

# TROPICAL PUBLIC health news.

Tropical Public Health Services (Cairns)



## Introduction



*In our shared public health world there's always something new happening.*

This newsletter will help you get up to speed with some of the latest communicable disease challenges, which at the moment include mumps, meningococcal disease and sexually transmissible infections.

As we go to press an extension of the 4-valent (ACWY) conjugated meningococcal vaccine program already in place for all 15 – 19 year olds and described in this newsletter, is occurring. Funded vaccine has now become available to include 1 – 19 year old indigenous people in the Torres Cape

and Cairns & Hinterland Hospital and Health Service areas, as well as the North West HHS. This is in response to a significant outbreak of Meningococcal W cases among indigenous communities in the Northern Territory. A major vaccination program there over the past few months appears to have interrupted the cycles of transmission, but there have been what appear to be spillover cases in the North West.

Other developments on the horizon include the recent announcement of funded influenza vaccine for all Queensland children 6 months to less than 5 years of age (previously provided as funded vaccine only for those with medical conditions, and indigenous children). We hope this will be embraced in 2018 by health professionals as this age group are our super-spreaders, and also a high proportion of under 1 year olds require hospital admission with more severe disease. More to follow in the New Year, about this one.

Australia has just experienced a major flu season in 2017. While the vaccine was moderately effective against the Flu B strain that was circulating, it is clear that this year's formulation was not very effective at all against the A (H<sub>3</sub>N<sub>2</sub>) strain that was so prevalent. In effect, we witnessed what a flu season might look like much more often if there wasn't a flu vaccine in place! Evidence has now emerged that at a late stage in the preparation and production process for the vaccine, an unexpected gene mutation occurred which affected the particular antigens relied upon to confer H<sub>3</sub>N<sub>2</sub> immunity. We expect there will be better ways in the future to reduce the risk of this situation recurring.

*Dr Roscoe Taylor, Acting Director  
Tropical Public Health Services (Cairns)*



### In this issue:

- + Ongoing syphilis outbreak and emergent HIV outbreak in FNQ
- + Promoting Meningococcal Vaccine
- + Dengue Action
- + Turbidity takes its toll on tranquillity...
- + A Fresh look at Food + Australian Food Safety Week

# Ongoing **SYPHILIS OUTBREAK** and emergent **HIV OUTBREAK** in FNQ

*An outbreak of infectious syphilis was identified in North West Queensland in 2011,*

and since then the outbreak has spread across Northern Queensland (NQ) to include the Torres and Cape, Cairns and Hinterland and Townsville HHS areas, as well as the Northern Territory, Kimberley region of WA and South Australia.

Syphilis during pregnancy can cause congenital syphilis; since the beginning of the outbreak in 2011 12 cases of congenital syphilis have been diagnosed (seven in NQ), and there have been five deaths associated with congenital syphilis.

Syphilis infection can increase the risk of HIV transmission.

Syphilis, like many sexually transmitted infections (STIs) may be asymptomatic, therefore increasing opportunistic testing is crucial for early diagnosis and prompt treatment; and regular sexual health checks are recommended.

Since the beginning of 2014, there has been an increase in the number of HIV diagnoses in Aboriginal and/or Torres Strait Islander people in Far North Queensland (FNQ). Most cases have been diagnosed in people resident in the Cairns region; some also travel to, or reside in regional or remote communities.

The majority of cases have been in men (aged between 20 – 40 years), many of whom have male and female partners, but do not identify themselves as gay or bisexual.

Sexual contact appears to be the main route of transmission.



#### **Please note :**

- Offer syphilis and HIV testing to all Aboriginal and Torres Strait Islander people aged 15-39 years as part of a comprehensive STI screen.
- Opportunistic HIV, syphilis and other STI testing should be offered to all people in at risk groups
- Ensure all clients who test positive for chlamydia or gonorrhoea are also tested for syphilis and HIV.
- HIV testing should be included in the assessment of all people newly diagnosed with hepatitis C.
- Prompt treatment and contact tracing are critical to STI control.
- Provide information to clients about STI and blood borne virus risk reduction, and regular testing if they change partners.
- Further information and assistance with contact tracing:
  - Syphilis Register on 1800 032 238 or email [North-Qld-Syphilis-Surveillance-Centre@health.qld.gov.au](mailto:North-Qld-Syphilis-Surveillance-Centre@health.qld.gov.au)
  - Your local Sexual Health Service, Men's and Women's health service or contact tracing officer
  - Cairns Sexual Health Clinic on (07) 4226 4769 and Cairns Contact Tracing Officer CNC at Cairns
  - Sexual Health Clinic: Debbie Penney on 0427 562 645.

**Any questions related to emergent HIV outbreak and ongoing syphilis outbreak please contact  
Dr Annie Preston-Thomas on 4226 5556**

# Promoting Meningococcal Vaccine

**Qld has a FREE time limited program Meningococcal ACWY Vaccine for 15 – 19 year olds – PLEASE HELP US PROMOTE THIS VACCINE!**

*Under the program, free conjugate meningococcal ACWY vaccine is being offered to all Year 10 students through the Queensland School Immunisation Program in 2017.*

Free vaccine is also be available to 15 to 19 year olds through their doctor or usual immunisation provider from 1 June 2017 until 31 May 2018.

Parents and teenagers may believe that previous vaccination against Meningococcal C disease protects them against all forms of invasive meningococcal infection; and therefore they do not require the newer conjugate ACWY vaccine. This is not so, and we need your help to spread this message.

Meningococcal disease is a severe illness that can cause death or profound life-long disability including brain damage, hearing loss and/or limb loss. The recently announced Meningococcal ACWY Vaccination Program is in response to increased notifications of meningococcal disease caused by meningococcal strains W and Y in Queensland and other Australian jurisdictions during 2016. The program will target 15 to 19 year olds, who have some of the highest rates of meningococcal carriage.

The Meningococcal ACWY Vaccination Program will use Menveo® and Menactra® vaccines. Both vaccines are presented in vials and require syringes and needles for administration. Providers can order meningococcal ACWY vaccine through the usual monthly vaccine ordering process from IPU.

**More information about the Meningococcal ACWY Vaccination Program can be found on the Immunisation Program website at <http://www.qld.gov.au/health/conditions/immunisation/adolescents>**



**Meningococcal ACWY Vaccination Program**

Provided **FREE** for 15 - 19 years olds

Due to an increase in Meningococcal disease, the Queensland Government is offering free Meningococcal ACWY vaccine to adolescents aged 15 - 19 years.

Administration with an ACWY vaccine helps prevent meningitis, sepsis & other serious forms of meningococcal disease (M, C, W and Y strains).

Discuss with your healthcare professional in today's appointment

For more information visit [www.health.qld.gov.au/immunisation](http://www.health.qld.gov.au/immunisation)

SANOFI PASTEUR

There is currently an outbreak of Meningococcal W disease (Men W) occurring in the Northern Territory, particularly among Aboriginal children.

**Be aware of atypical presentations of Men W or Y disease. They have been noted to occur in all age groups:**

- Usual presentations of meningococcal disease with sepsis or meningitis include fevers, headache, neck stiffness, dislike of bright lights (photophobia), vomiting, purpuric rash, cold limbs, and joint pain;
- Babies and very young children may experience irritability, have difficulty waking, non-blanching petechial rash, bulging fontanelle, rapid or laboured breathing, refusal to walk/limping, diarrhoea, a high pitched cry or decreased oral intake;
- Many of the People with Men W disease in the NT outbreak have had atypical presentations such as epiglottitis, septic arthritis, conjunctivitis or pneumonia that present alone (~20%) or in combination with usual findings.

## Mumps

There has been a general increase in mumps cases in NW Queensland and other parts of northern Australia, particularly among indigenous people. 299 cases have been notified this year to date in Queensland (compared with 39 this time last year, which itself was an increase on previous years). New Zealand is also experiencing an outbreak. Further cases may yet emerge in the Cairns HHS and Torres Cape HHS areas, so it pays to maintain a heightened clinical awareness as well as promotion of the MMR vaccine.

As with measles, two doses of MMR vaccine are required to significantly reduce the risk of acquiring mumps.

MMR (Measles-Mumps-Rubella) vaccine should be actively considered for young people unless they have a readily available record of two previous doses of MMR (provided the person is not pregnant or immunosuppressed). The vaccine can be provided free using Queensland Health stocks for any person born after 1966 without 2 documented doses of MMR.



# DENGUE ACTION

*The Dengue Action Response Team (DART) reaches out to support community education and awareness programs in the prevention and control of *Ae aegypti* mosquitoes.*

They participated in the Trinity Beach Under 8's day where kids had the chance to learn and explore about mosquitoes while having fun playing games with DART members.

The team had other successful information booths at the Cairns Show, Cairns Life Expo and NAIDOC day. These events offer interactive education and information about dengue and Zika and the mosquitoes that transmits these diseases. Every year we engage with thousands of people from the community to promote safer living with knowledge of arthropod-borne diseases and mosquito bite prevention.

This year the theme was war on mosquitoes and kids of all ages had the chance to "take out" mozzies.







# Turbidity takes its toll on tranquillity....

## *With cheap direct flights from Cairns, Bali remains a travel hotspot for Far North Queenslanders.*

Living in far north Queensland is seen by many as living in paradise, where the oldest rainforests meet the Great Barrier Reef, and as such, the pristine waters that flow through our rainforests are seen as pure and naturally potable.

Lots of our drinking water service providers in the far north utilise catchments to collect drinking water from surface water creeks running through hectares and hectares of rainforest. These waters look absolutely idyllic and, for a lot of the year, seem crystal clear.

But when is rainforest water most likely to cause problems for our drinking water service providers? When it rains ironically enough! Heavy rains wash materials from the forest floors down into the water courses, including soil, vegetation..... and bird and feral pig faeces in huge volumes.

Pathogenic bacteria washing down through the creeks should be destroyed and rendered harmless by disinfection chemicals dosed in to the water supply before they reach the consumer. However, when a big rain event occurs and the extra materials surge down through the water catchment areas, the water is carrying huge amounts of floating particles; this is referred to as turbidity.

Apart from not looking very appealing, why does having particles of material, other than additional pathogenic bacteria mean problems for the drinking water service provider? The problem comes when the particles obstruct or get in the way of the molecules of disinfectant, which work by binding with, and inactivating the pathogens in the water. The extra particles of soil and leaf litter amongst other things, dramatically reduce the efficacy of the disinfectant, making it too risky to guarantee the water is safe to drink.

**Should you require any further information or advice regarding this or any other public health issue, please contact Tropical Public Health Services (Cairns) on 07 4226 5555.**

Tropical Public Health Services Environmental Health Officers work closely with the Department of Energy and Water Supplies and the individual drinking water service providers to determine the best course of action to ensure the water coming from our taps is safe to drink. In some instances, the only way to guarantee the water is safe is to issue a Boil Water Alert to all consumers.

**When issued, the advice to the affected community is to boil their tap water used for drinking and people should use cooled boiled water or bottled water for:**

- drinking
- brushing teeth
- washing and preparing food or beverages
- preparing baby formula
- making ice
- bathing infants.

**Unboiled drinking water can be used for:**

- showering and bathing other than infants (but minimise water in the mouth)
- washing dishes by hand or in a dishwasher, provided dishes are air-dried
- washing clothes
- flushing toilets.

When communities are affected doctor's surgeries may see an increase in presentations of gastroenteritis, and as such it is worth handling these presentations with one eye on the increased potential for the cause to be the drinking water supply, and be mindful of the associated pathogens that are likely to be found there. It would be greatly appreciated if the above advice could be reiterated to any patients you feel it appropriate for, during times when Boil Water Alerts are in place for your area.

# A Fresh look at Food

*In 2016, a state-wide audit was carried out by Public Health Units across Queensland to determine legislative compliance for use-by dates for packaged food. Retail businesses of varying sizes throughout the state were audited to determine whether packaged food was being sold past its use-by date.*

These businesses included retailers co-located with petrol stations, convenience stores, medium supermarkets and large supermarkets.

Section 39(4) of the *Food Act 2006* states 'A person must not sell or advertise, for sale, food in a way that contravenes a provision of the food standards code'. The Food Standards Code 1.2.5-4 states 'Food must not be sold past its use-by date'.

A similar use-by date audit had been conducted in 2013. One objective of the 2016 audit was to compare the compliance rate with that of the 2013 audit to estimate the efficacy of the enforcement activities undertaken in 2013. For this reason, 50% of the premises audited in 2013 were included in the 2016 audit.

Officers employed in Tropical Public Health Services (Cairns) were divided into pairs and 40 premises from the Cairns region were allocated to be audited over a twelve-week period.

During an audit in a large supermarket in July 2016, thirty-seven food products were found on display for sale past their use-by date. The products found were considered to be high risk food such as seafood, dairy and meat. A large portion of these items were found in the frozen section of the supermarket and were up to 146 days past their use-by date. A formal interview was conducted with the supermarket owner and the items were seized as evidence.

A review of the file history determined that the same supermarket was found to be selling 11 food products past their use-by date during the 2013 audit. A prescribed infringement notice had been issued to address this non-compliance. Given this previous history, the evidence gathered and the severity of the non-compliance (more than three times the amount of food past its use-by date was found in 2016 compared to 2013), it became apparent that the business had neglected to address systemic failures. Therefore, prosecution was determined as the most appropriate action to take.

The complaint and summons were laid with the respective magistrates' court, one charge was for the company and one was for the company director, who is also the owner of the supermarket.

After numerous adjournments, the sentencing hearing was scheduled. The company was charged with three counts of breaching Section 39(4) of the *Food Act 2006* and standard 1.2.5 - 4 of the Food Standards Code by selling and advertising 37 food products for sale past their use by date. The company director was charged with three counts of failing to take all reasonable steps to ensure the company did not breach Section 39(4) of the *Food Act 2006*.

Guilty pleas were entered on both charges and sentencing involved a \$20,000 fine being issued to the company in addition to \$1000 in court costs with a conviction recorded. The company director was also fined \$4000, with an additional \$750 in court costs with no conviction recorded.

The successful prosecution has underscored the need for and supported the purposes of the audit project:

- Protection of the health of consumers by removing from sale any food past its use-by date
- Education of retail food businesses unsure of date marking requirements;
- Food business operators knowing that the requirements of the Food Standards Code are monitored.

## AUSTRALIAN FOOD SAFETY WEEK

**11-18 November 2017 - community resource package is now available from the Food Safety Information Council**

This year's theme is 'Is it done yet? Use a thermometer for great food, cooked safely every time'.

We would love it if you could get involved in Australian Food Safety Week.

If you'd like to find out more go to <http://foodsafety.asn.au/> or contact the Council at [info@foodsafety.asn.au](mailto:info@foodsafety.asn.au) or call 0407 626 688.

Many of the resources available and activity suggestions would be of particular value to local governments, and remember that food safety is everybody's business!



## Count of notifications for selected conditions for Far North Queensland

### TOTAL

(1 January 2017 – 30 September 2017)

	Cairns & Hinterland	Torres Strait & Cape York	TOTAL
Acute Rheumatic Fever	16	18	34
Barmah Forest Virus	11	3	14
Campylobacter	301	18	319
Chlamydia (STI)	1,652	469	2,121
Cryptosporidiosis	31	3	34
Dengue Fever	25	5	30
Gonorrhoea (STI*)	322	108	430
Group A Streptococcal Infection	26	13	39
Hepatitis A (All)	1	0	1
Hepatitis B (All)	49	18	67
Hepatitis C	135	7	142
Influenza (Lab Confirmed)	1,859	295	2,154
Leprosy	0	1	1
Leptospirosis	44	2	46
Melioidosis	31	11	42
Meningococcal Infection (Invasive)	2	0	2
Pertussis	160	18	178
Pneumococcal Disease (Invasive)	18	5	23
Q Fever	16	2	18
Ross River Fever	106	18	124
Rotavirus	82	11	93
Salmonellosis (All)	208	22	230
Syphilis (Infectious)	158	25	183
Varicella (Chicken Pox and Unspecified)	297	30	327
Yersiniosis	17	0	17
Zika Virus	0	0	0

Data extracted and correct as of 10/11/2017

NOTE figures for Gonorrhoea and chlamydia are for number of positive tests not number of individuals with the disease (one person may have multiple tests)

Weekly notifiable conditions reports are available at:

[www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/surveillance/reports/notifiable](http://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/surveillance/reports/notifiable)

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### Useful web links:

- [Travel Vaccination advice for GPs](#)
- [Communicable Disease Control Guidance and Information](#)
- [Immunisation information for health professionals](#)
- [RHD and ARF guidelines](#)
- [Clinical guidelines for sexual health](#)
- [Homepage for Tropical Public Health Services \(Cairns\)](#)