# FAST FACTS



Acute Rheumatic Fever and Rheumatic Heart Disease are

## PREVENTABLE

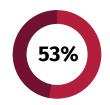
## MORE **6000**

### **PEOPLE ARE ON RHD REGISTERS ACROSS AUSTRALIA**

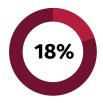
& 40% of them are under 24 and at risk of premature death or disability.1







of ARF reported between 2010 and 2013 was in children aged 5-14 years.3



of ARF in children aged 5 to 14 years are preventable recurrences.2

of the ARF reported in Australia is among Aboriginal and Torres Strait Islander people.3



### **59 PER** 100,000



The incidence of ARF is approximately 59 per 100,000 among Aboriginal and Torres Strait Islander people and less than 1 per 100,000 for other Australians.2

### **6**x MORE



Aboriginal and Torres Strait Islander people are more than 6 times more likely than other Australians to be hospitalised for ARF and RHD.3

## **20-55**x MORE



Aboriginal and Torres Strait Islanders are between 20-55 times more likely to die from RHD than non-Indigenous people.1

### **GOOD NEWS**

ARF and RHD can be controlled through improved living conditions, reduced overcrowding, access to health care and antibiotics.

Policy and research initiatives to better understand and reduce the burden of RHD are underway.

1/ Australian Medical Association (AMA), 2016. AMA Report Card on Indigenous Health,

Available at: https://ama.com.au/system/tdf/documents/2016-AMA-Report-Card-on-Indigenous-Health.pdf?file=1
2/ Australian Institute of Health and Welfare 2018. Better Cardiac Care measures for Aboriginal and Torres Strait

Islander people: third national report 2017. Cat. no. IHW 197. Canberra: AIHW 3/ Australian Institute of Health and Welfare 2015. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples 2015. Cat. no. IHW 147. Canberra: AIHW.



### 10 THINGS YOU NEED TO KNOW



#### GLOBAL SIGNIFICANCE

- Acute rheumatic fever (ARF) is a sensitive marker of childhood disadvantage.
- Rheumatic heart disease (RHD) is the most common cause of acquired heart disease in children around the world.



#### **IN AUSTRALIA**

- Aboriginal and Torres Strait Islander people
  of northern and central Australia have among
  the highest reported rates of ARF and RHD in
  the world.
- ARF is most common among children aged 5-14.
- ARF and RHD are notifiable conditions in some Australian states and territories.



#### **PATHOGENESIS**

- ARF is an illness caused by a reaction to a bacterial Group A streptococcal infection.
   Not all people who have this infection will develop ARF.
- RHD is damage to the heart valves following ARF. The valves are unable to function normally which leads to leaking or blockage of blood as it moves through the heart.



#### **PRIMARY PREVENTION**

 Prompt treatment of streptococcal throat and skin infections with penicillin is critical to prevent ARF.



#### **DIAGNOSIS OF ARF**

- Clinical features may include fever, joint redness/pain/swelling, choreiform movements, lumps or rashes on the skin.
- Heart involvement should be suspected if there are ECG changes, a heart murmur, or chest pain or palpitations.
- Diagnosis requires a specific combination of symptoms plus evidence of a recent Group A streptococcal infection.
- Everyone with suspected ARF should be admitted to hospital under the care of a medical specialist.



#### TREATMENT OF ARF

- For everyone penicillin to clear the streptococcal skin or throat infection.
- For symptom control pain and fever relief, rest and care to support joints, corticosteroids for acute severe carditis, anti-epileptics for severe chorea.



#### **RECURRENCE OF ARF**

- ARF tends to recur with subsequent streptococcal infections.
- Delivery of intramuscular penicillin every 21 to 28 days prevents recurrent ARF and minimises the development and/or severity of RHD.



#### **DIAGNOSIS OF RHD**

- RHD is most accurately diagnosed on echocardiogram.
- The mitral and aortic valves are most commonly affected.
- Signs of progressing disease may include breathlessness on exertion or lying down, fatigue, swelling of the legs and feet and palpitations.



#### **DISEASE CONTROL**

- RHD Control Programs provide support to clinicians, and to people with ARF and RHD and their communities.
- The Australian ARF/RHD guideline includes best practice clinical information and tailored models of care for people with ARF and RHD.



#### PRIMORDIAL PREVENTION

Addressing socioeconomic disadvantage, including a reduction in household crowding and improvements in hygiene hardware, as well as ensuring access to health services are likely to be the best solution to prevent ARF and RHD.

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Reference: RHDAustralia (ARF/RHD writing group), 2012. National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand. Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (2nd edition).





The Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (2nd edition) and quick reference guides are available through the RHDAustralia website: www.rhdaustralia.org.au



