# PUBLIC HEALTH POST

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

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Issue 38 - September 2019

**Regional Public Health** 

HAUORA Ā IWI KI TE ŪPOKO 🔵 O TE IKA A MĀUI

Better health for the greater Wellington region

#### MEASLES UPDATE IN THE GREATER WELLINGTON REGION Dr Annette Nesdale, Medical Officer of Health Number of confirmed measles notifications by week and district health board, 1 January – 20 September 2019. Northland Waitemata Auckland Counties Manukau Waikato Lakes Taranaki Hawke's Bay Bay of Plenty Number of confirmed measles cases 200 Midcentral Hutt Valley Capital and Coast Canterbury South Canterbury Wairarapa 180 Southern 160 140 120 100 80 60 40 20 0 19-Apr 26-Apr 3-May 10-May 17-May 24-May 31-May 12-Jul 9-Aug 16-Aug 30-Aug 12-Apr 4-Jun 21-Jun 25 26-Jul 2-Aug 23-Aug 5-Apr Şē Şeb Sep 28-Jun 29-Mar ab 혚 ģ 14 15 16 17 18 19 20 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 13 21 37 38 Week number and date (ending Friday)

Figure 1: Number of confirmed measles notifications by week and district health board, 1 January – 20 September 2019.

Nationally 1544 measles cases have been notified (1 January to 20 September 2019) and 83% of these are in the greater Auckland region. Age groups accounting for a high proportion of cases are those aged 20-29 years (33% of cases) followed by those aged 10–19 years (21% of cases and those aged <12 months (14% of cases). Overall 34% of measles cases have required hospital care.

Higher proportions of hospitalisation occur in those <12 months (60% this age range require hopsital care); 36% of Pacific people and 40% of Maori with measles require hospital care). The distribution and DHB of these cases can be seen in figure 1.

#### Measles in the greater Wellington region 2019

So far there have been 25 confirmed cases of measles (12 in CCDHB, 9 in HVDHB, 1 in the Wairarapa DHB and 3 cases in the RPH district of MidCentral DHB). 4 of these people required hospital care. The mean age of people with measles was 21 years (range 7 months to 49 years).

Without intervention measles will quickly spread in the community. The diagram below shows the public health response for three separate people who subsequently developed measles after their holiday in the Wellington region. While here, they had contact with a number of people and undertook a range of activities not knowing they were in the early infectious stage of measles.

Case 1 (on holiday from the Bay of Plenty) had 11 contacts who we determined were protected from measles (in green) and 2 people (in red) who were not protected and subsequently developed measles. As these 2 people were in home quarantine the entire time they were infectious there were no further cases in this chain. The public health follow up of case 1 involved 51 interactions; that is the number interactions between the public health nurses/medical staff and the person with measles and all

their contacts. These interactions include arranging blood tests, talking to GPs, employers/schools, daily phone calls, monitoring for symptoms).

Case 2 (on holiday from Melbourne) resulted in 9 further measles cases and there were 303 interactions for the 81 people followed up.

The follow up of case 3 (on holiday from Singapore) resulted in 7 further measles cases over four generations of transmission.

For more information and resources on measles: www.rph.org.nz/measles



Figure 2: Infographic poster showing three seperate measles cases in the Wellington region.

# **RPH PRIMARY CARE LIAISON PROJECT**

RPH are in the planning stages of a primary care health promotion project. We are aiming to link more closely with primary care, ensuring you are up to date with communicable disease trends and illness throughout the year. The goal is to support each PHO and practice by providing a single point of contact in the Communicable Disease and Housing team, that person will liaise closely with the practice and be the Communicable Disease team face of RPH.

A public health nurse will be in contact with your practice during September/October to arrange a time to meet and introduce themselves. Please can you pass this information on to members of your practice.

# WHAT ARE YOU REPORTING?

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

	Number of cases			
Notifiable condition	Hutt Valley	Capital & Coast	Wairarapa	Total
Campylobacteriosis	31	48	17	96
Cryptosporidiosis	5	10		15
Dengue fever			1	1
Gastroenteritis	0 (8)	0 (14)		0 (22)
Giardiasis	9	40	6	55
Hepatitis A		1		1
Hepatitis B		1		1
Invasive pneumococcal disease	4	2		6
Legionellosis		1		1
Leptospirosis			1	1
Listeriosis	1			1
Malaria		3		3
Measles	7	8		15
Meningococcal disease		2		2
Pertussis	4 (3)	38 (9)	2	44 (12)
Rheumatic fever	1	1		2
Salmonellosis	6	23	2	31
Shigellosis	1	6		7
Tuberculosis	3	3 (1)		6(1)
Typhoid fever	1			1
VTEC/STEC infection	7	17	3	27
Yersiniosis	6	17	7	30
Grand total	86 (11)	221 (24)	39	346 (35)

#### Notes (1,2)

- Hepatitis A was identified in a 37-year-old male from Wellington who had recently returned from travel to India. The illness resulted in hospitalisation.
- 2. The two rheumatic fever cases were an 8-year-old boy from Wellington and a 9-year-old boy from Lower Hutt; both were of Pacific ethnicity, and both met criteria for confirmed/ definite rheumatic fever.
- 3. A 5-year-old child from Lower Hutt was notified with typhoid fever that resulted in a five-day admission to Hutt Hospital. The child did not have a history of travel to a typhoid-endemic country, however there had been people in the child's household who had recently travelled from India, bringing with them some food items of which the child had consumed. Testing of the child's contacts did not reveal further cases with either symptomatic or asymptomatic typhoid infection.
- 4. Meningococcal disease 2 cases both from Porirua; one was a male aged in his 30's and the other a 1 year old boy. They were no links between these 2 cases.
- 5. Measles see article.

#### 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.

Table. Notified cases by DHB in the Hutt Valley, Wairarapa and Wellington 1/4/2019 - 30/6/2019. Table includes 'confirmed' cases with additional 'probable' cases in brackets. Accessed 13/8/19.

# **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.
- 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

<u>urgent vs. non-urgent notifications</u> 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

# **Regional Public Health Notifications**

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Porirua City	pop. 51,717
Campylobacteriosis	5
Cryptosporidiosis	2
Gastroenteritis	0 (3)
Giardiasis	ω
Invasive pneumococcal disease	-
Malaria	-
Meningococcal disease	2
Pertussis	5 (1)
Rheumatic fever	-
Salmonellosis	4
VTEC/STEC infection	ε
Yersiniosis	9
TOTAL	38 (4)

Wellington City Campylobacteriosis	pop. 190,956
Campylobacteriosis	
	33
Cryptosporidiosis	7
Gastroenteritis	(6) 0
Giardiasis	26
Hepatitis A	<del>،</del>
Hepatitis B	Ŧ
Legionellosis	-
Malaria	2
Measles	ω
Pertussis	14 (7)
Rheumatic fever	0
Salmonellosis	14
Shigellosis	4
Tuberculosis	3 (1)
VTEC/STEC infection	10
Yersiniosis	10
TOTAL	134 (17)

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Lower Hutt City	pop. 98,238	~
Campylobacteriosis	23	
Cryptosporidiosis	ო	~
Gastroenteritis	0 (6)	
Giardiasis	7	هم
Hepatitis C	0	
Invasive pneumococcal disease	4	
Listeriosis	<del></del>	5
Measles	7	Campyl
Pertussis	3 (2)	Cryptos
Rheumatic fever	0 (1)	Gastroe
Salmonellosis	e	Giardias
Shigellosis	-	Pertuss
Tuberculosis	Ł	Salmon
Typhoid fever	-	Tubercu
VTEC/STEC infection	9	VTEC/S
Yersiniosis	5	Yersinio
TOTAL	65 (9)	TOTAL
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Yersiniosis

TOTAL

19 (1)

Invasive pneumococcal disease

Giardiasis

2

Salmonellosis Shigellosis

Pertussis

City 65 (9)

S 24

pop. 8.235

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pop. 23,352

ton **District** 

Masterton District 24

Kapiti Coast District 49 (3)

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0 (2)

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pop. 49,104

Kapiti Coast District

Campylobacteriosis

Cryptosporidiosis Gastroenteritis

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7 2

Upper Hutt City	pop. 40,179
Campylobacteriosis	23
Cryptosporidiosis	e
Gastroenteritis	0 (6)
Giardiasis	7
Pertussis	0
Salmonellosis	4
Tuberculosis	-
VTEC/STEC infection	7
Yersiniosis	3 (2)
TOTAL	20 (3)

South Wairarapa District	pop. 9,528
Campylobacteriosis	5
Dengue fever	-
Leptospirosis	÷
Pertussis	-
Salmonellosis	2
VTEC/STEC infection	÷
Yersiniosis	2
TOTAL	13

# Notes:

1. Population data from Statistics New Zealand 2013 Census 'usually resident population'.

Tables present the number of 'confirmed cases', with additional 'probable cases' in brackets.
Notification data from: The Institute of Environmental Science and Research Ltd. EpiSurv database of notifiable conditions. 2019. Accessed 13/08/2019.

Figure: Notifiable cases in the Hutt Valley, Wairarapa and Wellington 01/04/2019 - 30/06/2019, tabulated by territorial authority.

# GREATER WELLINGTON REGION HAZARDOUS SUBSTANCE NOTIFICATIONS IN 2018

## Ellana Clendon, Health Protection Officer and Dr Jill McKenzie, Medical Officer of Health

The table below identifies the number of hazardous substance notifications recorded for the greater Wellington region for 2018. This data includes reporting from all 3 DHBs via ED clinicians. The source of ED clinician notifications is a system established with the Wellington Hospital, Masterton Hospital and Hutt Hospital EDs for RPH to receive information on any ED presentations that are potentially associated with a poisoning injury. Once the data/notification is received, RPH determines whether the exposure meets the definition of a hazardous substance or chemical poisoning/injury and enters the information into the Hazardous Substances Disease and Injury Reporting Tool (HSDIRT system, housed on Bestpractice decision support, BPAC, dashboard).

RPH investigates all lead poisoning notifications and provides the case with public health advice to reduce and prevent further exposure. This information is entered into the national surveillance system HSDIRT.

All other poisonings/injuries are entered into the HSDIRT surveillance system and anonymised data is analysed by Massey University's Centre for Public Health Research, to help inform the local public health units and the Ministry of Health about regional and national trends. For each notified case, if there are concerns the exposure occurred due to inadequate controls being in place, RPH will followup individual hazardous substance or chemical poisoning/ injuries. If exposure occurs in the workplace this is referred to WorkSafe New Zealand (minimal information is provided without the cases consent and with consent more detail is included). If non-occupational exposure occurs then RPH will complete the investigation.

During 2018, there were 95 notifications for the Wellington region, this included 20 lead absorption and 75 hazardous substances notifications. The majority of lead notifications in 2018 were reported by laboratories (14 notifications). However, the majority of hazardous substances notifications were reported by the ED clinicians (63 notifications).

Reporting source	Lead	Hazardous substances	Total
ED clinician		63	63
General Practitioner	6	1	7
Laboratory	14		14
Other hospital clinician		1	1
Public Health Unit		10	10
Total	20	75	95

Table: Number of notifications by reporting source, 2018.

In comparison, in 2017, there were 109 notifications that included 19 lead absorption and 90 hazardous substances notifications.

#### Lead poisoning notifications

No cases required hospital admission.

There were 11 lead absorption notifications where occupation was recorded as the source of exposure for 2018, compared with 13 in 2017. Painters were the most common occupation (6 notifications).

There were 9 lead notifications from non-occupational or unknown exposures. Indoor rifle range shooting (3 notifications) was the most common source of non-occupational lead exposure.

# Hazardous substances notifications

Of the 75 hazardous substances notifications, 14 were admitted to hospital, including two children under the age of 5 years.





#### Ten hazardous substances notifications for children under 5 years olds

There were 10 hazardous substances notifications for children under five years old in 2018. All but one of the notifications were due to exposure to a household chemical, including drain cleaner, diesel, petrol, mercury, rat poison and formalin.

# Most hazardous substances injuries occured in the home and the workplace

53% of hazardous substances notifications (40 notifications) were due to exposure in the home in 2018 followed by exposure at work (20%, 15 notifications). There were four notifications where exposure occurred in public places, ten in schools/early childhood centres, and six unknown.





#### Want to know more?

Massey University Environmental Health Indicators NZ (**ehinz** <u>http://www.ehinz.ac.nz/</u>) contains more information and statistics on hazardous substances injuries and other factors on how the environment affects the health of the New Zealand human and animal populations.



# HAZARDOUS SUBSTANCES INJURY INCLUDING LEAD POISONING NOTIFICATION - HOW YOUR GENERAL PRACTICE CAN HELP

As you may be aware, the Hazardous Substances and New Organism Act requires all medical practitioners to notify cases of hazardous substances injuries to the medical officer of health. In addition, the Health Act requires cases of lead poisoning and of poisoning from 'chemical contamination of the environment' to be notified.

This includes occupational, non-occupational, intentional and non-intentional exposures.

#### What is a hazardous substance?

#### Hazardous substance

Defined as anything that can:

- Explode
- Catch fire
- Oxidise
- Corrode
- Be toxic to humans

Includes:

- Firework injuries
- Agrichemical poisoning
- Exposure to spraydrift
- Chemical burns, including all chemical eye injuries
- Illness caused by exposure to solvents or chlorine
- Carbon monoxide poisoning
- Lead poisoning
- Ingestion of cleaning products or cosmetics by children

Excludes poisoning or overdose from:

- Medications
  - Alcohol (except industrial alcohol)

#### How to notify a hazardous substances injury

- 1. Advise the patient:
- The hazardous substance report is a legal requirement that is primarily for surveillance purposes and injury prevention.
- Public Health may be in contact if they need more information. NB The first notification of a raised blood lead level ("lead poisoning") will always be followed up by Public Health staff.
- 2. Notify a hazardous substances injury or disease, including lead poisoning:
- Use the electronic reporting system on BPAC (available on MedTech32, My Practice, and Profile for Windows) under "Hazardous Substances & Lead Notifications" on the dashboard. See Regional Public Health – <u>Accessing</u> <u>the Notification Form</u>.
- If you do not have access to BPAC, download and print the <u>Hazardous Substances Disease and Injury</u> <u>Reporting Form</u> and:
  - fax to (04) 570-9373, or
  - scan and email to RES-Entdisreptla@ huttvalleydhb.org.nz (unsecure email address)

#### For advice, phone:

- Regional Public Health during office hours (04) 570 9002
- The on-call medical officer of health outside office hours (04) 570 9007

The 3D HealthPathways includes a pathway on reporting hazardous substance injuries: <u>http://3d.healthpathways.</u> org.nz

# MASSEY UNIVERSITY LEPTOSPIROSIS CONTROL CASE STUDY

Massey University is conducting a nationwide prospective case control study to investigate risk factors for leptospirosis. This work is funded by the New Zealand Health Research Council and has Health and Disability Ethics Committee (HDEC) and DHB locality ethics approvals. We aim to recruit 150 incident cases and we expect the study to run until early 2021. Your patients may be contacted to participate in the study and we would like you to support them in this, and to support us in the study. If one of your patients consents to take part in the study, we would be in touch with you for clinical information.

While leptospirosis remains a disease of those working in livestock industries, we have seen a shift since 2015 in the demography of cases towards more cases with no clear occupational link and towards more women. There is also a year on year increase in the number of cases and within those, the proportion of cases hospitalised.

Our research aims to update our knowledge of factors that increase or reduce the risk of contracting leptospirosis. We will be asking questions of incident cases and matched controls about exposure to animals, environments and lifestyle factors. We will be documenting the case series of patients, their presenting symptoms, the use of diagnostic tests, treatment and their ACC experience.



We will follow up patients after six months and are seeking funding to form a cohort of patients where we document recovery/persistence from leptospirosis symptoms.

More information can be found here:

http://leptospirosis.org.nz/Research/ Emergingsourcesandpathwaysforleptospirosis.aspx

#### You can also contact the research team:

Principle Investigator: A/Prof Jackie Benschop, j.benschop@massey.ac.nz, 06 951 6994

Study coordinator: Dr. Shahista Nisa, s.nisa@massey.ac.nz, 06 951 6918

## STI SURVEILLANCE DASHBOARD NOW LIVE

The Institute of Environmental Science and Research (ESR) has published a STI surveillance dashboard.

The dashboard provides an overview of trends in syphilis, gonorrhoea, and chlamydia in New Zealand, and can be

broken down by DHB region, age, gender, ethnicity and sexual behaviours.

https://www.esr.cri.nz/our-services/consultancy/publichealth/sti/ (please note, these dashboards are best viewed in Google Chrome).

## **PUBLIC HEALTH ALERTS**

Regional Public Health communicates public health alerts to primary care practices by fax and by email. These communications often contain information that needs to be urgently taken on board by general practitioners and primary care nurses. Please contact Regional Public Health on (04) 570 9002 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, and would like to, then you can provide your email address via phoning the number above.

#### Ordering pamphlets and posters:

Produced by: Regional Public Health Private Bag 31-907, Lower Hutt 5040 Ph: (04) 570 9002, Fax: (04) 570 9211 To order any Ministry of Health resources, please contact the Health Information Centre on (04) 570 9691 or email **laurina.francis@huttvalleydhb.org.nz** 

For enquiries regarding the Public Health Post, please contact Demelza O'Brien, Regional Public Health, by email **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.