

# TROPICAL PUBLIC health news.

Tropical Public Health Services (Cairns)

## Introduction

Welcome to the third Tropical Public Health Services (Cairns) quarterly newsletter.

Public health focusses on the prevention of disease. In this edition we look at measures to prevent dengue, AIDS/HIV, rheumatic heart disease, influenza and ill health from smoking. The strategy for each is slightly different but the principle is the same, i.e. taking measures to prevent illness or the consequences of illness. This is the underlying principle which informs the work of Tropical Public Health Services.

Dengue is not the only mosquito borne disease of concern. So far this year we have seen a relatively high number of notifications of Ross River fever. The strategy for reducing cases is slightly different to Dengue because Ross River fever is spread by a much more prevalent mosquito. The only way to try and reduce Ross River cases is for people to avoid mosquito bites by use of repellent, mosquito coils, etc. particularly whilst in the bush or camping.

This newsletter includes the disease notifications data for all of 2014. In particular, there has been an increase in cases of Campylobacter and Salmonella food poisoning over the past few months. In order to prevent



illness from these organisms, the public are urged to ensure that they cook meat, particularly chicken, thoroughly and avoid cross contaminating other foods with raw meat whilst preparing food.

I hope you find this newsletter informative. Please email me [richard.gair@health.qld.gov.au](mailto:richard.gair@health.qld.gov.au) with your feedback or any suggestions for future editions.

Regards,  
Dr Richard Gair, Director



Above: Community education through participation was a key part of a week's activities aimed at raising awareness of HIV and AIDS in the Northern Peninsula Area. The activities included screen printing which resulted in some stunning artworks that will be used in future health promotion resources. Read more on page 2.



### In this issue:

- + Children at risk - ARF and RHD
- + Influenza immunisation program update
- + Avoiding Dengue outbreaks

## World AIDS/HIV Awareness Week

By *Mario Assan, Health Promotion Officer*

The Northern Peninsula Area (NPA) hosted a range of activities to increase awareness about HIV and AIDS coinciding with World Aids Day on 1 December 2014.

The week long program included a community BBQ, health promotion display and giveaways, art workshops which included painting and screen-printing, basketball clinics and basketball 3-on-3 carnival.

The approach was to engage the community and provide AIDS/HIV information and education and increase awareness through activities which would encourage the community to participate.

The program was coordinated by

the Sexual Health Promotion team at NPA Family and Community Services, together with 2 Spirits, Cairns Taipans and Tropical Public Health Services (Cairns).

Participants created artworks with positive safe sex messages facilitated by Arone Meeks and Mario Assan. Artwork produced from the workshop will be developed into future health promotion resources.

Aaron Tamwoy said "It was great to engage the community through activities to increase awareness".

Local band SK Boyz also produced a song to promote key themes associated with the week. They performed the song during the night of the 3-on-3 basketball carnival which was a big hit with the community.

Organisations which also provided



*Above: Screen-print design of dugongs incorporated into the AIDS ribbon.*

support included NPA Basketball Association and Cairns Sexual Health Unit. Working in partnership with key organisations enabled the program to be delivered and provide successful outcomes.

## 2015 National Influenza Immunisation Program

*The National Influenza Program for 2015 will NOT commence on the usual start date of 15 March.*

Vaccine service providers will be notified when vaccine distribution is to commence.

Vaccination clinics should not be booked until vaccine delivery dates are confirmed.

The World Health Organization and the Australian Influenza Vaccine Committee have agreed that the 2015 vaccine will contain three influenza strains with two strain changes from the 2014 vaccine.

The change in virus strains has impacted on manufacturing timeframes.

The 2015 influenza vaccines will contain the following components:

- A/California/7/2009 (H1N1) pdm09 - like virus
- A/Switzerland/9715293/2013 (H3N2) - like virus
- B: a B/Phuket/3073/2013 – like virus (Yamagata lineage)

The Federal Government has added the influenza vaccine for Aboriginal and Torres Strait Islander children aged 6 months to <5 years of age to the national program.

Remember to ask all parents "Is your child of Aboriginal and/or Torres Strait Islander origin?"

The Australian Immunisation Handbook recommends influenza vaccination for anyone aged

6 months or older who wishes to protect themselves against influenza.

Groups eligible for free influenza vaccination include:

- All adults aged  $\geq 65$  years of age
- Pregnant women at any stage of pregnancy
- Aboriginal and Torres Strait Islander people aged  $\geq 15$  years of age
- Aboriginal and Torres Strait Islander children aged 6 months to <5 years of age
- Individuals  $\geq 6$  months of age with medical conditions predisposing them to severe influenza.

More detailed information is available online at: [www.immunise.health.gov.au](http://www.immunise.health.gov.au) or through Tropical Public Health Services (Cairns).

# Children at risk - RHD and ARF

*In an alarming statistic – fewer than 1% of people with Acute Rheumatic Fever (ARF) and Rheumatic Heart Disease (RHD) in Queensland received all their scheduled secondary prophylaxis antibiotics during 2014.*



This means at least 1144 Aboriginal and Torres Strait Islander people in Queensland are at risk of further ARF episodes and worsening RHD.

Recorded rates of ARF and the resultant condition RHD within the Australian Aboriginal and Torres Strait Islander populations are amongst the highest in the world. Both diseases predominately affect children, adolescents and young adults and are significant contributors to early morbidity and mortality within these population groups.

ARF is the autoimmune response to Group A Strep (GAS) infections. It is impossible to predict which child will develop ARF, but it is important to recognise that subsequent episodes of ARF and the development of most RHD cases are entirely preventable.

*Evidence shows that the only effective strategy to prevent recurrent ARF episodes is with regular intra-muscular injections of Bicillin L-A.*

The frequency is often prescribed as “monthly” as this was in practice

easiest to achieve. Evidence now shows that penicillin levels in the blood drop after the third week. Current advice from the Australian guidelines is for all ARF/RHD patients to have their injections every 21 to 28 days. This ensures that the antibiotic coverage is maintained and the potential for subsequent GAS infections and ARF episodes is reduced (Edwards, 2013).

For most patients, regular penicillin injections must be maintained for at least 10 years and for some they must continue for life, depending on the severity of the disease.

The RHD Register and Control Program for Queensland provides monthly recall/reminder lists to health care providers across the state to support the delivery of secondary prophylaxis antibiotics on time every time.

As of 31 December 2014, the Register had 1,666 clients, 1149 of whom were scheduled to receive

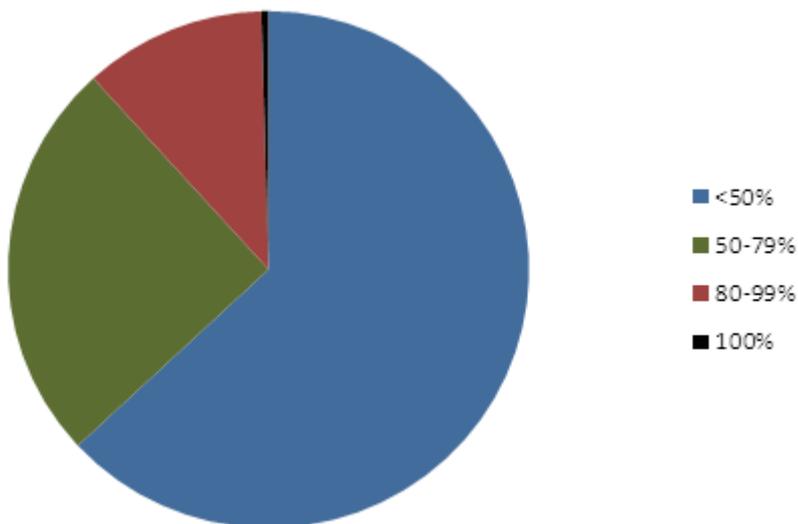
penicillin injections. The graph below shows the compliance rates with prescribed secondary prophylaxis in Queensland for the period 1 January 2014 to 31 December 2014.

As can be seen from this data, the number of clients at very high to high risk of contracting GAS infections, ARF and worsening of RHD is alarming. The only evidence-based strategy to prevent this occurring is the delivery of intramuscular penicillin every 21 to 28 days.

Strategies and resources to improve client, family and clinical awareness of and adherence to treatment scheduled can be discussed with the RHD Register and Control Program by calling 1300 135 854.

[>>> more ARF/RHD info and resources online...](#)

## Proportions of clients receiving % of their scheduled secondary prophylaxis antibiotics (1 Jan – 31 Dec 2014)



Scheduled injections received on time in 2014	<50%	50-79%	80-90%	100%	Totals
Clients (%)	63.1	25.2	11.31	0.44	100%
Clients (raw numbers)	725	289	130	5	1149

# Avoiding Dengue Outbreaks

By Dr Richard Gair

*In Far North Queensland Dengue fever occurs in outbreaks; it does not circulate all year round. These outbreaks always result from someone travelling to a country where there is dengue and then coming to FNQ whilst they are still infectious to mosquitoes.*

In Australia, it is only in North Queensland that there are significant numbers of *Aedes aegypti* (the mosquito that transmits dengue from one person to another), so in contrast to the rest of Australia, we regularly see outbreaks in our area.

Outbreaks of dengue can be avoided by:

## 1. Preventing human cases coming in to Australia.

This is very difficult, but the risk can be reduced by educating travellers about taking precautions whilst visiting dengue endemic countries. Health professionals should



educate travellers about the need to take mosquito precautions.

## 2. Early recognition of cases will prevent people with dengue fever infecting mosquitoes.

Anyone who thinks they may have dengue should see a doctor as soon as possible. Doctors should immediately conduct the appropriate tests for dengue (NS1, PCR and serology) but should notify Tropical Public Health Services Cairns (TPHS Cairns) immediately without waiting for the results of the test.

The symptoms of dengue are:

- headache and flu-like illness
- aches and pains in muscles and joints
- sometimes rash
- lethargy
- sometimes metallic taste in mouth
- sometimes diarrhoea.

## 3. Reduction of the number of mosquitoes.

This can be achieved by reducing breeding sites around homes, removing anything containing water and use of screens to stop mosquitoes getting in to houses.

## 4. Avoiding mosquito bites by using insect repellent and mosquito coils.

## 5. Spraying of premises to kill potentially infected mosquitoes.

Doctors need to immediately notify TPHS Cairns if they suspect dengue - don't wait for confirmation on testing - so that TPHS can deploy Vector Control Officers as soon as possible.

## 6. Interfering with or stopping the ability of mosquitoes in an area to transmit dengue.

Early results suggest that the Eliminate Dengue project may be successful in reducing the ability of mosquitoes to transmit dengue.



Last wet season we saw 136 cases of locally acquired dengue fever; the year before that 184 and this year so far we have seen 44 locally acquired cases (as at 27/02/2015). In 2009, Cairns saw an outbreak of over 1,000 cases that lasted 31 weeks.

Dengue is a very unpleasant illness often requiring significant time off work or school and in some cases it can have serious consequences including death.

TPHS (Cairns) has been working hard on a preventative program this year to reduce the number of mosquitoes in known local high risk areas for dengue transmission.

The Eliminate Dengue project (a worldwide project to reduce the ability of mosquitoes to transmit dengue) has been doing research in a number of areas around Cairns. Initial results indicate that the project is likely to be successful in controlling dengue outbreaks in the long term.

Prevention of dengue outbreaks is a joint effort between the public, the local authority, local health professionals and TPHS (Cairns).

*Notify Tropical Public Health Services immediately on the suspicion of dengue.*

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## New guide an Australian first

A new easy-to-understand guide is set to become a key resource in defending against dengue fever.

Developed by ARC Disability Services and Tropical Public Health Services (Cairns) the Don't Get Dengue booklet was launched in February.

ARC CEO Anita Veivers said the booklet was the first of its kind in Australia.

"A lot of time and research has gone into the development of this guide and we are very proud to be able to make it available to the public.



"It is a crucial resource designed to simplify the key steps to preventing the spread of dengue in an easy to read and easy to understand format for people who have an intellectual disability or limited reading ability," she said.

Tropical Public Health Services (Cairns) Entomology Manager Joe Davis said the Dengue Action Response Team (DART) had welcomed the opportunity to become involved.

"This guide helps us to reach out to sections of our community who otherwise may miss important dengue prevention messages," he said.

Don't Get Dengue is available at Cairns Regional Council facilities such as libraries, online on the Dengue website [www.health.qld.gov.au/dengue](http://www.health.qld.gov.au/dengue) and ARC Disabilities website [www.arcinc.org.au/resources/](http://www.arcinc.org.au/resources/).

>> [download the guide here...](#)

## New Tobacco Laws

*From 1 January 2015, Queenslanders who smoke on or within five metres of health facilities and school grounds face on-the-spot fines following amendments to the Tobacco and Other Smoking Products Act 1998.*

"Included in these amendments are also improvements to the legislation that will see Queensland become the first state to subject e-cigarettes to the same laws as regular cigarettes," Dr Richard Gair, Director Tropical Public Health Services (Cairns) said.

The new laws can be enforced by Queensland Health Environmental Health Officers, Local Government officers, and Hospital and Health Service Chief Executive-appointed authorised persons such as security staff.

"Making public and private Queensland hospitals and health

facilities completely smoke free reinforces the message that these places are for healthcare and the promotion of healthy lifestyle choices," Dr Gair said.

"Second-hand smoke causes 10 per cent of deaths due to smoking-related diseases so the buffer around these facilities will play an essential role in dispersing smokers that congregate at entry and exit points."

>> [more info and resources online...](#)

### Quick facts

- *Smoking is banned at all public hospitals and healthcare facilities (including public community health centres, aged care facilities, mental health facilities, rehabilitation facilities) and at private hospitals and day hospitals.*
- *Smoking is also banned at all state and non-state schools (primary and secondary).*
- *The ban on smoking at health facilities and schools includes a five metre buffer around the perimeter of their land.*
- *On-the-spot fines apply – a penalty of at least \$227.*

Queensland Health

## Smoke-free Healthcare



## Notifiable conditions reported in Far North Queensland:

TOTAL	Cairns & Hinterland	Torres Strait & Cape York	TOTAL
(1 January 2014 – 31 December 2014)			
Acute Rheumatic Fever	20	27	47
Barmah Forest Virus	44	6	50
Campylobacter	500	16	516
Chlamydia (STI)	2009	715	2724
Cryptosporidiosis	41	<5	≈45
Dengue Fever	146	<5	≈150
Gonorrhoea (STI)	350	166	516
Hepatitis A (All)	<5	<5	≈8
Hepatitis B (All)	60	13	73
Hepatitis C	185	13	198
HIB	<5	0	<5
Influenza (Lab Confirmed)	741	204	945
Group A Streptococcal	33	16	49
Leptospirosis	55	0	55
Malaria (All)	9	0	9
Measles	9	0	9
Melioidosis	6	6	12
Meningococcal Infection (Invasive)	<5	0	<5
Pertussis	98	30	128
Pneumococcal Disease (Invasive)	13	<5	≈17
Q Fever	20	<5	≈24
Ross River Virus	213	27	240
Rotavirus	32	<5	≈36
Salmonellosis (All)	225	39	264
Shigella (All)	32	21	53
Syphilis (Infectious <2 yr duration)	36	12	48
Varicella (Chicken Pox and Unspecified)	331	40	371
Varicella (Zoster)	<5	0	<5
Yersiniosis	52	<5	≈56

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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 \(Cairns\)](#)