates.
- Encourage Tdap booster vaccination at 5-10 yearly intervals for front line health care staff.
- Notify cases of pertussis on clinical suspicion; don't wait for laboratory confirmation.
- Give prophylaxis to pregnant women beyond 35 weeks gestation and infants under 1 year, who are contacts.
- Do not test if the patient has a clinically compatible illness and is a contact of a confirmed case, or the result will not influence clinical or public health management of the case or contacts.
- Know what test to do: PCR in the first three weeks of illness; serology if a retrospective diagnosis is required for a patient with a cough for more than three weeks. In South Canterbury discuss the case with a microbiologist or Medical Officer of Health before testing.

National Mumps Outbreak

Since the last week in 2016 there has been a mumps outbreak in New Zealand (Fig. 2) that began in the Auckland public health region. Up to the 26th of July, 240 cases of mumps had been notified nationally including a 19 year old student with aseptic meningitis.

Figure 2. New Zealand mumps notifications 18th November 2016 to 26th July 2017



Areas affected: 95% of notifications have been in the North Island (13 cases in the South Island) and 18% were overseas (mostly in Fiji) during the incubation time. 68% of notifications have been in Waitemata and Counties Manakau. In the C&PH region there have been 8 notifications in Canterbury and 1 in West Coast.

Ages: 65% of cases notified were aged between 10-29 years.

Immunisation status: Of those with a known vaccination status, 48% were unimmunised and 31% had received two doses of MMR. MMR efficacy (mumps component) after one dose is 64–66% and 83–88% after two doses.

Practice Points

- MMR eligibility:
 - * children at ages 15 months and 4 years.
 - * adults who are susceptible to one or more of measles, mumps and rubella are also eligible for free MMR.
 - * persons who require (re-)vaccination following immune-suppression (if the individual is immune competent enough to safely receive the vaccine).
 - Unimmunised contacts may not develop mumps and MMR is recommended in case they are re-exposed.
 - Post-exposure prophylaxis for mumps is not effective.
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Rheumatic Fever Management

The diagnosis of rheumatic fever can be complex and long term management difficult. To provide consistency of management across the South Island (which has very low rates of rheumatic fever) South Island DHBs have a common rheumatic fever prevention and management plan under the aegis of the

South Island Public Health Partnership, a work stream of the South Island Alliance.

To ensure that finances are not a barrier to care, the plan includes provision of free services for the following:

- monthly prophylaxis (medications and injections)
- quarterly GP visits for review (optional)
- dental treatment (while the patient is on long term antibiotics).

Preventing recurrence

- Long term prophylaxis requires strict, no later than 28 day, benzathine penicillin injections.
- In Canterbury, non-attendance is addressed initially in primary care (Acute Demand nurses at the 24 Hour Surgery, Pegasus community workers, the Whanau Link co-ordinator or District Nursing Service).
- If there are unresolved issues a C&PH Communicable Diseases nurse should be contacted to try and reconnect the patient with the health system.

For further details refer to Health-Pathways.

So far this year two cases have been notified in Canterbury (none in South Canterbury or West Coast).

Legionnaires' Disease — Exposure To Bulk Compost

An elderly Christchurch man recently developed Legionnaires' disease following exposure to bulk compost.

Warnings about the risks of inhaling the dust are already on bags of compost/potting mix and this incident raised concerns that the public may be at risk when purchasing bulk compost/potting mix.

Landscape suppliers will be informed of the importance of maintaining a safe work/retail site as required by legislation.

Summary Of Selected Notifiable Diseases* By District Health Board April—June 2017 And 2016

	Canterbury		South Canterbury		West Coast		TOTALS	
	Cases	Cases	Cases	Cases	Cases	Cases	Cases	Cases
	Apr-Jun 2017	Apr-Jun 2016	Apr-Jun 2017	Apr-Jun 2016	Apr-Jun 2017	Apr-Jun 2016	Apr-Jun 2017	Apr-Jun 2016
Enteric Diseases								
Campylobacteriosis	137	123	24	17	5	9	166	149
Cryptosporidiosis	30	2	2	1	1	0	33	22
Gastroenteritis	10	1	-	-	1	-	11	1
Giardiasis	44	35	11	4	2	-	57	39
Hepatitis A	-	1	-	-	-	-	-	1
Listeriosis	-	1	-	-	-	-	-	-
Paratyphoid	1	1	-	-	-	-	1	1
Salmonellosis	39	28	6	10	1	1	46	39
Shigellosis	6	4	-	-	1	-	7	4
Typhoid	1	-	-	-	-	-	1	-
VTEC	13	2	5	-	-	1	18	3
Yersiniosis	32	32	3	6	-	1	35	39
Other Diseases								
Dengue Fever	6	9	1	-	-	-	7	9
Haemophilus influenza b	-	-	-	-	-	-	-	-
Hepatitis B	-	1	-	-	-	-	-	1
Hepatitis C	-	1	1	-	-	-	1	1
Invasive Pneumococcal dis.	7	11	2	4	-	-	9	15
Lead absorption	-	-	-	-	-	-	-	-
Legionellosis	7	8	-	1	1	1	8	10
Leptospirosis	7	-	3	-	1	-	11	-
Malaria	-	-	-	-	-	-	-	-
Measles	1	-	-	-	-	-	1	-
Meningococcal Disease	4	-	-	-	-	-	4	-
Mumps	3	-	-	-	-	-	3	-
Pertussis	35	74	1	-	3	-	39	74
Rheumatic fever (initial attack)	1	1	-	-	-	-	1	1
Rubella	-	1	-	-	-	-	-	1
Tuberculosis (new case)	3	7	-	-	-	-	3	7

* There was at least one Zika notification in the South Island from April to June 2017 and 2016.