

COMMUNICABLE DISEASES

For general practitioners and practice nurses

Legionnaire's disease

Legionnaire's disease is a community-acquired severe pneumonia. Of hospitalised patients, 30% require ICU admission and up to 10% die. New Zealand has the highest reported incidence of Legionnaire's disease in the world, and Canterbury has the highest incidence in New Zealand.

In the 12 months to September 67 cases of legionellosis were notified in Canterbury and 6 cases in South Canterbury. There have been no notifications on the West Coast in the last 12 months, despite an average of 4 cases per year over the previous 5 years. Legionnaire's disease is more common in the warmer months, and last November saw a record 24 notifications in Canterbury (Figure 1).

In most countries the dominant Legionella

October 2018

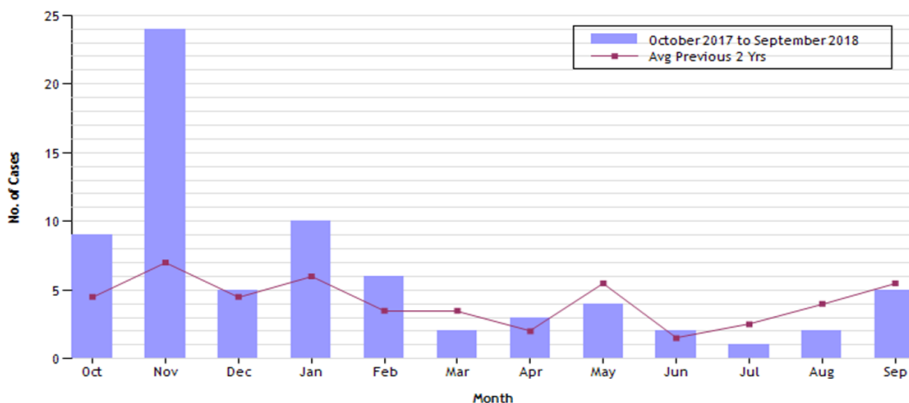
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Community and Public Health
Canterbury
District Health Board
Te Poari Hauora o Waitaha

species is *L. pneumophila*, which can contaminate water sources such as fountains, spa pools, air conditioning systems, and inadequately heated hot water, and has been responsible for large outbreaks.

Fig 1: Legionellosis notifications in CPH DHBs over the last 12 months and previous 2 years



Community & Public Health

Legionnaire's disease practice points

- Remember Legionnaire's disease as a potential cause of community-acquired pneumonia, especially in Spring.
- Ask patients with community-acquired pneumonia about exposure to potting mix or compost, and treat with antibiotics for Legionella if the answer is yes.
- Sputum can be tested for legionella by PCR and culture on request. Urine antigen testing can only detect *L. pneumophila*, so is not helpful after exposure to potting mix.

In contrast, over 50% of New Zealand cases are caused by *L. longbeachae*, found in soil and compost-derived products.

Most cases of Legionnaire's disease occur in people aged over 50. Risk factors for Legionnaire's disease identified in a recent Canterbury study were: COPD, a history of smoking, exposure to compost or potting mix, tipping or trowelling compost or potting mix, and having unwashed hands near the face after exposure to compost or potting mix.

Symptoms are less helpful than risk factors in assessing risk for Legionnaire's disease, but may include dry coughing, high fever, shortness of breath, chest pains, headache, nausea, vomiting, abdominal pain, and diarrhoea, which is more common than with other forms of community-acquired pneumonia.

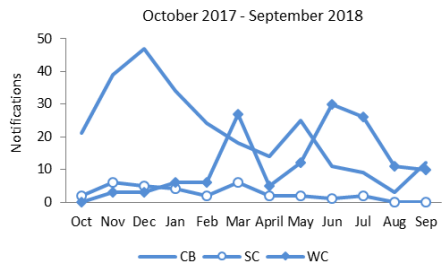
Community and Public Health has been working with the media and industry to promote safe handling of compost and potting mix this Spring, including hand-washing and avoiding inhaling dust. Ad-

vice on *avoiding Legionnaire's disease by using potting mix safely* is available on Healthinfo.

Pertussis

A national pertussis outbreak is ongoing although notifications appear to be returning to endemic levels. Across New Zealand 30 notifications were received in the first week of October - a reduction from the steady 35–55 cases a week since March. Notifications have decreased in all CPH DHBs (Figure 2).

Figure 2: Pertussis notifications in CPH DHBs over the last 12 months

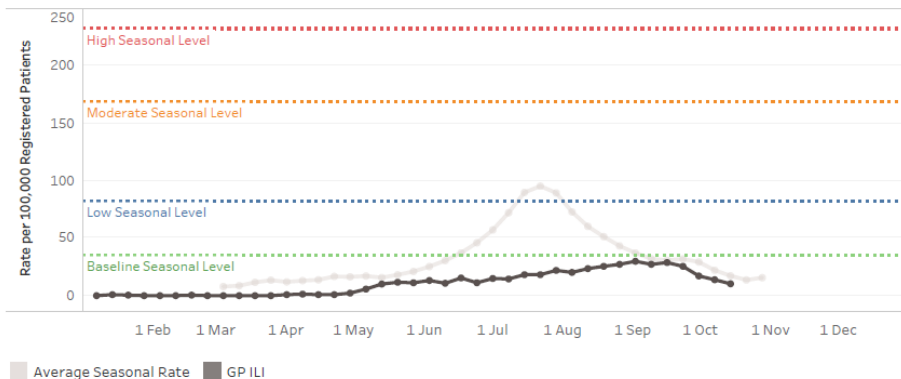


Influenza

We are grateful to practices who have contributed to the sentinel surveillance system again this year. Influenza and other respiratory virus activity has been very low this season across New Zealand (figure 3) and Australia. Influenza A (H1N1)pdm09 has been the dominant influenza virus throughout the season.

2018 influenza vaccination coverage for people aged 65+, as recorded on NIR, was 62% for Canterbury, 60% for South Canterbury, 55% for West Coast, and 56% for all New Zealand. Coverage was lower for Māori, Pacific and Asian people. Practices are encouraged to continue to

Figure 3: New Zealand Weekly General Practice Influenza-like Illness Rates 2018



have influenza vaccine stock available until 31 December 2018 for eligible patients, particularly for all pregnant women.

PHIQ feedback

We are reviewing Community and Public Health surveillance systems and communications and will be in touch with practices over coming months. You are welcome to provide any comments or suggestions to the author by email: daniel.williams@cdhb.health.nz

Enteric diseases in Spring

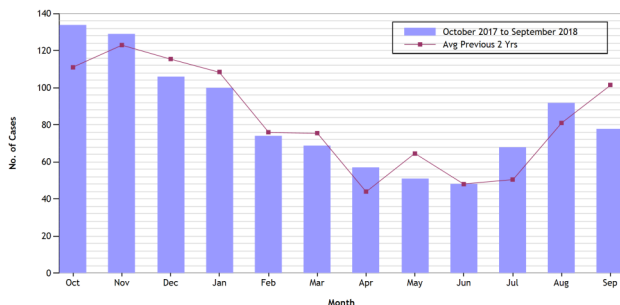
Enteric disease notifications increase

each Spring, particularly in rural areas. Campylobacteriosis accounts for around 40% of disease notifications overall, and is most frequently notified from August through to January (Figure 4). Campylobacteriosis notification rates are highest in the 0-4 and 20-29 year age groups, and in occupational groups working with live animals or meat.

HealthPathways provides a testing guide which recommends faeces testing for patients with acute gastroenteritis if:

- diarrhoea is not resolving after 1 week
 - patient has been to an overseas location with poor water or sanitation
 - patient is a food handler, childcare or healthcare worker, or is immunocompromised
 - patient is severely unwell, febrile, or has bloody diarrhoea
- Antibiotics are contraindicated if VTEC/STEC is a possibility.

Figure 4: Campylobacteriosis notifications in CPH DHBs over the last 12 months and previous 2 years



Summary of Selected* Notifiable Diseases by District Health Board July—September 2018 and 2017

	Canterbury		South Canterbury		West Coast		TOTALS	
	Cases Jul-Sep 2018	Cases Jul-Sep 2017	Cases Jul-Sep 2018	Cases Jul-Sep 2017	Cases Jul-Sep 2018	Cases Jul-Sep 2017	Cases Jul-Sep 2018	Cases Jul-Sep 2017
	Enteric Diseases							
Campylobacteriosis	183	220	41	30	14	20	238	270
Cryptosporidiosis	25	32	9	7	1	2	35	41
Gastroenteritis	12	7	-	-	-	1	12	8
Giardiasis	45	34	4	3	5	2	54	39
Hepatitis A	-	1	-	-	-	-	-	1
Listeriosis	1	-	-	-	-	-	1	-
Paratyphoid	-	1	-	-	-	-	-	1
Salmonellosis	36	50	3	3	6	-	45	53
Shigellosis	4	4	-	-	-	-	4	4
Typhoid	1	-	-	-	-	-	1	0
VTEC	8	3	1	-	-	-	9	3
Yersiniosis	40	43	4	4	3	1	47	48
Other Diseases								
Dengue Fever	2	6	-	1	-	-	2	7
Haemophilus influenzae b	-	-	-	-	-	-	-	-
Hepatitis B	-	-	-	-	-	-	-	-
Hepatitis C	2	-	-	-	-	-	2	-
Invasive Pneumococcal dis.	18	22	1	2	-	-	19	24
Lead absorption	-	-	-	-	-	-	-	-
Legionellosis	8	12	-	2	-	-	8	14
Leptospirosis	3	1	1	0	1	0	5	1
Malaria	2	3	-	-	-	-	2	3
Measles	9	1	-	-	-	-	9	1
Meningococcal Disease	-	5	-	-	-	1	-	6
Mumps	-	7	1	-	-	-	1	7
Pertussis	23	54	2	-	46	1	71	55
Rheumatic fever (initial attack)	-	2	-	-	-	-	-	2
Rubella	-	-	-	-	-	-	-	-
Tuberculosis (new case)	15	9	1	-	-	-	4	2

* Other notifications: 1 Hepatitis NOS (South Canterbury)