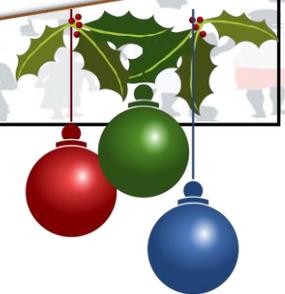




Wide Bay *Public* HEALTH *Matters*

December 2018 PHM 3



Editorial: Dr Margaret Young

The recent heatwave and associated fires had a significant impact on communities throughout Queensland, including the Deepwater area and other communities in Wide Bay. The magnificent response from our emergency services working with these communities helped protect lives and properties.

Inside this Bumper Issue:

- Heatwaves
- Bats!
- A new online immunisation course
- Common causes of gastro
- And more....

Heatwaves are becoming hotter, longer and more frequent, and deserve our attention. A review of extreme heat events in Australia¹ estimated that extreme heat events have caused more deaths than all other natural hazards combined. The December edition of the Australian Journal of General Practice includes an article² on heat-related morbidity and mortality, with a detailed model mapping out preventive action for heat stress.

In this edition, I have drawn on a range of materials to assist you in preparing your patients for heat waves.

Summer is also a time to review emergency plans, check cold chain breach procedures, and ensure good food safety.

And from all of us at the Wide Bay Public Health Unit, have a safe and happy Christmas and holiday season.

The Hervey Bay office of the Wide Bay Public Health Unit has moved (see back page). Phone numbers remain the same.

¹ Coates L et al. Exploring 167 years of vulnerability: An examination of extreme heat events in Australia 1844-2010. *Environ Sci Policy* 2013;42:33-44.

² Tait PW, Allan S and Katelaris AL. Preventing heat-related disease in general practice. *AJGP* 2018;47(12):835-840.

Heatwaves

The Bureau of Meteorology (BOM) defines a heatwave as 3 days or more of high maximum and minimum temperatures that are unusual for that location.

During severe hot weather, there is a risk of developing heat exhaustion and heatstroke. However, most illness and mortality during a heatwave is due to exacerbation of existing conditions, particularly respiratory, cardiovascular and renal diseases. Children, older people and people who are socially isolated are at higher risk of heat-related illness due to decreased capacity for physiological and behavioural adaptation.

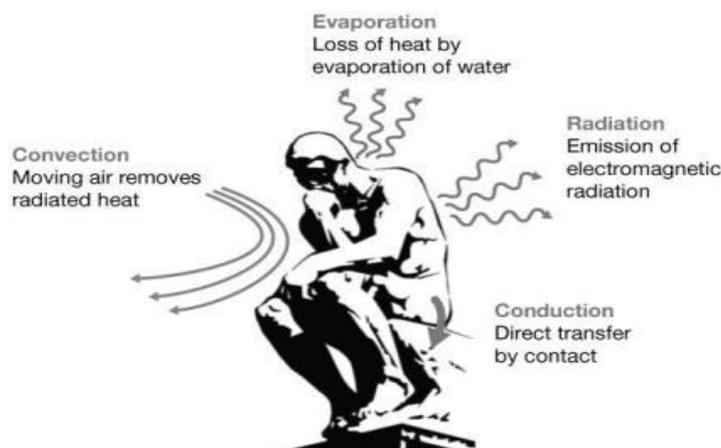
5 key messages to stay well in the heat

- ✓ Have a plan
- ✓ Drink plenty of water
- ✓ Stay out of the sun
- ✓ Keep cool
- ✓ Look out for others

The following information is designed to help you to enable your patients to manage their health during hot weather and heat waves. Broader impacts of heatwaves on the environment and community including bushfires are significant, but will not be addressed here.

Thermoregulation

The hypothalamus regulates normal human body temperature, keeping it within a range of 36.1 – 37.8°C. The body can lose heat by conduction, radiation, convection and evaporation.



Temperature and Humidity

When considering the potential health impacts of hot weather or a heatwave, it is important to look at the **apparent temperature** (App. Temp.). The apparent temperature takes into account both the ambient temperature and the relative humidity, which is a measure of water vapor in the air. As humidity rises, evaporation of sweat reduces, impacting our ability to cool. As a result, when the humidity is high we feel hotter and we are more prone to health impacts of heat. At 100 percent relative humidity, sweat will not evaporate into the air at all.

Source: <https://sustainableleiden.wordpress.com/page/8/>

Factors that influence our ability to keep cool

Temperature, humidity. When the temperature of the skin is higher than the air temperature, the body can lose heat by radiation, conduction and convection. A healthy person can lose heat via these mechanisms with air temperatures up to around 35°C. However, when the air is hotter than the skin, the only means by which the body can lose heat is through sweating. Humidity has an important impact on our experience of heat and our ability to thermoregulate (see box). Sweating and heat loss can be impaired by excess fat, skin disorders (e.g. scleroderma) and excessive layers of clothing. Up to around 35°C heat loss can be improved by finding a breeze or using a fan, or applying cool water or a cool object (cold packs).

Sunlight. Under Australian conditions the effect of full sun produces an additional maximum increase in the **apparent temperature** of about 8°C around the middle of the day.



Ability to vasodilate. The physiological response of the body to heat includes peripheral vasodilation, which increases the blood flow to the skin to facilitate heat loss through radiation, convection and conduction. Peripheral vasodilation requires an increase in cardiac output. People with chronic medical conditions that impair peripheral vasodilation and people who cannot increase their cardiac output will be most at risk during heat waves.

Age, illness. Young children are more vulnerable as they produce more body heat, sweat less and have faster rising core temperatures. The body's heat regulation system can be impaired in the elderly, and people with chronic illnesses.

Ability to adjust the environment. Infants, young children, people with cognitive impairment, mobility issues, mental illness, alcohol and substance abuse, people who are homeless or socially disadvantaged, and people whose occupation requires them to undertake physical activity in the heat are at higher risk of health effects of heat waves because of their reduced ability to adjust their environment.

Medications. A number of prescribed medications can increase the risk of heat-related illness (see Page 4).

Alcohol and other drugs

Alcohol and opioids increase peripheral vasodilation and increase sweating. This lowers body temperature but contributes to dehydration. Alcohol also acts as a diuretic which aggravates dehydration. Amphetamines and amphetamine-like substances elevate body temperature by two main mechanisms: cutaneous vasoconstriction which reduces heat loss, and increased muscular activity which generates heat. Decreasing the use of alcohol and other drugs is recommended during heatwaves, however if use continues, users should increase their intake of water and electrolytes and employ other strategies to stay cool. This can be a challenge at festivals and other outdoor events.

Storing medications during a Queensland summer

Some medications can be less effective or more toxic when exposed to and stored in high temperatures. Most medications need to be stored below 25°C or in the fridge if indicated. This applies particularly to antibiotics, adrenergic drugs, insulin, analgesics and sedatives. Encourage your patients to talk with the pharmacist about the correct use and storage of medications as part of their plan for hot weather.

Illnesses exacerbated by heat

The majority of heat-related morbidity and mortality is due to exacerbation of existing chronic conditions, particularly:

- Cardiovascular and cerebrovascular conditions
- Asthma and other respiratory illness
- Kidney disease
- Diabetes and obesity
- Parkinson's disease
- Alzheimer's or related diseases



Table: Examples of medications that may affect heat tolerance and risk of heat-related illness

Mechanism	Examples *This list is a guide only.
Interference with sweating	Anticholinergics, e.g. tricyclics antidepressants and benztropine Beta-blockers Antihistamines Phenothiazines Vasoconstrictors
Interference with thermoregulation	Antipsychotics or Neuroleptics (e.g. risperidone, clozapine, olanzapine) Serotonergic agonists Stimulants (Amphetamine, cocaine) Thyroxin
Decreased thirst	Butyrophenone e.g. haloperidol and droperidol, Angiotensin-converting enzyme (ACE) inhibitors
Dehydration or electrolyte imbalance	Diuretics (especially loop diuretics) Any drug causing diarrhoea or vomiting (colchicines, antibiotics, codeine)
Reduced renal function	NSAIDS Sulphonamides Indinavir Cyclosporin
Aggravation of heat-related illness by worsening hypotension	Vasodilators e.g. nitrates (GTN) and calcium channel blockers Anti-hypertensives
Drug levels are affected by dehydration, with potential for drug toxicity	Digoxin Lithium Warfarin Antiepileptics Biguanides (e.g. Metformin) Statins
Altered state of alertness affecting ability to stay cool	Any drugs which alter the state of alertness (e.g. alcohol, benzodiazepine, narcotics and many more)

Heat-related illnesses

Dehydration

Even mild dehydration leads to an increased risk of injury and falls, acute kidney injury, renal stones, urinary tract infection (especially in women), heat related illness and poorer performance of complex tasks. Cardiac work is increased by mild to moderate dehydration and leads to reduced fluid available for sweating.

A person can sweat up to 15 litres per day and it is important to note that thirst does not match fluids lost by sweating, even when fluids are freely taken. Monitoring urine colour is a good way to monitor hydration for people who have normal renal function (see link to Urine colour chart on Page 6).

Dehydration may result in medication toxicity (refer to table above).



Direct heat related illnesses

Illness	Mechanism	Symptoms
Heat rash	Inflammation of sweat glands	Itchy rash
Heat cramps	Dehydration and loss of electrolytes, often after exercise	Muscular cramps, most often in the lower limbs.
Heat oedema	Vasodilation and fluid retention	Swelling, mainly ankles
Heat exhaustion	Dehydration and/or sodium depletion leading to poor blood flow. Tends to occur after several days of heatwave.	Flushed or pale, sweating, tachycardia, muscle cramps, weakness, dizziness, nausea, vomiting, syncope
Heat stroke	Core temperature rising leading to widespread organ injury. A medical emergency.	Same as for heat exhaustion, plus hyperthermia, dry skin with no sweating, shock arrhythmia, altered mental state, ataxia, seizures, loss of consciousness, death.
Exertional heat stroke	Core temperature rise precipitated by intense or prolonged exercise.	As for heat stroke, plus rhabdomyolysis and renal failure.

Emergency treatment

If you suspect heatstroke, call the ambulance immediately. While waiting:

- Take the person's temperature
- Move them to a cool shaded or airconditioned area, if possible
- Remove excess clothing
- Immerse the person in a tub of cool water if possible, otherwise place the person in a cool shower or sprinkle them with cool water, using a fan to create an air current
- Do not give fluids unless they are fully conscious and you are confident they can swallow properly
- Do not give aspirin or paracetamol

Preparing your patients for heat waves

- Identify your patients at risk (and their families/carers)
- Educate them about how to stay healthy in hot weather (see Tips on Page 6)
- Review their medications and advice on fluid intake as necessary
- Advise them to talk to their pharmacist about storing medications
- Encourage them to have a heatwave plan (where to go, what to do, how to monitor their health)
- Refer them to further resources (see links on Page 6):
 - Urine colour chart
 - Fact sheets



Tips for people to stay healthy in heat waves

Have a plan

- Know where to go, what to do and how to monitor your health
- Plan activities around the heat and avoid being outside between 11am and 3pm

Drink plenty of water

- Monitor urine colour
- Avoid alcoholic, hot and sugary drinks

Keep cool and stay out of the sun

- Use air conditioning and/or fans at home
- Cool the house by shading windows and shutting curtains. When/if the temperature outside falls during the evening, open the windows if it is safe to do so
- If it is too hot at home, go to an air conditioned shopping centre, library, cinema or community centre
- Take cool showers or baths
- Wear light coloured, loose-fitting clothes made from natural fibres
- Wear a large brimmed hat when outdoors
- Eat light foods such as salads, and avoid using the oven
- Minimise physical activity during the heat; plan to undertake physical activity (e.g. exercise) in air conditioning or during cooler times of day



Look out for others

- Check on those at higher risk including elderly neighbours

Acknowledgements:

Much of this material has been adapted from the Heatwave Plan for England and the New South Wales Beat the Heat webpage. These are available at:

<https://www.health.nsw.gov.au/environment/beattheheat/Pages/information-for-health-professionals.aspx>

https://www.sps.nhs.uk/wp-content/uploads/2017/07/UKMI_QA_Drugs-and-heatwave_May-2017.doc

Fact sheets

<http://conditions.health.qld.gov.au/HealthCondition/condition/20/199/362/heat-related-illness>

<https://www.qld.gov.au/emergency/dealing-disasters/disaster-types/heatwave>

Urine colour chart

<https://www.health.nsw.gov.au/environment/beattheheat/Pages/urine-colour-chart.aspx>

Have you found any articles interesting or helpful? Have you spotted an error? Have you a suggestion for the next edition of our newsletter? If so, please drop us a line! Email us at: WBPHU@health.qld.gov.au

Vaccination Records. *Where do you find them?*

Age Group	Source of vaccination records
Children aged less than 10yrs	AIR
Adolescents aged 10 to 19yrs	<ul style="list-style-type: none"> • AIR for childhood vaccinations • PHU for School Immunisation Program (SIP) history. • Note: AIR may have HPV vaccine listed but other SIP vaccines may be missing, especially vaccinations given prior to 2017, and Year 7 and Year 10 vaccinations given in the current school year (as they may not yet have been transmitted to AIR). Check with the PHU before vaccinating to avoid unnecessary vaccination.
Adults over the age of 20yrs but under 30yrs	<ul style="list-style-type: none"> • AIR: adults will have an AIR record and may or may not have any vaccinations listed. • PHU: ask us to do a history search.
Adults over 30yrs	<ul style="list-style-type: none"> • AIR: adults will have an AIR record but may not have any vaccinations listed. • PHU: ask us to do a history search.
Aboriginal and Torres Strait Islander adults	<ul style="list-style-type: none"> • PHU: ask us to do a history search, especially to check any record of previous pneumococcal vaccination.
Points to note: <ul style="list-style-type: none"> • AIR became a whole of life immunisation register at the end of 2016. • All Australians with Medicare cards have a record on AIR. • All vaccination events with funded vaccines should be transmitted to AIR. Catch-up vaccination for children can be commenced up until the day before the 20th birthday. • We strongly encourage VSPs to transmit all vaccination events for privately funded vaccines, as this creates an accessible electronic record for those vaccines also. • Historical records on the Queensland VIVAS database are still accessible by the PHUs and we can search this database for histories for your adult patients. This database commenced in 1996, so adults who are now in their early 20s may have fairly complete records. VIVAS also include some historical Indigenous pneumococcal and flu vaccination • Immunoglobulin is not a vaccine and will not be listed on AIR. 	

NEW free online training course for Immunisation

Qld Health has launched a comprehensive free online training course for immunisation for anyone who is involved in receiving, administering or managing vaccines in Queensland.

The course is self-paced and interactive and will help immunisation service providers maintain and enhance their skills in providing immunisation services

Please be aware that **this course is for general education purposes only and does not lead to authorisation as an Immunisation Program Nurse.**

There are 4 courses in total including

- Course 1: Vaccine Administration (foundation course)
- Course 2: Vaccine Management
- Course 3: Immunisation data – recording and reporting
- Course 4: Catch -up Vaccinations

Upon completion, a certificate of completion and CPD hours are awarded for each course .

Visit www.csdsgld.edu.au and search for 'immunisation' to access this online training.

Vaccine Dose Numbers are important

Please be careful when entering dose numbers into your practice software for vaccinations given. Unfortunately, families have been financially penalised by Centrelink for their child not being up-to-date when vaccines have been given but numbered incorrectly. Often the vaccine will be listed on AIR but not validated. This is frequently a problem with DTPa vaccines, however incorrect dose numbers will be problematic with every vaccine that is linked to payments.

If entering directly onto AIR, for example entering missing vaccinations, please check the 'Due Details' section on the AIR record. This will tell you the dose number to enter on the AIR record when these missing vaccines are administered. You may need to do a secure email to AIR to ask them to correct some existing dose numbers that are already on the AIR history. AIR's secure email is an appropriate way to request this change.

The following table will be helpful in ensuring the correct DTP dose number is used.

Dose numbering for DTPa vaccines			
Child born BEFORE 1 st October 2014		Child born ON or AFTER 1 st October 2014	
6 week / 2 mth Infanrix hexa	Dose 1	6 week / 2 mth Infanrix hexa	Dose 1
4 mth Infanrix hexa	Dose 2	4 mth Infanrix hexa	Dose 2
6 mth Infanrix hexa	Dose 3	6 mth Infanrix hexa	Dose 3
4 yr old Infanrix-IPV OR Quadracel	Dose 4	18 mth Infanrix OR Tripacel	Dose 4
		4 yr old Infanrix-IPV OR Quadracel	Dose 5
<p><i>NOTE, if a child born before 1st October was given an 18mth DTPa [Infanrix or Tripacel] when it was not required, AIR will want to call this an extra dose 3. This is correct, because for a child born before 1st October 2014, their dose 4 of DTPa is at 4yrs.</i></p>			

Vaccine Management during Storm Season

It is that time of the year when we expect storms and power outages to occur. We need to be prepared to reduce the impact these weather events have on our vaccines. Please ensure that you have adequate eskies to store all the vaccines [loosely packed]. Each esky will need to have enough ice bricks, packaging material [bubble wrap/scrunched paper etc.] and a digital thermometer. You will need a temperature record sheet available to monitor the vaccines in each esky.



An effective way to slow down the heating process in your purpose-built vaccine fridge once the power has gone off, is to have bottles of water or chilled icepacks in the fridge and cover the glass doors. Be warned that a glass fronted vaccine fridge can breach within about 20 minutes.

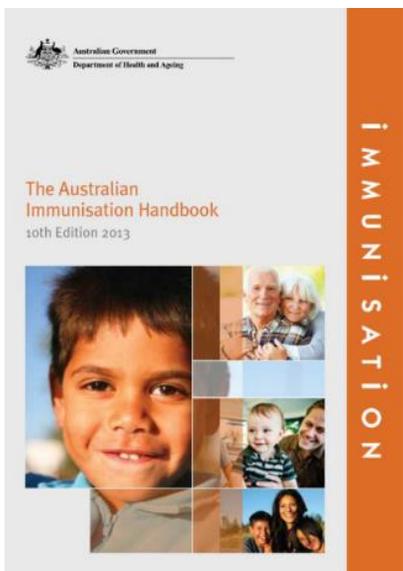
If you do have a cold chain breach please remember to isolate your vaccines to ensure no one uses any, and contact QIP on 3328 9888 on the next working day [QIP closed 21st Dec to 2nd Jan]. Please continue to monitor the vaccines, and do not use or discard any vaccines unless advised to do so by QIP or the PHU.

Can we also take this opportunity to ask you to ensure your data loggers are set to read at 3 to 5 minute intervals? An interval longer than this makes determining duration of breaches more difficult. We would appreciate your support with this request.



As typed by Medical Secretaries

- Patient has left her white blood cells at another hospital
- The worst time to have a heart attack is during a game of charades
- Patient has chest pain if she lies on her left side for over a year
- On the second day the knee was better and on the third day it disappeared.
- The patient has been depressed since she began seeing me in 1993
- Mrs Evans slipped on the ice and apparently her legs went in separate directions in early December.
- Discharge status: Alive, but without my permission. Patient had waffles for breakfast and anorexia for lunch
- While in ER, Eva was examined, X-rated and sent home. Skin somewhat pale, but present.
- Patient has two teenage children, but no other abnormalities
- The patient was in his usual state of good health until his airplane ran out of fuel and crashed



Please DISCARD all hard copies of the 13th edition Australian Immunisation Handbook [AIH].

Hard copies of the AIH are out of date and should not be used.

Immunisation providers are asked to always refer to the Australian Immunisation Handbook which is now in a digital format. You can save the link as a favourite or a simple Internet search will easily find the site <https://immunisationhandbook.health.gov.au/>

Going digital will allow for easier navigation, effective search function and introduction of visual guides for more complex schedules and immunisation practices.

You can sort by disease, age and risk factor. You can also download the relevant tables or disease chapters quite easily.



Christmas and New Year Office Closure Notification

QIP will be closed from Friday 21st December and reopen Wednesday 2nd January 2019. Last vaccine orders on 17th December.

The Wide Bay Public Health Unit will be closed from close of business Monday 24th December and reopen on Wednesday 2nd January 2019.

For urgent communicable disease or environmental health issues, call the on-call Public Health Physician on 3646 1699 or through the switchboard of your nearest hospital.

Common and important causes of gastroenteritis: agent, incubation, clinical features and sources.

Agent	Incubation period	Main clinical features	Typical sources
<i>Bacillus cereus</i>			Improper cooling and storage of cooked rice, potato and pasta dishes can result in ingestion of food contaminated with the pre-formed toxin (emetic form). Ingestion of faecally or environmentally contaminated meat, milk, vegetables and fish can lead to production of enterotoxins in the gut (diarrhoeal form).
- Emetic form (most common)	0.5 to 6 hours	Nausea, vomiting, malaise, with or without diarrhoea. Usually no fever. Recovery in 6 to 24 hours.	
- Diarrhoeal form	6 to 24 hours	Abdominal cramps, profuse watery diarrhoea. Usually no fever. Recovery in 12 to 14 hours.	
<i>Campylobacter</i> species	1 to 10 days (usually 2 to 5 days)	Fever, nausea, abdominal cramps, diarrhoea (often bloody). Antimicrobial treatment only if prolonged or extra-intestinal manifestations of infection.	Undercooked meat (especially poultry); unpasteurised dairy products; contact with infected animals (especially puppies, kittens).
Noroviruses, other caliciviruses	10 to 72 hours (usually 24 to 48 hours)	Severe vomiting, diarrhoea, abdominal cramps, headache and fever. Symptoms typically last 24 to 72 hours.	Highly infectious by direct person to person transmission; also through aerosolisation (faeces or vomitus) and through contaminated objects, water and food.
<i>Clostridium perfringens</i>	6 to 24 hours (usually 10 to 12 hours)	Diarrhoea, abdominal cramps. Vomiting and fever are usually absent. Symptoms usually last up to 24 hours.	Ingestion of faecally or environmentally contaminated meat that has been inadequately refrigerated.
<i>Salmonella</i> species	6 hours to 10 days (usually 12 to 36 hours)	Diarrhoea, often with abdominal cramps, vomiting and fever. No antimicrobial treatment required for uncomplicated gastroenteritis; antimicrobial treatment recommended for vulnerable patients, or patients with persisting fever or extra-intestinal manifestations.	Ingestion of food contaminated with animal faeces (especially poultry, meat, raw milk, eggs, leafy greens, melons, nuts, seeds); direct contact with animals (including reptiles, amphibians) or their environment
<i>Shigella</i> species	12 hours to 6 days (usually 1 to 3 days)	Loose small volume stools with blood and mucus, fever, nausea, vomiting and cramps. Appropriate antimicrobials shorten duration and severity of illness.	Direct or indirect person to person faecal-oral transmission. Men who have sex with men are recognised as a risk group for infection.
<i>Staphylococcus aureus</i>	30 mins to 8 hours (usually 2 to 4 hours)	Abrupt and sometimes violent onset of nausea, vomiting, cramps and often diarrhoea. No fever. Usually resolves in 1 to 2 days; rehydrate as necessary.	Ingestion of food contaminated by an infected person. Bacteria multiply at room temperature and produce toxin. Toxin is heat-stable.
<i>Vibrio parahaemolyticus</i>	4 to 48 hours (usually 12 to 24 hours)	Watery diarrhoea abdominal cramps, nausea, vomiting, fever, headaches. Symptoms persist 1 to 7 days. Appropriate antimicrobials if severe.	Ingestion of raw or inadequately cooked seafood, especially oysters or other shellfish. People with reduced gastric acidity or liver disease at increased risk of illness.

Gastro: some key points

In Australia:

- There are at least 4.1 million cases of gastro each year.
- Most cases are due to viral infection (e.g. norovirus). This is spread from person to person through direct or indirect contact, including aerosolisation of vomitus and faeces.
- On average, there are more than 230,000 cases of *Campylobacter* and 55,000 cases of *Salmonella* each year.
- The estimated total annual cost to society for foodborne illness is \$1.249 billion.

Page 10 contains a table to help you key out common and important causes of gastro in our community.

In addition to individual clinical reasons for testing, please request testing if:

- The patient knows others who are unwell and it may be an outbreak
- The patient is a resident, carer or volunteer in an aged care facility
- The patient is a child attendee or a staff member of a child care centre

If a viral illness is suspected, request viral PCR on faeces or vomitus. A faeces PCR will only test for parasites and bacteria.

Food handlers with gastro should remain off work for at least 48 hours after symptoms have settled. Children with gastro should remain away from child care or school until at least 24 hours after symptoms have settled.

A short word on pertussis

Notifications of pertussis (whooping cough) have increased across Queensland this year, although absolute numbers of laboratory confirmed cases in Wide Bay are still small.

Pertussis begins with non-specific upper respiratory symptoms followed 1 to 2 weeks later by a paroxysmal cough that frequently ends in gagging or vomiting. The classical 'whoop' is uncommon. Babies may have cyanosis, apnoea and seizures.

Nucleic acid testing (PCR) on nasopharyngeal swab or aspirate is the most appropriate test during the first 3 weeks of cough. Serology has low sensitivity and specificity but may be useful after 2 or 3 weeks of coughing. IgG and IgA may be elevated for as long as 2 years after vaccination.

Patients with pertussis are infectious from the onset of symptoms until 2 weeks after the onset of the paroxysmal cough; and are considered not infectious after 5 days of an appropriate antibiotic: azithromycin, clarithromycin or erythromycin. Antibiotic prophylaxis for contacts of confirmed cases of pertussis has a limited role, and is usually recommended only for contacts who are infants under 6 months of age, and contacts who may transmit pertussis to infants under 6 months of age.

The Public Health Unit can advise you, and detailed advice is available at:

<http://www.health.gov.au/internet/main/publishing.nsf/content/cdna-song-pertussis.htm>

Bats & people ... *not a good mix!*



High summer temperatures and heatwave conditions not only adversely affect human health but can have devastating consequences for wildlife. During the recent scorching conditions there have been reports of flying foxes becoming disoriented from heat and dehydration and accidentally flying into people. Descriptions of flying foxes 'dropping from the trees' or falling from the sky to perish in great numbers has become an almost yearly occurrence.

Most of the human exposure to bats is through intentional handling. Good Samaritans experience bites and scratches when attempting to rescue bats caught in barbed wire fences or fruit tree netting for example, or trying to remove bats

from homes or worksites as well as caring for heat affected urban colonies.

Unintentional exposure also occurs but less frequently with grounded bats being stood upon, bats flying through open windows of cars and homes, and, in one incident, a bat being caught on fishing line cast off the Pier.

Any bat related injury (bite, scratch or mucosal exposure to bat saliva or neural tissue), including those inflicted by microbats (insectivorous bats), carries a small but important risk of Australian Bat Lyssavirus infection. No matter how small the injury or how long ago it occurred, all bat related injuries should be assessed and managed as potential ABL exposures.

Management includes:

- **Immediate and thorough washing** (for at least 5 minutes) of all recent bite wounds and scratches with soap and water is important for minimising risk of infection. A virucidal preparation should be applied (povidone-iodine solution or alcohol). Avoid primary suturing of the wound.
- **Notify your local Public Health Unit immediately** (Hervey Bay 41841800) for assessment and advice on management of any potential exposure to Australian Bat Lyssavirus. Post-exposure prophylaxis (PEP) is recommended and funded by Queensland Health for any potential clinically significant exposure and should be commenced as soon as possible, preferably within 48 hours of exposure. PEP usually involves a series of rabies vaccination and rabies immunoglobulin if indicated.
- **Assess tetanus vaccination status** and give tetanus vaccine if necessary

For further information contact the Wide Public Health Unit.

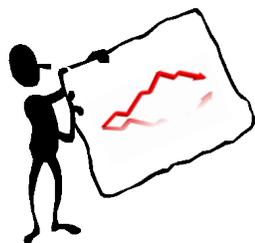
Comprehensive information is found in the following documents:

Australian Immunisation Handbook (AIH)

<https://immunisationhandbook.health.gov.au/vaccine-preventable-diseases/rabies-and-other-lyssaviruses>

Rabies and Australian bat lyssavirus National guidelines for public health units

<http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-abvl-rabies.htm>



IT'S ALL IN THE NUMBERS!

Wide Bay Hospital and Health Services Communicable Disease Notifications

The Wide Bay Public Health Unit covers the same geographical area as the Wide Bay HHS. Miriam Vale Shire is part of Gladstone Regional Council, however, it is within the Wide Bay HHS, and is included for this report. The Public Health Physician based in Hervey Bay is responsible for notifications in the Wide Bay HHS.

The ten conditions in the table accounted for about 88.7% of all Queensland notifications during the period 01 July 2018 to 30 September 2018.

Top 10 notifications for Queensland compared to Wide Bay HHS for the period 01/10/2018-10/12/2018

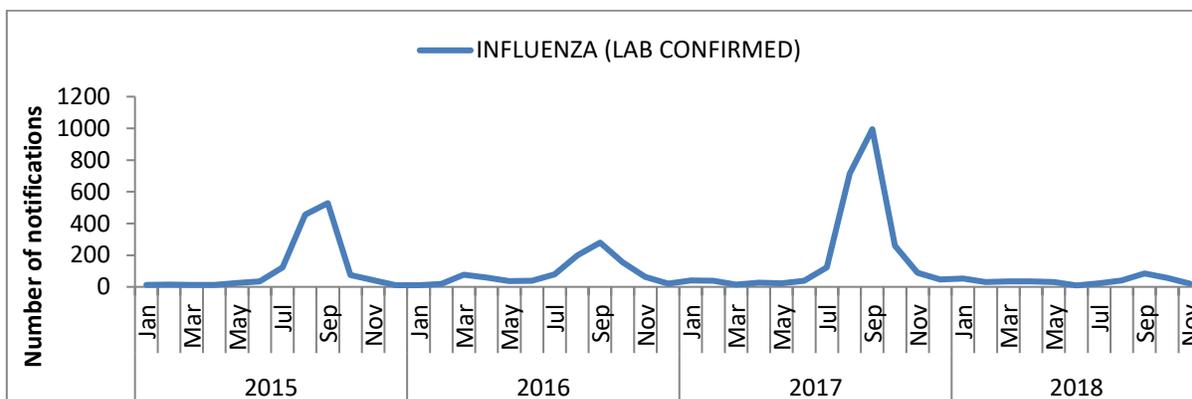
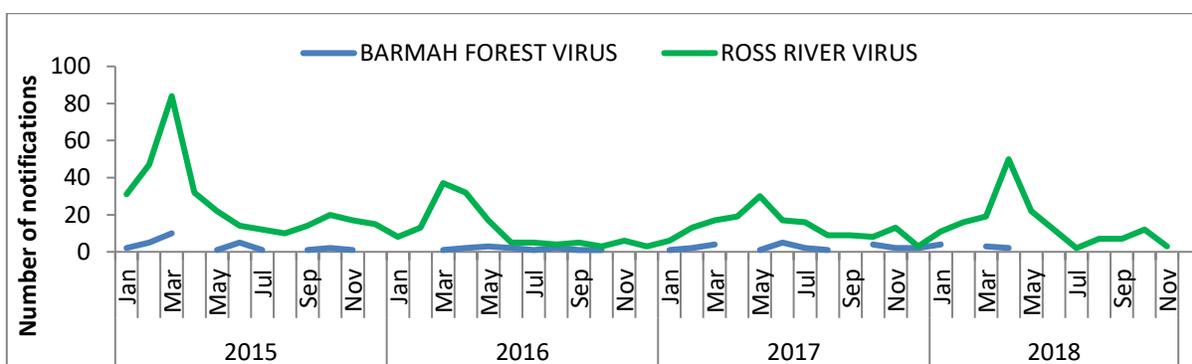
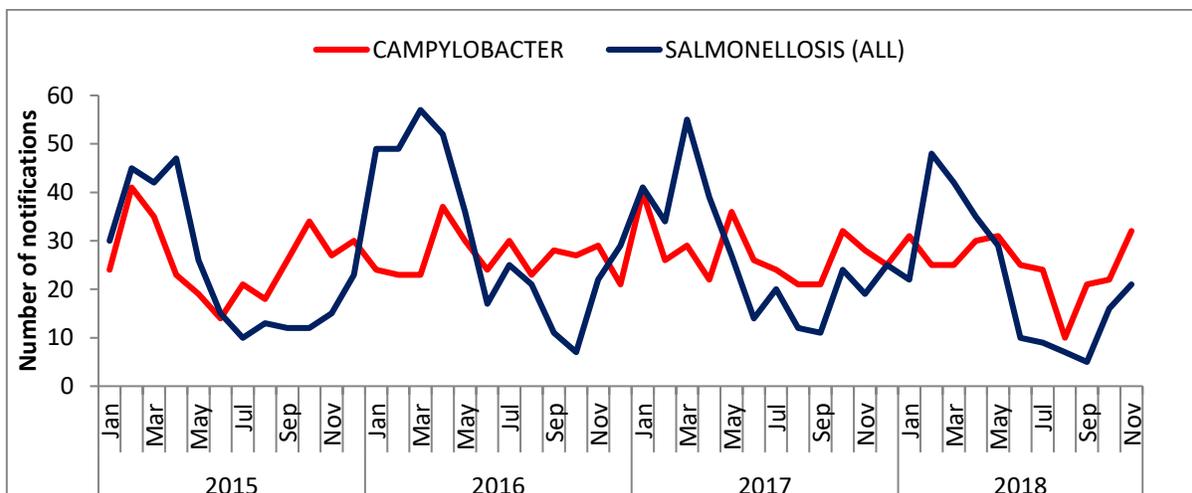
Notifiable disease	Count and Rate per 100,000 population*													
	Wide Bay Public Health Unit								Queensland					
	Bundaberg Regional Council		Fraser Coast Regional Council		Agnes Water-Miriam Vale (Regional Area)		North Burnett Regional Council							
Chlamydia (STI)	71	(75.0)	^	44	(42.3)	^	5	(81.6)	^	0	~	4710	(95.9)	^
Influenza (Lab Confirmed)	19	(20.1)	~	61	(58.6)	~	<5	^	<5	~	<5	3498	(71.2)	~
Varicella	27	(28.5)		25	(24.0)	^	<5	~	<5	^		1881	(38.3)	^
Campylobacter	28	(29.6)	~	28	(26.9)	^	<5		<5			1779	(36.3)	^
Gonorrhoea (STI)	7	(7.4)	^	<5			0		0			1097	(22.3)	^
Salmonellosis (All)	23	(24.3)	^	14	(13.4)	~	<5	~	<5	~		554	(11.3)	~
Pertussis	<5		^	5	(4.8)	^	0		0			519	(10.6)	^
Hepatitis C	8	(8.4)	~	22	(21.1)		<5	~	<5			418	(8.5)	~
Non-TB Mycobacteria	7	(7.4)	~	7	(6.7)	~	0		<5	^		322	(6.6)	^
Ross River Virus	<5		~	7	(6.7)	^	<5	^	<5	^		235	(4.8)	^

*2017 population data used to calculate the rates.

^ Above same time last year

~ Below same time last year

Graphs of notifications for the Wide Bay Public Health Unit are given below.



Office	Address	Postal	Phone	Fax
Hervey Bay – please note new street address	Madsen Medical Centre, Suite 11, 17 Hershel Court, Urraween 4655	PO Box 724 Hervey Bay Q 4655	07 41841800	07 41841809
Bundaberg	Lvl 1, 14 Branyan St Bundaberg 4670	PO Box 185 Bundaberg Q 4670	07 43037500	07 43037599
After Hours contact for urgent notifications: 3646 1699 Immunisation Histories: Fax 43037559				

Wide Bay Public Health Matters is produced by the Wide Bay Public Health Unit. The target audience is clinicians, particularly those working in primary health care. The newsletter aims to provide timely information and advice on relevant issues.