

# PUBLIC HEALTH POST

Public Health for Primary Care in Wellington, Wairarapa and the Hutt Valley

Also available online at [www.rph.org.nz](http://www.rph.org.nz)

Issue 40 - March 2020

## COVID-19 SITUATION

DR CRAIG THORNLEY, MEDICAL OFFICER OF HEALTH

Following the first reports of cases with an acute respiratory syndrome in Wuhan, China, in late December 2019, a previously-unknown coronavirus was identified as the causative agent. On 12 February the novel coronavirus was officially named SARS-CoV-2, and the associated illness is referred to as COVID-19. As of 9 March 2020, there are five confirmed cases of COVID-19 in New Zealand.

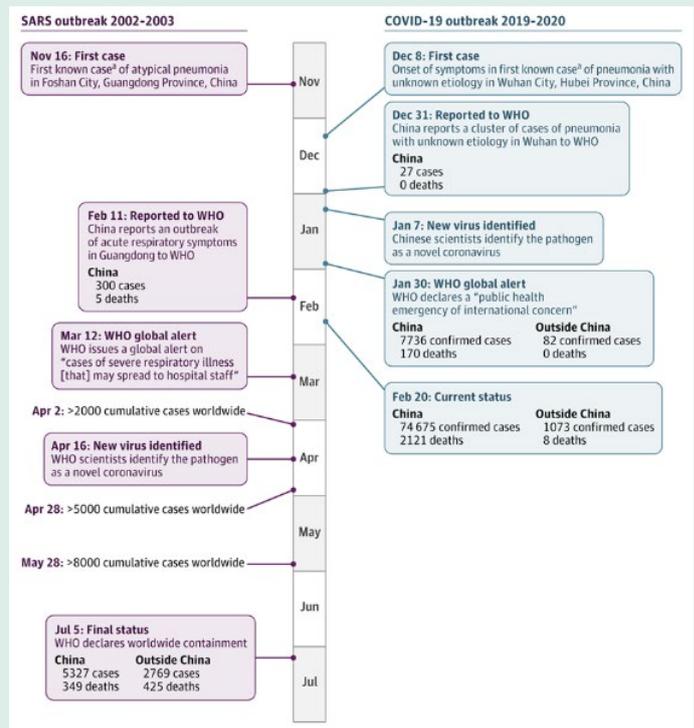
Coronaviruses are RNA viruses with a characteristic crown-like appearance on electron microscopy, and have been identified as human pathogens since the 1960s. Epithelial cells in the respiratory and gastrointestinal tract are the primary target cells, and viral shedding can therefore occur via these systems. Seven coronaviruses have been shown to infect humans; recently-emerged zoonotic coronaviruses that have caused human outbreaks (SARS-CoV in 2002, MERS-CoV in 2012 and now SARS-CoV-2) are all betacoronaviruses.

COVID-19 manifests as flu-like illness (fever, cough, dyspnoea, myalgia, fatigue), and more serious cases develop severe pneumonia, acute respiratory distress syndrome, sepsis and septic shock. People with pre-existing chronic conditions, (such as heart disorders, diabetes, liver and respiratory disease) appear to be more vulnerable to severe illness and death.

The New Zealand pandemic plan (NZIPAP; <http://bit.ly/2vKN36B>) provides a framework for guiding the response; considerable public health planning and action is occurring within the “keep it out” (border protection) and “stamp it out” (intensive contact tracing and cluster control) phases.

Information is being updated frequently. Health professionals can find the latest COVID-19 updates on the Ministry of Health webpage for health professionals (<http://bit.ly/2womowR>). The site contains multiple guides and resource documents, as follows:

- Current COVID-19 case definition (<http://bit.ly/2SRauDf>)
- Interim advice for health professionals
- Primary care quick reference guide
- Advice for primary care reception staff
- Primary care triage checklist form
- Infection prevention and control advice



Timeline Comparing the Severe Acute Respiratory Syndrome (SARS) and Coronavirus Disease 2019 (COVID-19) Outbreaks.

From: Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72 314 Cases From the Chinese Center for Disease Control and Prevention JAMA. Published online February 24, 2020. doi:10.1001/jama.2020.2648

Other useful websites include:

- Regional Public Health page for health professionals: <http://www.rph.org.nz/health-professionals/coronavirus-covid-19/>
- Posters and resources for primary care are available here: <http://www.rph.org.nz/health-professionals/coronavirus-covid-19/> and <https://www.hpa.org.nz/covid-19>
- World Health Organization: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> (see “Situation Reports” for daily updates).
- Johns Hopkins University global case dashboard: <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

# INCREASE IN STEC NOTIFICATIONS IN THE WELLINGTON REGION RESULTING FROM CHANGES IN LABORATORY TESTING

DR CRAIG THORNLEY, MEDICAL OFFICER OF HEALTH

## What is STEC?

STEC is the acronym for shiga-toxin producing *Escherichia coli*, also known as verocytotoxin-producing *E. coli* (VTEC). A well-known STEC serotype is *E. coli* O157:H7. STEC infections can cause severe illness, including haemorrhagic colitis; microthrombi and angiopathic effects of the shiga toxin can also lead to complications such as haemolytic-uraemic syndrome (HUS) and thrombotic thrombocytopenic purpura (TTP). Cattle and other ruminants are a reservoir for STEC bacteria, and infections commonly occur through contact with animals or farm environments, and by ingestion of contaminated food or water.

## Changes to faecal pathogen testing in 2018

The rate of STEC detections and notifications in the greater Wellington region has been markedly increased since January 2018. The increase coincided with changes by Wellington SCL, the regional community laboratory service provider, to routine testing of community gastroenteritis faecal specimens. Testing for bacterial pathogens had previously been based on culture and isolation of aetiologic agents; from January 2018, polymerase chain reaction (PCR) is being used to detect genetic sequences associated with common causes of acute gastroenteritis, including STEC. PCR is recognised as being a much more sensitive test for STEC than culture. On the Wellington SCL laboratory result, a positive test for STEC is noted as “Shiga Toxin 1” or “Shiga Toxin 2” detected.

## Resulting increase in STEC detection and notification

Between 2014 and 2017, there were 39 notifications of STEC infection in the greater Wellington region, a mean of 9.8 cases per year. From January 2018 until September 2019 there were 301 STEC notifications; a mean of 14.3 cases per month and the equivalent of 172 cases per year. This represented a greater than 17-fold increase over the notification rate prior to January 2018 (Figure 1).

## Changes in characteristics of notified STEC cases

The clinical and demographic characteristics among patients notified with STEC after January 2018 (i.e., PCR-detected cases) was noted to differ from those of patients with illness detected prior to the change in laboratory methods (culture-detected cases). There were three principal differences:

- PCR-detected cases tended to be older than culture-detected cases. The median age of PCR-detected cases was 38 years; by comparison, the median age of culture-detected cases was 14 years. Almost two-thirds of patients reported 2018-2019 were aged 25 years or

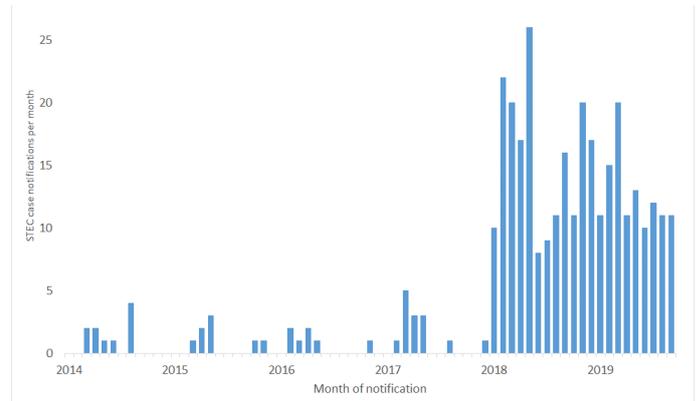


Figure 1: STEC notifications in the greater Wellington region, by month, January 2014 - September 2019

older; in the years 2014-2017 only a third were in this age group ( $p < 0.001$ ).

- Patients detected with STEC after the introduction of PCR testing were less likely to have severe illness. 85% (33/39) of patients notified with STEC between 2014-2017 presented with bloody diarrhoea or HUS; from 2018 onward, bloody diarrhoea or HUS was present in only 19% (57/301).
- Patients detected with STEC after January 2018 were more likely to have had symptoms for an extended period before clinical presentation and testing. Before introduction of PCR testing, all patients diagnosed with STEC had had symptoms of less than one-month's duration before presentation (as determined by the date of specimen collection). From January 2018 onward, acute presentations still accounted for the majority of notifications, but 23% of cases were recorded to have had symptoms for at least one month before testing occurred; often this duration extended for many months.

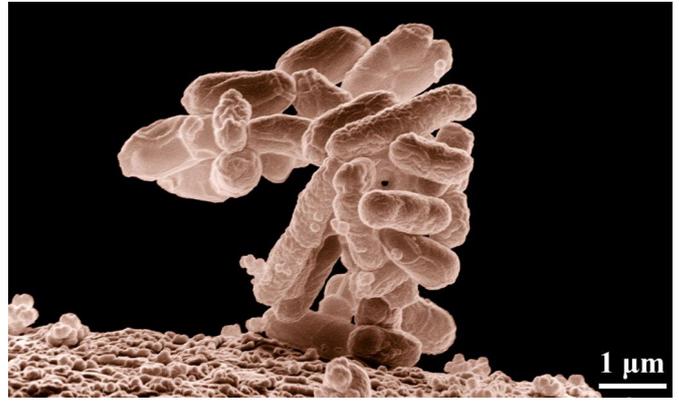
In summary, the increased sensitivity of STEC identification offered by PCR testing appears to have resulted in STEC detection in people with less severe and often chronic bowel symptoms, and in people in older age groups.

## Changes in STEC public health management

The changes in STEC epidemiology in the greater Wellington region had been mirrored in other regions where community laboratories had introduced PCR testing for enteric pathogens. Recognising the often-milder illness apparent in patients with PCR-detected STEC infection, the Ministry of Health has revised its guidance for STEC management: <https://www.health.govt.nz/our-work/diseases-and-conditions/communicable-disease-control-manual>. Patients with STEC infection are advised not to return to school, early childhood centres or work, particularly in high risk occupations, until free of symptoms

for at least 48 hours. No microbiological clearance is required before returning to normal activities. Regional Public Health has established a triage process in which notified patients aged under five years or who work as food handlers, early childhood teachers or in other high risk occupations are contacted and counselled about the need to delay return to normal activities until symptom-free for 48 hours.

Image: Low-temperature electron micrograph of a cluster of *E. coli* bacteria, magnified 10,000 times. Each individual bacterium is oblong shaped. Photo by Eric Erbe; this photo is in the public domain.



## TOXIC ALGAE POISONING

DR TESS LUFF, PUBLIC HEALTH REGISTRAR AND  
ELLANA CLENDON, HEALTH PROTECTION OFFICER

### What is toxic algae?

Potentially toxic algae (or blue-green algae) are not in fact algae, but cyanobacteria. The term 'toxic algae' is the most commonly recognised term and is therefore used to communicate risk.

Cyanobacteria are photosynthetic organisms that helped transform the earth's original atmosphere into an oxygen rich environment millenia ago. There are a many different cyanobacteria, and some produce cyanotoxins which present a risk to human (and animal) health.<sup>1</sup>

Toxic algae is found in freshwater and is present year round, usually posing little risk to humans. The risk increases when it proliferates or 'blooms', which usually happens during warm, dry weather with the right mix of nutrients.

Two main types of cyanobacteria are of risk to human health; benthic and planktonic. Benthic species form mats on river rocks or sediment which can then detach and float to the river side; we see this in the Hutt, Waipoua, Waikanae and more recently Ōtaki Rivers, amongst others. Planktonic species are free-floating and can cause lakes and ponds to have a 'pea-soup' appearance when in bloom – we see these types of blooms in Henley Lake in Masterton.

### Cyanotoxin poisoning

Notifications of human cyanotoxin poisoning are rare. Severe illness and death have been reported overseas,<sup>1,2</sup> however this is very uncommon and most often related to the rare occurrence of drinking water contaminated with cyanotoxin,<sup>3</sup> which has not been an issue in New Zealand. While there have been no deaths reported in this country, cyanotoxin poisoning remains a real and potentially fatal risk if accidentally ingested.<sup>2</sup> Children are at a much higher risk compared to adults due to their smaller size and increased likelihood of accidental ingestion.



Image: Benthic cyanobacteria on a river stone. Source: LAWA <https://www.lawa.org.nz/learn/factsheets/potentially-toxic-algae/>

Dogs are particularly susceptible to poisoning from cyanotoxins as they are attracted to the musty smell and taste of toxic algae and can eat large amounts while playing in water. Dog deaths have occurred in relation to cyanobacterial mats in the Hutt River, which have spurred considerable research into the topic in the Wellington region.<sup>4</sup>

The amount of toxin in any one piece of cyanobacterial mat is variable, therefore it is difficult to predict if there will be symptoms after ingestion or skin contact. Potentially even a fifty cent coin sized amount of toxic algae could cause harm if swallowed. Symptoms will usually occur within hours of ingestion and if no symptoms have developed after six hours, it is unlikely they will.<sup>5</sup>

There are a number of cyanotoxin types with a variety of mechanisms of action but they are most commonly neurotoxic or hepatotoxic<sup>6</sup>. In the Greater Wellington region the presence of neurotoxin is most likely. A survey of cyanobacterial mats (usually found in rivers at times of algal bloom) found only anatoxin (a neurotoxic cyanotoxin) in over half of the mats sampled.<sup>5</sup>

## Symptoms

If enough cyanotoxin is ingested it can cause<sup>7</sup>;

- Nausea and vomiting
- Numbness, tingling, muscle twitches
- Liver function derangement or failure
- Weakness, breathing difficulties and rarely convulsions, paralysis, death

Direct contact can cause skin or eye inflammation and inhalation can cause upper respiratory tract irritation.

## Management

### 1. Immediate action

There is no antidote for cyanotoxin poisoning, therefore management is supportive. Consider other causes of symptoms. Manage as for poisoning, for example, if ingested, activated charcoal may be useful within one hour of exposure. Contact the National Poisons Centre on 0800 764 766 for advice.

### 2. Testing

Cyanotoxins are not currently tested for in human biological samples, however this may be available in the future. If there is a strong suspicion of cyanotoxin poisoning, environmental sampling can be considered to support the diagnosis.

### 3. Public Health notification

Notification to the local public health unit is required. We will gather information from you detailing the event. Key information includes;

- The location and condition of the water
- When and for how long the person was in the water
- Nature of the contact (e.g. swallowed water, touched algal mat, swimming)
- Other recent contact with recreational water
- Details of symptoms including times of onset
- Clinical course and past medical history

## Councils and Regional Public Health work together to monitor toxic algae and communicate risk

The Greater Wellington Regional Council monitor Hutt Valley and Wairarapa sites and the Kāpiti District Council perform monitoring along the Kāpiti Coast. RPH receives their assessments and work in conjunction to determine the risk communication and action required.

## Common sites of toxic algae blooms in the greater Wellington region:

- Hutt River
- Waipoua River
- Henley Lake in Masterton
- Jim Cooke Park, Waikanae River

Check the LAWA 'Can I swim here' website for current warnings <https://www.lawa.org.nz/>



Image: Benthic cyanobacterial mat on a rivers edge. Source: LAWA <https://www.lawa.org.nz/learn/factsheets/potentially-toxic-algae/>

## Useful resources

- National Poisons Centre on 0800 764 766
- LAWA "Can I swim here?" website <https://www.lawa.org.nz/>
- Greater Wellington Regional Council frequently asked questions <https://www.gw.govt.nz/toxic-algae-faqs/>

## What are the key messages to pass on to the community?

- Know what toxic algae looks like and avoid contact if seen.
- Supervise children around waterways of risk.
- Check the LAWA website and the local and regional council websites/facebook accounts for any warnings.
- Keep your dog on a lead when the algae is visible and take your dog to the vet immediately if any toxic algae has been eaten.
- If you have symptoms after contact with toxic algae, seek medical attention and phone the National Poisons Centre for advice.

## References

1. Carmichael WW, Azevedo SM, An JS, et al. Human fatalities from cyanobacteria: chemical and biological evidence for cyanotoxins. *Environ Health Perspect.* 2001;109(7):663–668. doi:10.1289/ehp.01109663
2. Stewart I, Webb PM, Schluter PJ, Shaw GR. Recreational and occupational field exposure to freshwater cyanobacteria—a review of anecdotal and case reports, epidemiological studies and the challenges for epidemiologic assessment. *Environ Health* 2006; 5: 6.
3. Cheung MY, Liang S, Lee J. Toxin-producing cyanobacteria in freshwater: A review of the problems, impact on drinking water safety, and efforts for protecting public health. *Journal of Microbiology.* 2013; 51(1):1-0.
4. Heath MW, Greenfield S. Benthic cyanobacteria blooms in rivers in the Wellington Region. Findings from a decade of monitoring and research. Greater Wellington Regional Council 2016. <http://www.gw.govt.nz/assets/council-publications/REPORT-Benthic-cyanobacteria-blooms-in-rivers-in-the-Wellington-Region-A-decade-of-monitoring-and-research.pdf>
5. Spoerke DG, Rumack BH. Blue-green algae poisoning. *J Emerg Med* 1985; 2 (5): 353-5.
6. Dittmann E, Wiegand C. Cyanobacterial toxins—occurrence, biosynthesis and impact on human affairs. *Mol Nutr Food Res* 2006; 50 (1): 7-17.
7. Funari E, Testai E. Human health risk assessment related to cyanotoxins exposure. *Critical reviews in toxicology.* 2008;38(2):97-125.

## WHAT ARE YOU REPORTING?

### THREE MONTHS OF NOTIFIED CASES IN THE HUTT VALLEY, WAIRARAPA, WELLINGTON

Notifiable condition	Number of cases				
	MidCentral	Hutt Valley	Capital & Coast	Wairarapa	Total
Campylobacteriosis	5	58	105	39	207
Chikungunya fever			1		1
Cryptosporidiosis		3	12	3	18
Dengue fever				1	1
Gastroenteritis: unknown cause		3	7	2	12
Giardiasis	1	7	38	3	49
Hepatitis A			1		1
Invasive pneumococcal disease		7	4	2	13
Latent tuberculosis infection		3	2		5
Legionellosis		1			1
Malaria			1		1
Measles			10		10
Meningococcal disease			3		3
Mumps			8		8
Pertussis	1	12	31	1	45
Rheumatic fever - initial attack		1	1		2
Salmonellosis		9	15	3	27
Shigellosis		1	5		6
Tuberculosis - new case		4	7		11
Tuberculosis - relapse or reactivation		2			2
VTEC/STEC infection		8	19	9	36
Yersiniosis		15	52	7	74
<b>Grand total</b>	<b>7</b>	<b>134</b>	<b>322</b>	<b>70</b>	<b>533</b>

Table. Notified cases by DHB in the Hutt Valley, Wairarapa and Wellington 1/10/2019 – 31/12/2019. EpiSurv report P016 accessed 28/01/2020

#### Notes <sup>(1,2)</sup>

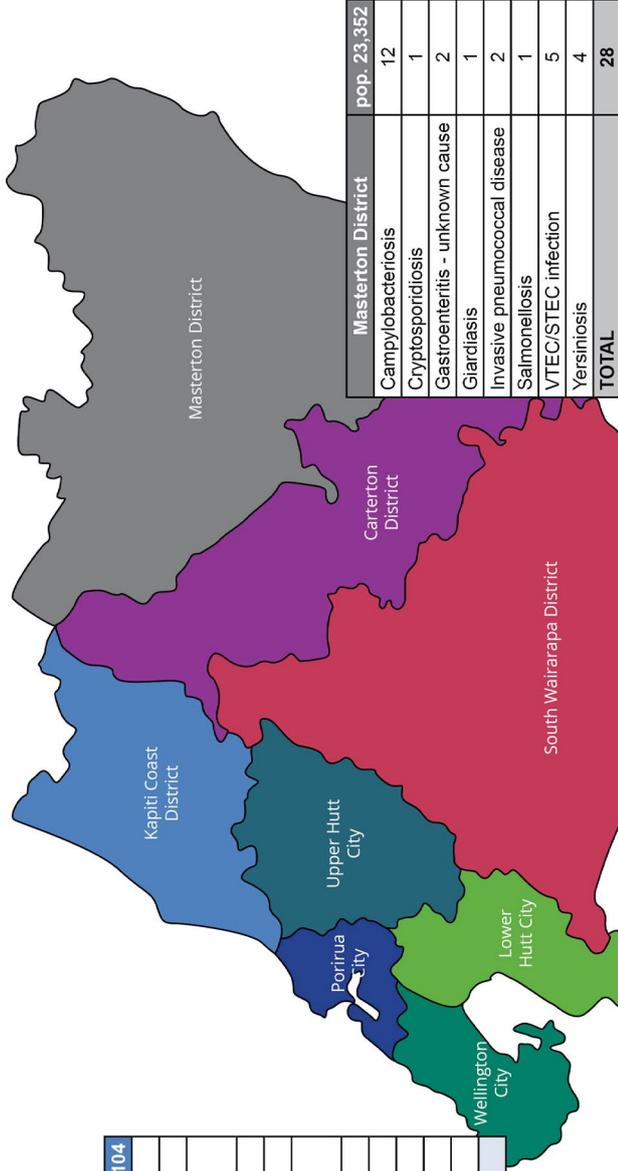
1. Mosquito-borne infections. Two cases were notified during the quarter, one case each of chikungunya and malaria. The patient with chikungunya had a history of travel to India and the patient with malaria had arrived in New Zealand after living in Nigeria.
2. Hepatitis A. During the quarter there was a notification of hepatitis A in a woman from the Kāpiti Coast. The patient had travelled to Fiji; five contacts received post-exposure hepatitis A vaccination as a prophylactic intervention.
3. Legionellosis. An elderly patient from Lower Hutt was notified with legionellosis requiring hospital admission; the infection was confirmed as *Legionella longbeachae*. The patient was a keen gardener of potted plants and had extensive contact with compost and potting mix, and this appeared the most likely source of infection.
4. Meningococcal disease. There were three cases notified during the quarter; one young adult and two patients aged over 60 years. The cases were not linked, and each had a different *Neisseria meningitidis* serogroup: B, Y and W. All were of European ethnicity.
5. Measles. The 10 cases of confirmed measles notified between October and December 2019 in the region were part of the national outbreak of measles; all cases in the greater Wellington region were either directly or indirectly linked to cases occurring in other parts of New Zealand, particularly Auckland. Cases ranged in age from 9 months to 58 years; seven cases were aged between 19-29 years. Of the 10 cases, three occurred among Pacific peoples, one was Māori, one was Indian and the remainder were European.
6. Rheumatic fever. There were two notifications in the quarter, a 15-year-old from Porirua and a 25-year-old from Lower Hutt. Both were people of Pacific ethnicity.

#### References

1. The Institute of Environmental Science and Research Ltd (ESR). EpiSurv database of notifiable conditions, 2019.
2. Regional Public Health. Notifiable condition surveillance records, 2019.

# Regional Public Health Notifications

1 October 2019 to 31 December 2019



Wellington City	pop. 190,956
Campylobacteriosis	66
Chikungunya fever	1
Cryptosporidiosis	8
Gastroenteritis - unknown cause	6
Giardiasis	29
Invasive pneumococcal disease	2
Latent tuberculosis infection	2
Malaria	1
Measles	6
Meningococcal disease	2
Mumps	5
Pertussis	15
Salmonellosis	8
Shigellosis	3
Tuberculosis disease - new case	5
VTEC/STEC infection	13
Yersiniosis	38
<b>TOTAL</b>	<b>210</b>

Kapiti Coast District	pop. 49,104
Campylobacteriosis	23
Cryptosporidiosis	2
Gastroenteritis - unknown cause	1
Giardiasis	7
Hepatitis A	1
Invasive pneumococcal disease	1
Pertussis	10
Salmonellosis	4
Shigellosis	1
VTEC/STEC infection	3
Yersiniosis	5
<b>TOTAL</b>	<b>58</b>

Lower Hutt City	pop. 98,238
Campylobacteriosis	33
Cryptosporidiosis	3
Gastroenteritis - unknown cause	2
Giardiasis	4
Invasive pneumococcal disease	5
Latent tuberculosis infection	2
Legionellosis	1
Pertussis	12
Rheumatic fever - initial attack	1
Salmonellosis	5
Tuberculosis disease - new case	4
Tuberculosis disease - relapse or reactivation	1
VTEC/STEC infection	6
Yersiniosis	9
<b>TOTAL</b>	<b>88</b>

Porirua City	pop. 51,717
Campylobacteriosis	21
Cryptosporidiosis	2
Giardiasis	3
Invasive pneumococcal disease	1
Measles	4
Meningococcal disease	1
Mumps	3
Pertussis	7
Rheumatic fever - initial attack	1
Salmonellosis	3
Shigellosis	1
Tuberculosis disease - new case	2
VTEC/STEC infection	3
Yersiniosis	9
<b>TOTAL</b>	<b>61</b>

Upper Hutt City	pop. 40,179
Campylobacteriosis	25
Gastroenteritis - unknown cause	1
Giardiasis	3
Invasive pneumococcal disease	2
Latent tuberculosis infection	1
Salmonellosis	4
Shigellosis	1
Tuberculosis disease - relapse of reactivation	1
VTEC/STEC infection	2
Yersiniosis	6
<b>TOTAL</b>	<b>46</b>

Carterton District	pop. 8,235
Campylobacteriosis	16
Cryptosporidiosis	1
Giardiasis	1
Pertussis	1
VTEC/STEC infection	1
Yersiniosis	1
<b>TOTAL</b>	<b>21</b>

South Wairarapa District	pop. 9,528
Campylobacteriosis	11
Cryptosporidiosis	1
Dengue fever	1
Giardiasis	1
Salmonellosis	2
VTEC/STEC infection	3
Yersiniosis	2
<b>TOTAL</b>	<b>21</b>

Masterton District	pop. 23,352
Campylobacteriosis	12
Cryptosporidiosis	1
Gastroenteritis - unknown cause	2
Giardiasis	1
Invasive pneumococcal disease	2
Salmonellosis	1
VTEC/STEC infection	5
Yersiniosis	4
<b>TOTAL</b>	<b>28</b>

## Notes:

1. Population data from Statistics New Zealand 2013 Census 'usually resident population.'
2. Tables present the number of 'confirmed cases' with additional 'probable cases' in brackets.
3. Notification data from: The Institute of Environmental Science and Research Ltd. EpiSurv database of notifiable conditions, 2019. EpiSurv report P016 accessed 28/01/2020.

Figure: Notifiable cases in the Hutt Valley, Wairarapa and Wellington 01/10/2019 – 31/12/2019, tabulated by territorial authority.

## CLUSTER OF ANTIBIOTIC RESISTANT BACTERIA IN LOWER HUTT, 2018-19

Carbapenemase-Producing Enterobacterales (CPE) are a serious threat to healthcare. Carbapenems are  $\beta$ -lactam antibiotics that are one of the few remaining treatment options available for patients with systemic gram-negative infections that are resistant to other medications. CPE are defined as enteric bacteria that carry genes that encode carbapenemase enzymes.

CPE have spread rapidly around the globe, and in many countries these bacteria are endemic in the community and well-established in healthcare facilities. CPE were first detected in New Zealand in 2009, and over the last decade the annual number of detections has increased. The majority of detections are linked with overseas travel to regions where CPE are common.

Between August 2018 and June 2019, CPE was detected in 14 people in Lower Hutt; subtyping of the isolates indicated that all were OXA-48-producing *E. coli* bacteria, and genetic analysis revealed that the strains were very closely related. In all but one case, the detections were among people who were either asymptomatic or presented with uncomplicated infections, either at hospital or in primary care; in one patient the infection had led to

urosepsis. All patients with illness recovered well following treatment. A further four people screened because they were linked to the initial cases were also found to have the same organism; none of these people were unwell.

Investigation by Hutt Hospital and Regional Public Health staff determined that transmission in the cluster had partly occurred in the hospital and partly in the community. Action was taken to prevent further transmission, and no new detections have occurred since June 2019.

This incident illustrates the importance of investigating for the source of infection in clusters of people with microbiologically-linked antimicrobial-resistant (AMR) bacteria, particularly among those that are uncommonly identified in New Zealand. Healthcare providers have an important role to play in ensuring prudent use of antibiotics, and to ensure that any antibiotics prescribed to patients known to have had AMR detection are chosen carefully to avoid encouragement of broader-spectrum resistance. In long term care facilities and healthcare settings, hand hygiene and effective environmental cleaning, particularly of bathrooms, are essential to prevent institutional transmission of AMR.

## PORIRUA CHILDREN'S EAR VAN

We strongly suggest to use the 3DHealthPathways for information on assessment, management and referral criteria for a health condition. For children's ears see:

### Management of AOM:

3DHB ENT pathway: <https://3d.healthpathways.org.nz/index.htm>

- Surgical OR Child and Young Person Health
- ENT and Hearing
- Acute Otitis Media, OME

### Acute otitis media

1. Provide symptomatic relief e.g. paracetamol or ibuprofen.

2. Consider antibiotics if:

- age < 2 years
- fever > 38° C
- symptoms persist > 36 hours

The appropriate dose of amoxicillin is 40mg/kg/day for one week. *Note: The NZ Formulary dose differs at 15 to 30mg/kg daily in three divided doses (maximum of 1.5g daily).*

The alternative choice to amoxicillin is co-trimoxazole.

3. If frequent repeated acute otitis media, use amoxicillin 50 to 80 mg/kg/day for one week.



4. Advise parents to stop smoking.

5. Continue to treat each episode, including after referral, while waiting for specialist review.

6. Review after six weeks to ensure effusion has gone.

3DHB pathway: <https://3d.healthpathways.org.nz/index.htm>

- Surgical
- ENT
- Ear discharge

### Ear Discharge

In all cases of discharging ears:

- Instruct the patient to mop out discharge frequently until settled.

- The standard quantity of 1 to 2 drops recommended on the bottle is inadequate. Use 5 to 6 drops, every six to eight hours.
- While the ear is in the discharging phase, the risk of inner ear toxicity from ear drops is extremely low. Continue the drops until the ear stops discharging.
- If there is no improvement after one week of drops, suspect drug resistance, take a swab, and consider another medication.
- Instruct patient on how to correctly apply ear drops.
- No swimming until at least four weeks after the discharge has stopped.
- Always review the ear drum once the discharge has settled to exclude serious pathology and give prevention advice.

## HEALTH EDUCATION RESOURCES

The Regional Public Health resource room stocks a catalogue of free health resources from the Health Promotion Agency (HPA) and the Ministry of Health.

Resources can be ordered online through [www.healthed.govt.nz](http://www.healthed.govt.nz) or everyone is welcome to visit our Health Education Resource Room to view and take resources. We are located on Level 1 of the Community Health Building, Hutt Hospital. Opening hours are Monday to Friday – 8am to 4.30pm.

Laurina, who has run our super smooth resource room for the past 25 years, is retiring. We greatly appreciate Laurina's contribution to Regional Public Health.

**Please update your contact details for ordering resources to: phone (04) 570 9691, fax: (04) 570 9211 or email: [healthed@huttvalleydhb.org.nz](mailto:healthed@huttvalleydhb.org.nz)**

## DISEASE NOTIFICATION – HOW YOUR GENERAL PRACTICE CAN HELP

To enable our staff to promptly initiate disease follow up we need your help in the following ways:

1. Inform your patient of the illness they have been diagnosed with or exposed to and that public health staff may be in contact.
2. Notify Regional Public Health of the disease within a timely fashion (after the case has been informed) - by phone for urgent notifications (as soon as you are aware), or by faxing a case report form for non-urgent (within one working day).

You can find a list of [urgent vs. non-urgent notifications](#) on the Regional Public Health website under Health Professionals > Notifiable Diseases.

3. Complete all sections of the [form](#), especially:
  - work/school/early childhood centre information
  - name of parent or guardian for a child under 16 years old.

The 3D HealthPathways includes a pathway on reporting notifiable diseases: <http://3d.healthpathways.org.nz>

## PUBLIC HEALTH ALERTS

Regional Public Health communicates public health alerts to primary care practices by email. These communications often contain information that needs to be urgently taken on board by general practitioners and primary care nurses. Recently, these alerts have included important updates on COVID-19. The alerts are also available on our website: <http://www.rph.org.nz/health-professionals/public-health-alerts/>.

Please contact Regional Public Health at [rph@huttvalleydhb.org.nz](mailto:rph@huttvalleydhb.org.nz) if you have not been receiving alerts, or to check and confirm that we have your correct details.

If you are not yet receiving alerts by email, please contact us at the above email, and request to be added to our distribution list.

### Ordering pamphlets and posters:

To order any Ministry of Health resources, please contact the Health Information Centre on (04) 570 9691 or email [healthed@huttvalleydhb.org.nz](mailto:healthed@huttvalleydhb.org.nz)

Produced by: Regional Public Health  
Private Bag 31-907, Lower Hutt 5040  
Ph: (04) 570 9002, Fax: (04) 570 9211

For enquiries regarding the Public Health Post, please contact Demelza O'Brien, Regional Public Health, by email [demelza.obrien@huttvalleydhb.org.nz](mailto:demelza.obrien@huttvalleydhb.org.nz) or by phone (04) 570 9002. Alternatively contact one of the regional Medical Officers of Health: **Dr Jill McKenzie, Dr Craig Thornley, Dr Annette Nesdale and Dr Stephen Palmer.**