

Medical Officer of Health Public Health ADVICE

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Public Health Report

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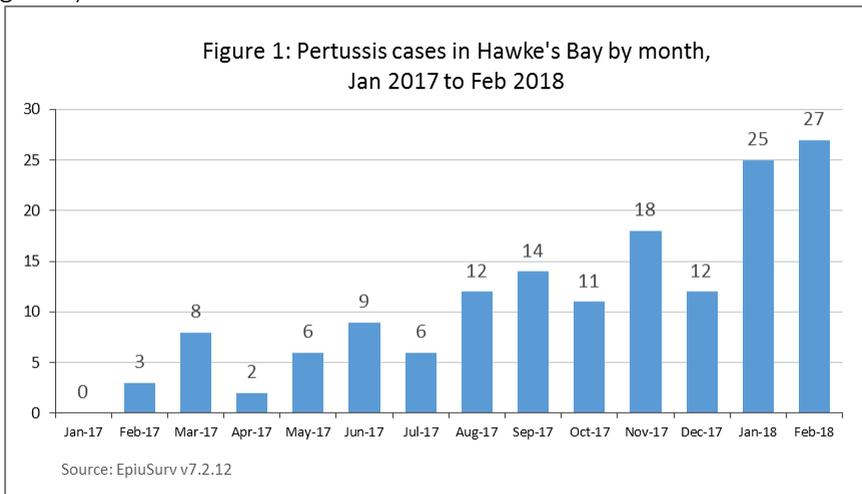
Kia ora and welcome!

This edition of Public Health Advice provides updates on Pertussis, Mumps, BCG vaccine and Syphilis. As usual we provide a summary of the notifiable disease cases you have reported to us.

We appreciate your continued support for public health by referring cases of notifiable disease. Feel free to contact any of the Medical Officers of Health to provide feedback or suggest issues you would like more information on.

Pertussis: current situation and advice on vaccination and testing

Since January 2017, 153 cases were reported in Hawke's Bay; 107 in the last 6 months (see Figure 1)



Pertussis vaccination for pregnant women

It is important to protect infants through a Tdap (Boostrix) dose in pregnancy. A survey of mothers who gave birth in Hawke's Bay in September 2017 found that between a third and half do not have this free, safe, and effective vaccine dose. The main reason was vaccine hesitancy, with nearly as many stating that they had not been offered the vaccine. Primary care can play a critical role in addressing both issues. Please do also record any doses given on the NIR to enable better monitoring.

Testing for Pertussis

We advised in December 2017 that the DHB lab now offers same day pertussis PCR test (if swab is received by 3pm). The testing has been very useful for the clinical and public health response, but its continued availability is at risk if demand is not managed. Testing kits are imported by the supplier from the USA and delays in testing may occur if demand exceeds availability.

Confirmation by testing is not needed if the patient has clearly been exposed to a another laboratory confirmed case prior to developing illness. This means that not every individual should be tested if there are several from the same household with clinically compatible illnesses that started around the same time. Please do remember to notify cases, even if you decide not to test, based on an epidemiological link.

If a suspect case has been coughing for 3 weeks or more, the PCR test is less reliable and should not be taken. As cases are considered not infectious after three weeks, there is no public health action from a diagnosis at that stage. We also do not recommend testing asymptomatic contacts.

Practical aspects of PCR test for pertussis

The swab for the PCR test is available from your usual lab provider, who will also collect the swab for testing by the DHB lab. For this test a nasopharyngeal (NP) swab is needed. This short (40 seconds) [YouTube video](#) shows how to collect the NP swab.

Public health management of cases

In December 2017 the Ministry of Health issued an updated Pertussis chapter of the [Communicable Diseases Control Manual](#). It now states that “When treated with an effective antibiotic (for example, erythromycin), infectivity lasts until 5 days of antibiotics have been taken. This can be shortened to 2 days if azithromycin is used”. Clinicians may wish to take the shortened duration of infectivity into account when assessing azithromycin as a treatment option.

Mumps

The mumps outbreak continues in Auckland, but there has not been any circulation in Hawke’s Bay. There were three confirmed cases in the second half of 2017. Many more cases appeared to be mumps clinically but were PCR negative. This could be due to other viruses that can cause parotitis, but may also be due to inadequate parotid massage before taking the swab for PCR. It is **recommended to massage the parotid gland for 30 seconds before collecting the buccal swab** from Stensen’s area (near the second upper molar).

A swab can be taken up to 7 days after swelling onset. The PCR test becomes less sensitive after 3 days, especially in vaccinated patients.

BCG supplies restored

There has been no supply of BCG vaccine in New Zealand for over 18 months, and during this time we have received 170 referrals in Hawke’s Bay. The MoH expects vaccine supply to resume again in April 2018 and once re-established, our priority groups will be the following:

1. Contacts of TB cases under 5 years of age
2. High-risk infants under 6 months of age
3. High-risk infants under one year of age
4. Eligible children under the age of 5 years travelling to high-risk countries

There will **not** be a catch-up programme for all the referrals we have received, however they will be assessed case-by-case, based on the priorities above and ensuring they meet the eligibility criteria for BCG vaccination as outlined in the Immunisation Handbook 2017 (page 524).

Syphilis referrals

We noted the increase in sexually transmitted infections in the last edition. It continues, including several recent cases of syphilis in Hawke's Bay. Because of the potential implications of undertreated syphilis infections, it is recommended that if you suspect syphilis cases, these should be referred or discussed with the specialist team (as per national NZ Sexual Health Society Guidelines and NZ Formulary). You can refer by phone 0277037391 or fax 068341816. Please include the following details in your referral and advise if you wish to refer a patient or discuss their management: Name/NHI/DOB; Reason for testing; Serology; Previous syphilis testing/treatment: Yes/No; Symptoms: Yes/No; Syphilis contact: Yes/No.

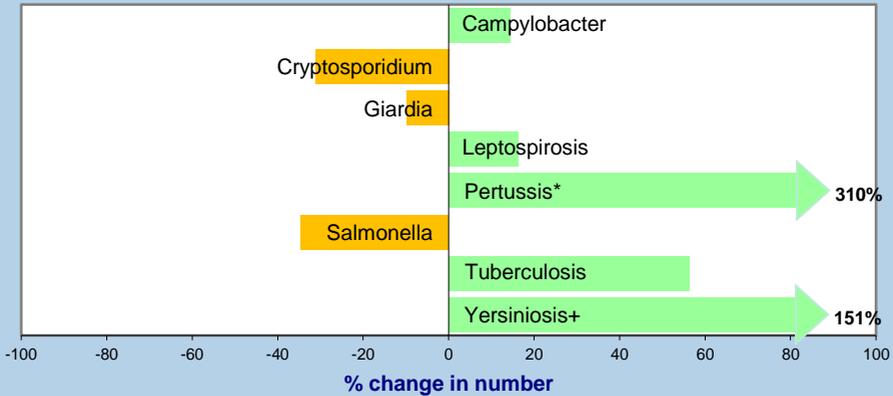
A requirement to notify Medical Officers of Health of Syphilis, Gonorrhoea and HIV infections came into effect in January 2017. As with AIDS notifications clinicians are required to notify cases without identifying information. A process to enable clinicians to meet this requirement is yet to be developed. In the meantime laboratory based surveillance of these conditions continues and newly diagnosed HIV infections continue to be reported to the AIDS epidemiology group.

Notified disease summary

Disease	Hawke's Bay		New Zealand	
	Cases	rate*	Cases	rate*
Campylobacter	270	164.6	6,482	135.2
Chlamydia *	1,532	934.1	30,146	628.9
Cryptosporidium	20	12.2	1,192	24.9
Giardia	65	39.6	1,649	34.4
Gonorrhoea	174	106.1	4,464	93.1
Invasive pneumococcal disease	23	14.0	522	10.9
Latent tuberculosis infection	8	4.9	308	6.4
Legionella	2	1.2	221	4.6
Leptospirosis	15	9.1	150	3.1
Malaria	1	0.6	42	0.9
Meningococcal disease	5	3.0	112	2.3
Mumps	3	1.8	1,337	27.9
Paratyphoid fever	10	6.1	48	1.0
Pertussis	101	61.6	2,144	44.7
Rheumatic fever - initial attack	5	3.0	146	3.0
Salmonellosis	29	17.7	1,118	23.3
Shigellosis	11	6.7	245	5.1
Tuberculosis - new case	12	7.3	299	6.2
VTEC/STEC Infection	11	6.7	548	11.4
Yersinia	34	20.7	918	19.2

* Annualised crude rate per 100,000 population calculated from 2017 mid-year estimates.
Hawke's Bay rate +0.0 higher / lower than the national rate
Note: The figures for Chlamydia & Gonorrhoea are for the 12 months ending Sep 2017.
* Chlamydia is not a notifiable disease

Selected Hawke's Bay disease notifications for July 2017 to Dec 2017 compared to the average for the same period during 2012-2016



Note 1: *denotes $p < 0.0001$ +denotes $p < 0.005$

Commentary on recent trends

Hawke's Bay is experiencing increases in leptospirosis, and has about 3 times the rate of notification as the national rate. The risk factors relate to sheep and cow exposures, including at meat works. Dr Jackie Benschop, a veterinarian, epidemiologist and Massey researcher with extensive experience of the disease will present *Leptospirosis: a global disease but a local phenomenon* at the Grand Round at 12.30 on 14 March at Hastings Hospital, Education Centre. You are most welcome to attend this session.

Pertussis and Yersiniosis rates are similar to national rates, with national increases in rates. There has been an increase in Campylobacter infections over the past two months. The cause is unclear but is not considered likely to be due to drinking water issues.

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

<http://hawkesbay.health.nz/population-health/public-health-advice/>