# Primary Prevention of Rheumatic Fever ...and More



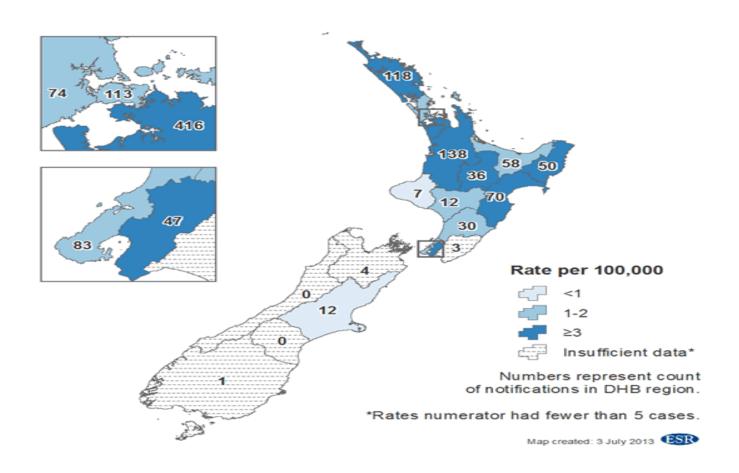
Liz Pillay Nurse Educator







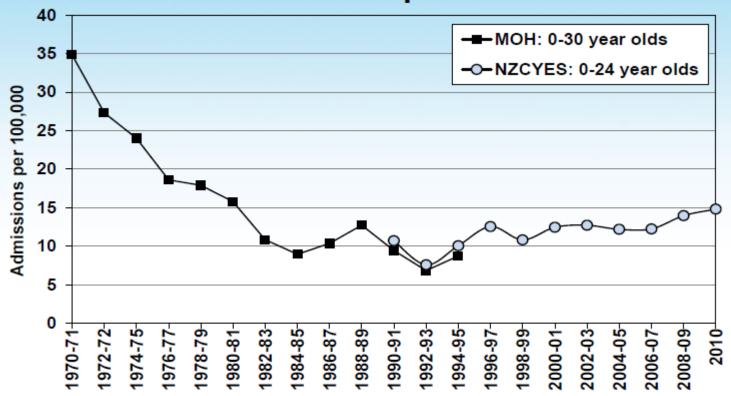
## RF Rates Across NZ





## New Zealand Trends

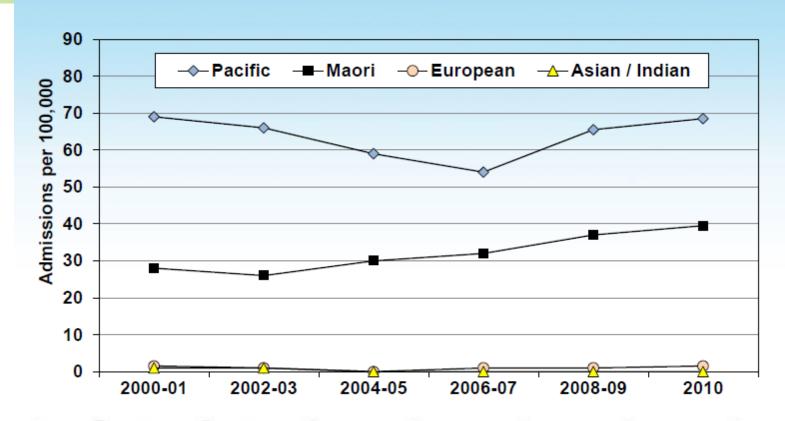
#### Acute Rheumatic Fever Hospitalisations 1970-2010



Ministry of Health. Progress on Health Outcome Targets 1999. Wellington: Ministry of Health; 1999. New Zealand Child and Youth Epidemiology Service <a href="https://www.otago.ac.nz/nzcyes">www.otago.ac.nz/nzcyes</a>



# ARF Admissions by Ethnicity 0-24 Year Olds, NZ 2006-2010



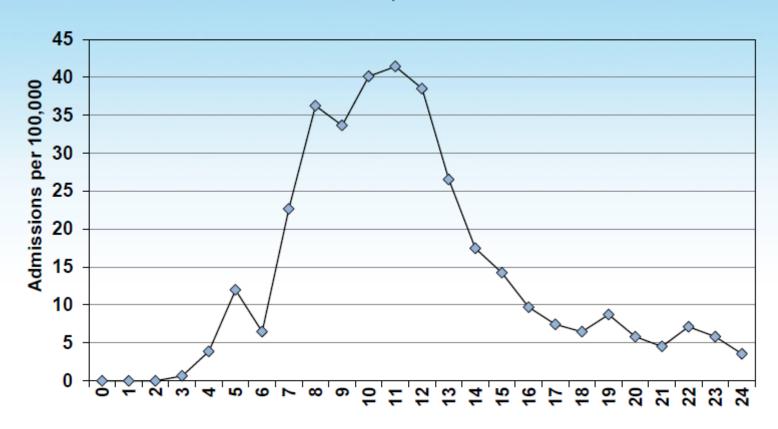


:YES 2012 www.otago.ac.nz/nzcyes

Working with the people of Auckland, Counties Manukau and Waitemata



# ARF Admissions by Age 0-24 Year Olds, NZ 2006-2010





NZCYES 2012 www.otago.ac.nz/nzcyes

Working with the people of Auckland, Counties Manukau and Waitemata



## Government response



- Rheumatic fever target as part of the Better Public Services initiative
- More than 65million over 6 years
- Stop it: Prevent transmission of Strep A sore throats
- Treat it: Treat Strep A throats quickly and effectively



## Goals of national RFPP



- To achieve equity of incidence and outcomes of rheumatic fever between Maori and Pacific children, and other NZ children
- 2. "By 2017, to reduce new episodes of rheumatic fever by two thirds to 1.4 cases per 100,000 population per year"



#### **Raising awareness**

STOP GAS SORE THROATS

**Communications Campaign** 

Online Learning

Pacific

Engagement Strategy

School-based programme

Primary care guideline/ response

Rapid Response Clinics

TREAT
GAS
SORE
THROATS

Reduced structural and functional household crowding

Auckland-wide Healthy Homes Initiative

SAS Fast Track scheme

Free, rapid effective sore throat management











### Union Health Otara





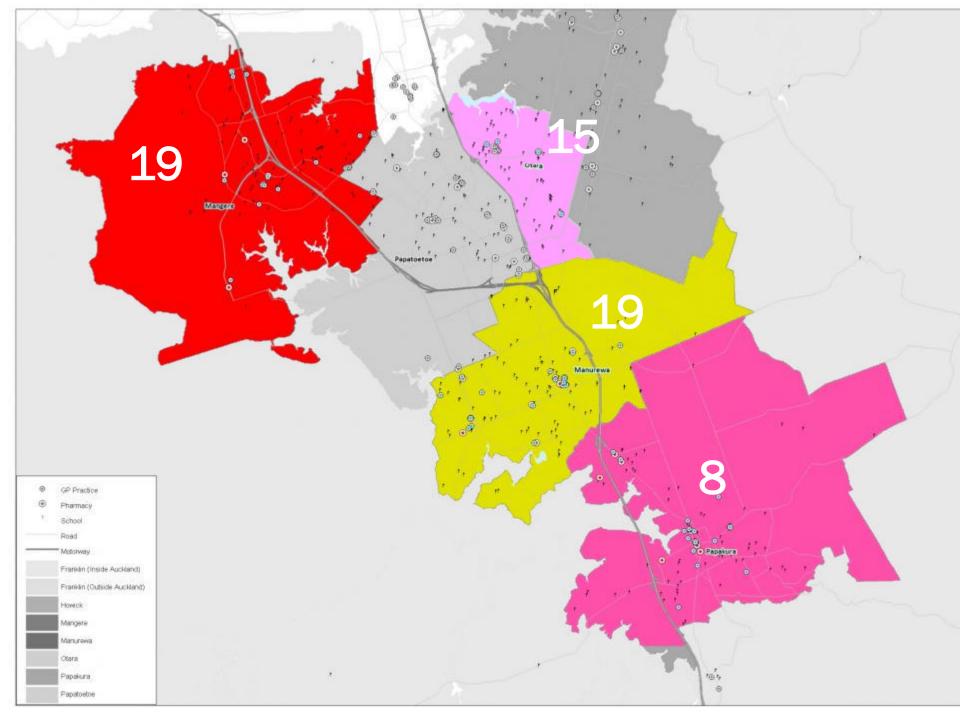






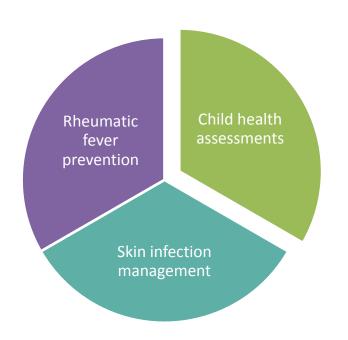






## Mana Kidz





- 61 decile 1-3 schools; >22k children
- Comprehensive school-based service
- Health teams (WSW, RN) at school 5 days a week
- Assessment and treatment Standing Orders
- Child health assessments include hearing and vision, child protection, housing/health referrals, health education and promotion

## Throat Swabbing



Most sore throats are caused by viruses

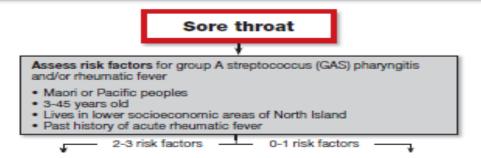
Only a throat swab can tell if the group A streptococcal bacteria is present

If a Maori or Pacific child or young person complains of a sore throat make sure they have a throat swab taken

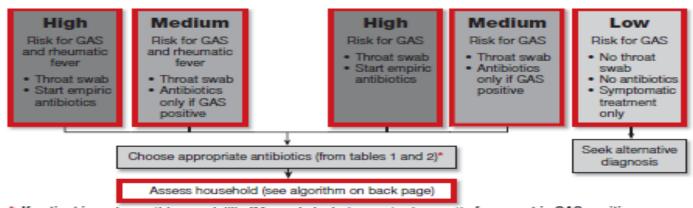






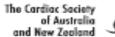


ANY Maori or Pacific child/young person in South Auckland is at high risk and needs a throat swab, with antibiotics asap.



- If patient is on benzathlne penIcIIIn IM prophylaxIs for acute rheumatic fever, and is GAS positive on throat swab, treat in the following way:
- If GAS positive in the first two weeks after IM penicillin injection has been given, treat with a ten day course
  of erythromycin (see table 1 and guideline)
- If GAS positive in the third and fourth weeks after IM penicillin injection, treat with a ten day course of oral penicillin (see table 1 and guideline).









## **Treatment**



## Medication Adherence is the significant challenge in the community...

- Penicillin V
- Amoxycillin
- Erythromycin Ethyl Succinate (EES)

### Single dose

Benzathine Penicillin G (BPG) –



10 days of antibiotics



## Success Story

- Primary school with school roll of 500 students
- A year ago: GAS+ rates around 30%
- March: 8.5%
- Significant reduction in skin infections
- Overall health of students have improved

