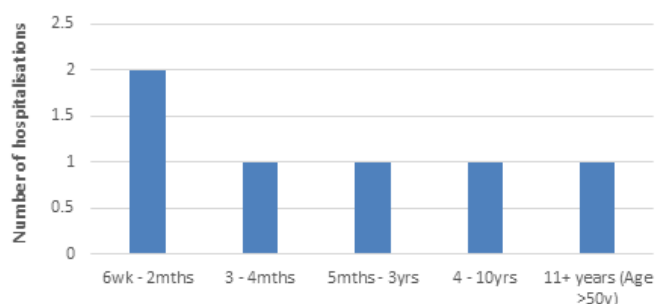
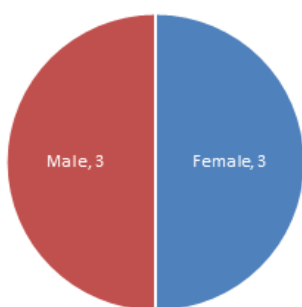


RPH pertussis hospitalisations 1/1/2018 - 12/2/2018

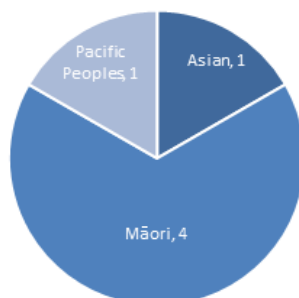


An early look at the demographic breakdown of the six hospital admissions in the first part of 2018 reveals that cases in hospital were predominantly very young, showed an even gender balance and Māori were highly represented.

RPH pertussis hospitalisations 1/1/2018 - 12/2/2018



RPH pertussis hospitalisations 1/1/2018 - 12/2/2018



The rise puts into context recent media, and is a reminder to all high risk individuals and health professionals to make sure that vaccinations are up to date.

Diagnosis

A throat or nasopharyngeal swab for PCR is recommended for diagnosis.

If the person has been coughing for more than four weeks, the sensitivity of laboratory diagnosis drops so testing is not recommended unless needed for clinical management.

Laboratory confirmation is not required for people living in the same house, or who had other close contact with a confirmed case, but these people still need to be notified to Public Health as a 'probable case'.

Treatment

Azithromycin is recommended and funded for treatment and prophylaxis for adults, children and infants.

Azithromycin is the preferred macrolide during pregnancy and lactation, and in infants <1 month of age due to lower risk of hypertrophic pyloric stenosis. Parents should still be informed of the signs and symptoms of pyloric stenosis and to seek medical advice if concerned.

The schedule for azithromycin is as follows:

Infants and children: Day one: 10mg /kg/day in a single dose (max 500mg); Days two to five: 5mg/kg/day in single daily dose (max 250mg per day).

Adults: Day one: 500mg as a single dose; Days two to five: 250mg once daily.

Alternate antibiotic regimes are outlined on page 392 of the Immunisation Handbook 2017.

Antibiotics are of limited value if started three or more weeks after the onset of cough. However, they should be considered:

- For pregnant women with pertussis in the third trimester, even if it is six to eight weeks since cough onset.
- If the case has high risk contacts such as very young infants or pregnant women.

Exclusion

New cases who receive azithromycin are considered non-infectious after two days of treatment, and can return to their usual daily activities. The five-day exclusion from school, work and early child care centres applies when other antibiotics are used for treatment.

Further information

<http://www.rph.org.nz/public-health-topics/illness-and-disease/whooping-cough-pertussis/whooping-cough-fact-sheet.pdf>

The Ministry of Health www.health.govt.nz/your-health/conditions-and-treatments/diseases-and-illnesses/whooping-cough

IMAC www.immune.org.nz/diseases/pertussis

KidsHealth www.kidshealth.org.nz/whooping-cough

References:

1. Episurv database of notifiable conditions [Internet]. 2018 [cited 12/2/2018]. Available from: <https://episurv.survinz.esr.cri.nz/episurv.htm>
2. Regional Public Health. Notifiable condition surveillance records. 2018.
3. Dr Annette Nesdale 2018. Public Health Alert: Whooping Cough. Regional Public Health 2/2/2018. Available from: <http://www.rph.org.nz/health-professionals/public-health-alerts/alert-01-february-02-whooping-cough-update-on-treatment-and-local-cases.pdf>

WHAT ARE YOU REPORTING?

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

Dr Jonathan Kennedy, Medical Officer, Regional Public Health

Table 1. Notified cases by DHB in the Hutt Valley, Wairarapa and Wellington 1/10/2017 – 31/12/2017. Table includes 'confirmed' cases with additional 'probable' cases in brackets

Notifiable Condition	Hutt Valley	Capital and Coast	Wairarapa	Totals
Campylobacteriosis	48	100	33	181
Cryptosporidiosis		16	13	29
Dengue fever	3	2		5
Gastroenteritis	0(4)	3(10)	0(1)	3(15)
Giardiasis	2	30	7	39
Hepatitis B		1		1
Hepatitis C		1		1
Invasive pneumococcal disease	4	7	4	15
Legionellosis	1			1
Malaria		1(1)		1(1)
Meningococcal disease			1	1
Mumps	2(2)	10(1)		12(3)
Pertussis	14(1)	41(3)	8	63(4)
Rheumatic fever - initial attack	(1 under investigation)	(3 under investigation)		(4 under investigation)
Rickettsial disease	1			1
Salmonellosis	4	16	3	23
Shigellosis		6		6
Tuberculosis disease - new case	2(1)	1	1	4(1)
VTEC/STEC infection	1			1
Yersiniosis	9	23	5	37
Totals	91(8)	258(15)	75(1)	424(24)

Notes ^(1,2)

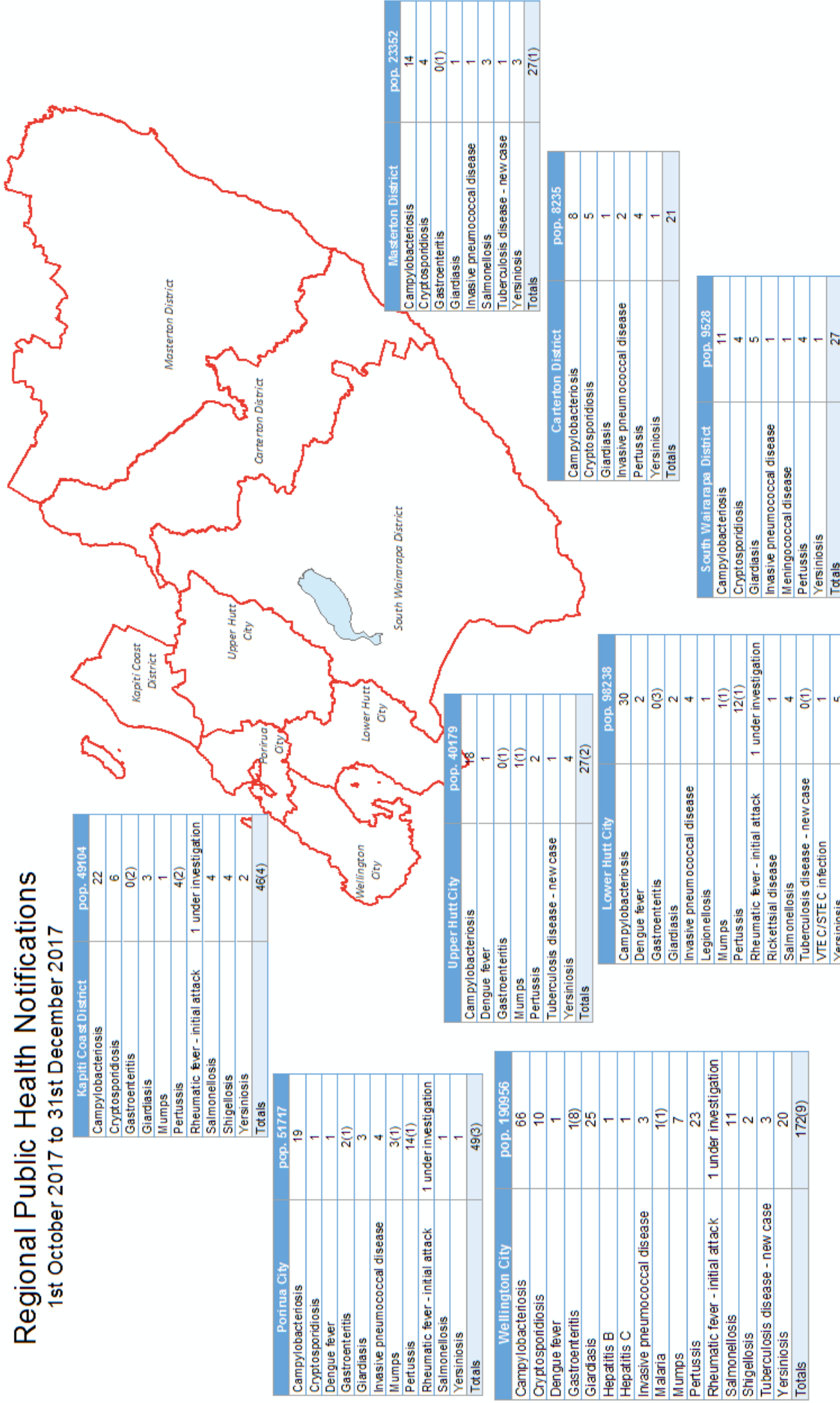
1. In most *Cryptosporidiosis* cases no source was identified, however contact with lambs or calves and consumption of raw milk were identified as risk factors for some cases.
2. *Legionella* was detected in a 43 year old man from Wainuiomata who had contact with potting mix during the incubation period.
3. A 55 year old meat processing worker was notified with *leptospirosis*.
4. Multiple cases of *mumps* were investigated across a wide age range and including a local cluster at a tertiary institution.
5. A five month old boy from the Wairarapa was notified with *meningococcal disease*.
6. A 26 year old female from Wellington with *rheumatic fever*, with a previous streptococcal sore throat and normal echocardiogram commenced monthly benzathine benzylpenicillin (Bicillin) injections. Other cases were a 13 year old boy, a 6 year old girl and a 10 year old girl.
7. Investigation of the *salmonella* cases found no unusual sources with cases ranging in age from 10 months to 71 years.
8. *Shigellosis* cases predominantly were overseas in the incubation period or had contact with a case in New Zealand. A one year old boy was notified without a clear potential exposure.
9. *STEC* was identified in a six year old female with bloody diarrhoea and stomach pains.
10. Illustrating the complexity of *tuberculosis* diagnosis, cases included a 60 year old man with a short history of fever and cough who was placed in home isolation, a 33 year old man who had a chronic cough for two years, a 21 year old woman with a two week history of cough and fever, a 65 year old with two months of respiratory illness.
11. Twenty children and 4 staff at an early childhood centre with diarrhoea and vomiting (an attack rate of 18%) resulted in control measures being put in place. Similar outbreaks occurred in two other early childhood centres. Outbreaks also occurred in multiple rest homes. One gastrointestinal infection outbreak in a rest home resulted in 30 residents and 13 staff becoming unwell (an attack rate of 26%). All rest home outbreaks are notified to infection control, NASC and planning and funding for Hutt / Wellington as a usual practice. If there are high numbers of cases then a visit to the facility with an infection control nurse is arranged.

References

1. Episurv database of notifiable conditions [Internet]. 2018 [cited 8/1/2018]. Available from: <https://episurv.survinz.esr.cri.nz/episurv.htm>.
2. Regional Public Health. Notifiable condition surveillance records. 2018.

Regional Public Health Notifications

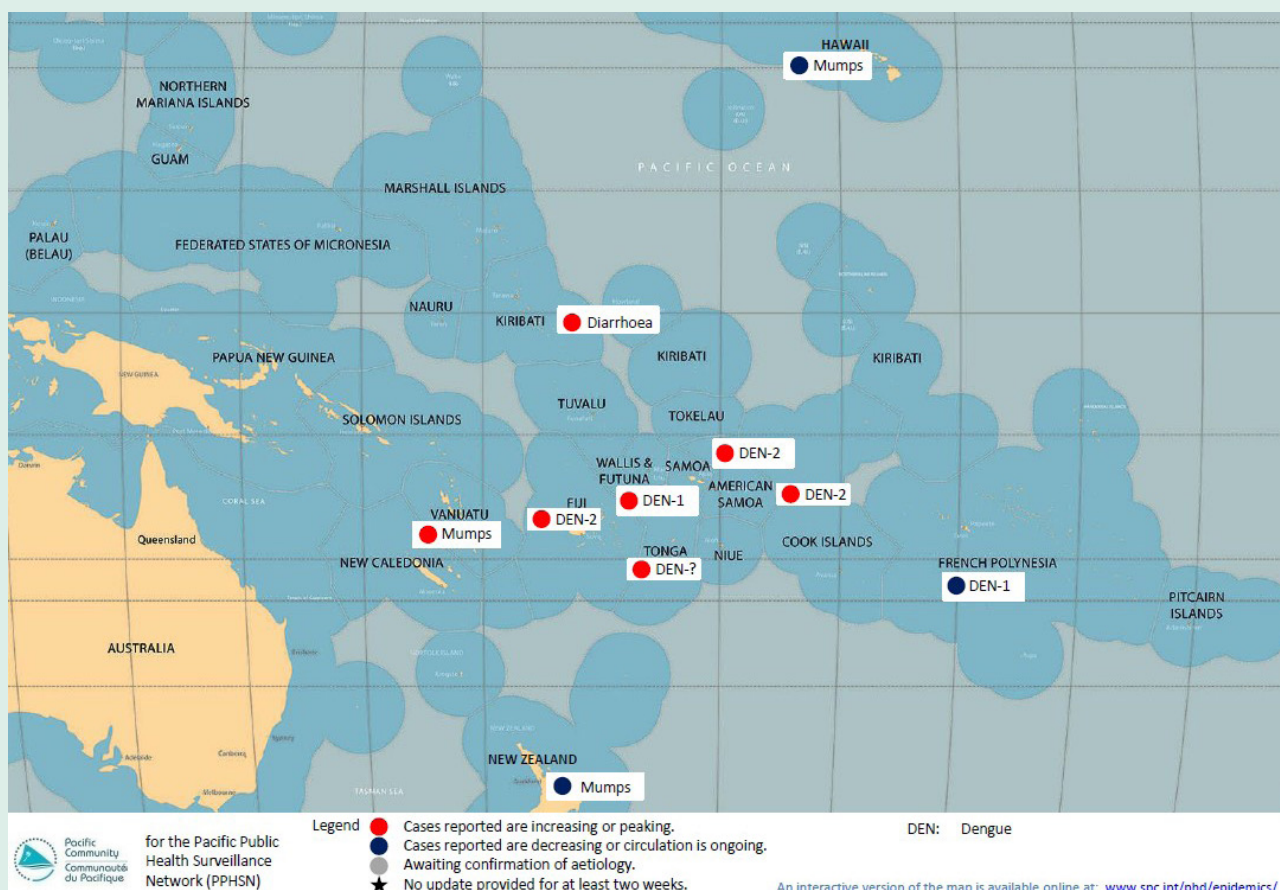
1st October 2017 to 31st December 2017



- 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 ESR, 8/1/2018.

Figure 1. Notifiable cases in the Hutt Valley, Wairarapa and Wellington 1/10/2017 – 31/12/2017, tabulated by territorial authority.

DENGUE FEVER IN THE PACIFIC - UPDATE



Dengue fever continues to be notified in high numbers from Pacific countries, with some cases making their way to New Zealand. The Secretariat of the Pacific Communities map of regional epidemics is heavily dominated by increasing or peaking case numbers of Dengue fever serotypes 1 and 2. Most significantly for New Zealand, cases have been notified here in travellers from Samoa.

Of the seven confirmed cases notified to Regional Public Health since the beginning of 2018, six were linked to travel from Samoa, and one to travel from Myanmar. Travellers should be advised about the risks of mosquito bites and how to minimise the chances of being bitten.

The Safe Travel website advises precautions to reduce the chance of contracting Dengue Fever¹. These include:

When Indoors:

- Stay in places with screens on windows and doors. Turn on the air conditioning if you have it, as cool air keeps mosquitoes away.
- Use insect sprays indoors when mosquitoes are around.
- Use mosquito coils.

When Outdoors:

- Wear a repellent cream or spray, preferably containing diethyltoluamide (DEET). Repellents containing less than 35 percent DEET are recommended because higher concentrations are no more effective – they just

work for longer – and in rare cases they can cause poisoning. Other products containing 20-25 percent picaridin and those containing about 30 percent lemon eucalyptus oil (equating to about 20 percent para-methane-diol (PMD)) are also appropriate to use. Repellents should not be applied to wounds, irritated skin, eyes or mouth.

- If you use both sunscreen and insect repellent, apply the sunscreen first and then the repellent.
- Wear protective clothing such as long-sleeved shirts, long pants and hats. Clothing can be treated with repellent.
- Use screens on tents.

Follow these links for more information about Dengue Fever in the Pacific, including advice from the Ministry of Health:

Ministry for Pacific Peoples: <http://www.mpp.govt.nz/news-and-stories/moh-dengue-fever-update/> (Posted 1/2/2018).

Ministry of Health: <http://www.health.govt.nz/your-health/conditions-and-treatments/diseases-and-illnesses/dengue-fever> (Posted 5/2/2018).

References:

1. SafeTravel 2018. Dengue Fever outbreak. Available from: <https://safetravel.govt.nz/news/solomon-islands-vanuatu-new-caledonia-dengue-fever>. Accessed 26/2/2018.

RAUMATI SPLASH PAD

INCREASE OF CRYPTOSPORIDIOSIS CASES IN WELLINGTON REGION

Dr Craig Thornley, Medical Officer of Health, Regional Public Health

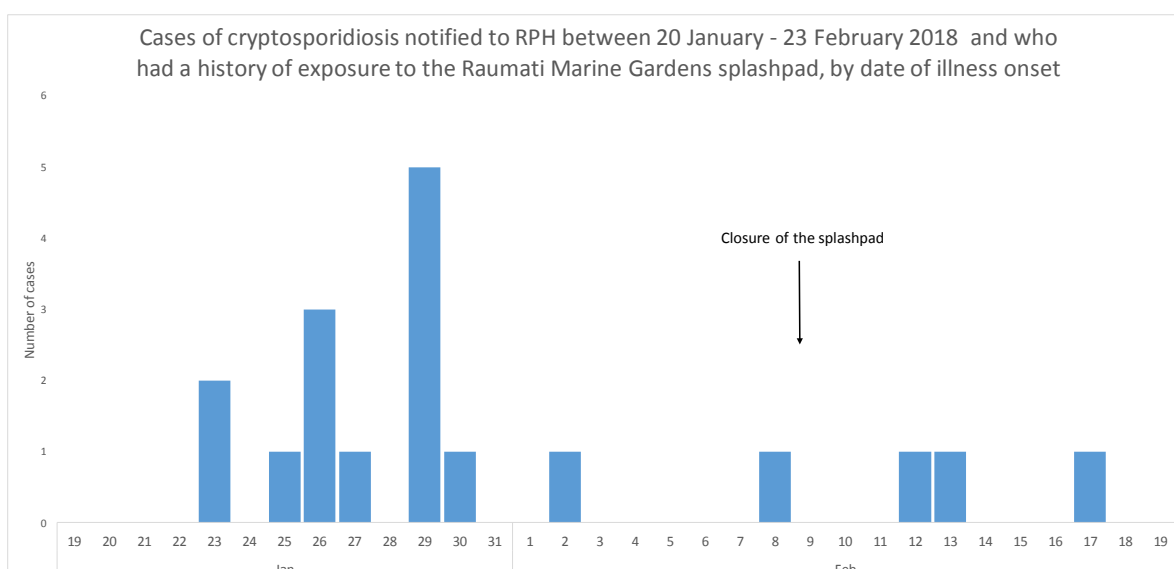


There has been an increased number of Cryptosporidiosis cases notified in the greater Wellington region since 20 January. Between 20 January and 23 February, RPH has received 46 notifications of Cryptosporidiosis cases in total. 18 cases were found to have used the splash pad (outdoor water play area) in the Raumati Marine Gardens during their incubation periods; 2 further cases were in these patients' families and were considered to be secondary cases. The ages of the 18 primary confirmed cases are <5 years (5), 5-14 (8), 25-34 (2) and 35-44 (3) and they are distributed across Wellington (9), Kapiti (7), Porirua (2). In addition to these cases notified to Regional Public Health, we were advised of 5 further people with acute gastroenteritis that had used the splash pad but who had not been tested, and two notified cases from other DHB areas (one each from Taranaki and MidCentral DHBs) who had also used the splash pad. All of these cases were exposed to the splash pad between 20 January and 9 February 2018. The operators of the splash pad took remedial action which involved closing the facility for maintenance on 9 February; RPH is continuing to work with the splash pad operators.

Swimming pool operators were alerted to the situation and were advised to be more vigilant with maintenance and to ensure good systems are in place. Information was sent out to School and ECECs regarding the increase in

cryptosporidiosis cases in the community, and provided with key messages around exclusion if symptomatic and not to use swimming pools (including splash pads) for 2 weeks after symptoms. So far, no cryptosporidiosis cases have been linked to the Raumati splash pad since it re-opened on 14 February.

The increase in notified cases of cryptosporidiosis has coincided with a change in routine laboratory testing so that community gastroenteritis specimens are tested using a polymerase chain-reaction (PCR)-based method that screens for multiple pathogens. Nonetheless, given the overall increase in cryptosporidiosis and frequency of swimming pool use as an identified exposure, RPH is monitoring for further clusters of cases linked to swimming pools and other aquatic play facilities.



KEEPING COOL THIS SUMMER

Dr Emma Church, Public Health Registrar, Regional Public Health



Source: https://upload.wikimedia.org/wikipedia/commons/e/eb/The_Sun.jpg

It was a hot summer in New Zealand, with temperatures around 2-4 degrees higher than the historical average for January. Keeping cool was a priority in the Wellington Region with overnight temperatures consistently in the high teens.

There is no agreed international definition of a heatwave; the term is relative to the typical weather in the region. Generally, a heatwave is described as a sustained period of excessive heat. The definition recommended by the World Meteorological Organisation is when the daily maximum temperature exceeds the average maximum temperature by 5°C on more than five consecutive days.

The Wellington region might not have reached the definition of a meteorological heatwave this summer, but even weather that is uncomfortably hot can have an impact, particularly in vulnerable patient groups. This summer a woman in her early sixties with multiple sclerosis died from hyperthermia in Christchurch. Heat stroke is a medical emergency and it is important that those at risk know how to prevent and recognize heat-related illnesses.

This article looks at what this summer can remind us about coping with heat, including general advice for patients.

Advice for patients: How to keep cool

The most important advice to give all patients is to **stay out of the sun, keep hydrated** and to **check on family, friends or neighbours** who may be at risk.

Some specific recommendations may be helpful for certain patient groups to minimise the risk of heat stress.

Keeping the body cool and hydrated:

- Drink frequently, and avoid drinks with caffeine, sugar

and alcohol. Don't wait until you feel thirsty, take a bottle of water with you if you leave the house.

- Wear loose fitted clothes of light materials and, if going outside, wear wide-brimmed sunhats and sunglasses.
- Avoid going outside in the middle of the day. Stay in the shade and wear sunscreen if you are outside.
- Take cooler showers or use cold packs/towels to cool down.
- **Never** leave children in a parked vehicle. Babies and children overheat very quickly. Temperatures inside a closed vehicle in the sun can reach more than 60 degrees Celsius within minutes, which may be fatal. Even on days that feel pleasantly warm outside, temperatures in a closed vehicle can rise this high.
- Minimise strenuous physical activity. Consider exercising early in the morning or in the evening when it is cooler.
- Avoid heavy meals, eat salads and fruits instead.

Keeping the home cool:

- During the day, shut curtains and blinds. When the heat has passed, open doors and windows to cool your house down.
- Use a fan or air-conditioning unit if you have one.
- If your house doesn't have air-conditioning, consider going to somewhere cooler during the day, such as a shopping centre, library or swimming pool.
- Sleep in the coolest room in the house.
- Use the oven and stove as little as possible.

Advice for patients: When to seek help

It is important that people are aware of the signs of heat-related illnesses and know when and how to get help, particularly the elderly, parents of young children, those with underlying medical conditions.

People are advised to get help if they feel dizzy, weak, or have intense thirst and headache. They should also move to a cool place immediately and drink water to rehydrate. Dial 111 for an ambulance if these symptoms persist or if they develop symptoms of heat stroke (confusion, disorientation, convulsions and unconsciousness).

Heat cramps may occur after sustained physical activity. The best advice is to move to a cool place, rest, stretch and massage muscles gently. Drinking oral rehydration solutions containing electrolytes may help. If the cramps persist for longer than one hour, medical attention should be sought.

How to keep cool at work in general practice

It's a good time to remember to look after yourself and keep getting enough sleep as the likelihood of a work-related incident can be higher if you are fatigued.

Reduce the risk of heat-related fatigue by:

- Keeping hydrated.
- Avoiding drinks with high caffeine or sugar.
- Modifying rest breaks.

Having a cool waiting room, available water, staff breaks for drinks and blinds closed to shut out the sun, can help ensure your practice is heatwave friendly for both staff and patients.

Identifying patients at risk

Whilst anyone can be at risk during heatwaves, some people are more vulnerable to the health impacts of heat-related events because they are unable to cool themselves down or they have health problems that make them susceptible to overheating. Identifying these patients and providing appropriate heat advice may help prevent heat-related illnesses. Factors which may put people at higher risk include:

- Age (for example, older adults or the very young).
- Homelessness.
- Low socioeconomic status.
- Outdoor occupations.
- Chronic diseases (for example, endocrine disorders

such as diabetes, extrapyramidal disorders, movement disorders, cardiovascular disease, renal disease, and respiratory diseases).

- Certain medications (for example, blood pressure-lowering medications).
- Social isolation.
- Cognitive impairment.
- Insomnia.
- Being overweight.

Things to remember

- Most drugs need to be stored at under 25°C as high temperatures can affect their efficacy. Any emergency drugs should be transported and stored at appropriate temperatures.
- Fluid intake and drug therapy may need to be monitored in older patients or those with comorbidities.
- Rest homes should ensure that residents are kept out of the heat, cool and hydrated.

Other sources of information

<https://www.civildefence.govt.nz/assets/Uploads/publications/consistent-messages-part-B-heat.pdf>

<http://www.arphs.govt.nz/health-information/healthy-environments/hot-weather>

<https://www.cdc.gov/climateandhealth/pubs/climatechangeandextremeheatevents.pdf>

INFLUENZA 2018 – BE PREPARED

Parts of the Northern Hemisphere, in particular the USA, have experienced a more severe influenza (flu) season. The main strains causing illness in the Northern Hemisphere are the "Aussie flu" A strain and a B strain. Both these strains are in the 2018 NZ influenza vaccine.

The following actions will help prepare your medical centre and reduce the impact of flu on your patients, staff and communities.

Influenza immunisation

- Support all your staff (including reception, admin and cleaning staff) to get immunised.
- Remember that children aged 4 years and under who have been hospitalised for respiratory illness or have a history of significant respiratory illness are eligible for FREE immunisation.
- Remind staff and patients that ~80% of people who get influenza might be asymptomatic but can unknowingly pass influenza to others.

Pneumococcal immunisation

Consider immunisation to reduce pneumonia/invasive pneumococcal disease in people at high risk. Pneumococcal vaccine is recommended but not funded for people with chronic illness e.g. heart, renal, liver or pulmonary disease, diabetes, etc. A full list of conditions can be found at pg. 426 of the Immunisation Hand book 2017.

Prevent illness spread in the waiting rooms by:

- a. Providing tissues, alcohol-based hand gel; and plain surgical face masks for patients who are coughing/sneezing.
- b. Ensuring frequently touched surfaces (e.g. door handles, counter tops, bathroom areas) are regularly cleaned.

DISEASE NOTIFICATION – HOW YOUR GENERAL PRACTICE CAN HELP

In 2013 Regional Public Health launched the [Public Health Disease Notification Manual](#) to assist in the disease notification process. Updates for this manual are located at <http://www.rph.org.nz>

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>

VOLUME OF ENTERIC NOTIFICATIONS

Please note, at present Regional Public Health is receiving a larger than usual volume of some enteric illness notifications which appears to be in part due to changes in laboratory diagnostic processes. To assist us with processing these, please remember to include *patient occupation* and other *high risk factors* in Public Health notifications. This information is not automatically included in the back-end laboratory notification and can only be obtained from the general practitioner or directly from the patient.

Please notify enteric infection *high risk factors* of particular interest to Regional Public Health:

- Food handlers.
- Children attending early childhood services.
- People who live or work in institutions.
- Health workers or others who work with adults or children at high risk of infection.



References:

1. Regional Public Health 2017. Public Health Disease Notification Manual for primary care health practitioners August 2017. Available from: <http://www.rph.org.nz/health-professionals/notifiable-diseases/2017publichealthdiseasenotificationmanual.pdf>
2. Bristol Stool Chart. Available from: <https://upload.wikimedia.org/wikipedia/commons/9/9e/BristolStoolChart.png>

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:

To order any Ministry of Health resources, please contact the Health Information Centre on (04) 570 9691 or email laurina.francis@huttvalleydhhb.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 Dr Jonathan Kennedy, medical officer, Regional Public Health, by email jonathan.kennedy@huttvalleydhhb.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.



2018 AUSTRALASIAN TUBERCULOSIS CONFERENCE

30-31 August | Te Papa Museum, Wellington, New Zealand

SAVE THE DATE!

www.tbconference.org

For two days in Wellington in August 2018, researchers, clinicians, practitioners and policy makers will gather for a conference focused on tuberculosis.

Tuberculosis (TB) remains a cause of high health burden worldwide. TB is ranked as one of the top 10 contributors to mortality worldwide – in 2015, 1.8 million deaths were due to TB. Over 1200 new cases occur in Australia and 300 in New Zealand annually.

We are also in a time of change in TB: increasing frequency of multidrug resistance, greater migration from countries with high TB burden, new diagnostic techniques, treatments, and tools for understanding TB epidemiology all create an imperative for building capacity and enhancing skills among the TB control healthcare workforce.

The 2018 Australasian Tuberculosis Conference is therefore timely. We expect to receive registration from approximately 200 delegates, primarily from New Zealand and Australia, who will join together to debate and discuss new areas of TB science, learn new techniques and practices, and develop networks to better improve and coordinate TB management across the region.

We expect that the conference will appeal to professionals involved in all aspects of tuberculosis management: clinical care (investigation, diagnosis, treatment); occupational health; infection control; public health; policy and guideline development; immigration; laboratory science and research.

CONFERENCE THEMES

- TB elimination in low burden countries.
- The dawn of the Whole Genome Sequencing era and application to TB diagnosis and control.
- TB and migration.
- Drug resistance and TB – diagnosis, management, epidemiology and future projections.
- TB vaccine development.
- Latent tuberculosis infection testing, diagnosis and treatment.
- Tuberculosis and diabetes.

CONFIRMED SPEAKER

- Dr Timothy Walker, John Radcliffe Hospital, University of Oxford will be speaking on application of whole genome sequencing to tuberculosis control.

DATES AND VENUE

The Australasian Tuberculosis Conference 2018 will be held from Thursday 30 August to Friday 31 August 2018 at the Te Papa Museum, Wellington, New Zealand. The museum is within walking distance from major hotels.

CONTACT DETAILS

This conference is facilitated by Regional Public Health, Hutt Valley District Health Board, Lower Hutt, New Zealand.

Conference organiser: Conference Innovators

Contact: Claire Bark

Phone: (09) 972 2034

Email: claire@conference.nz

CALL FOR ABSTRACTS

This is a great opportunity to share your knowledge. Call for abstracts will open shortly.

Visit www.tbconference.org for regular updates and to register your interest.