Acute Rheumatic Fever in Queensland: a lingering shame?

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Background

- Acute rheumatic fever (ARF)
  - Group A *Streptococcus* (skin & throat)
  - Overcrowding
  - Minimum 10 years follow up
  - Painful IM benzathine penicillin, four-weekly
  - Rheumatic heart disease (RHD)
Objective

• *Queensland Aboriginal and Torres Strait Islander Rheumatic Heart Disease Action Plan* (Action Plan)

• Inform the Action Plan
  – Describe the incidence rate of ARF diagnosis
  – Describe the geographical distribution of ARF
Methods

• Queensland RHD Register and Control Program

• Inclusion:
  – Confirmed, highly suspected, uncertain

• Analysis in Microsoft Excel®
Results

1071

88

12
Results

Queensland Aboriginal and Torres Strait Islander ARF incidence rate by age group, 2002-2004 to 2014-2016
Results

Queensland Aboriginal and Torres Strait Islander ARF incidence rate by age group, 2002-2004 to 2014-2016
Results

Map source: Queensland Health
Notifications of ARF in Aboriginal and Torres Strait Islander Queenslanders by HHS, 1999–2016

Map source: Queensland Health
Results

Queensland Aboriginal and Torres Strait Islander ARF incidence rate by HHS, 2014-2016
Results

Queensland Aboriginal and Torres Strait Islander ARF incidence rate by HHS, 2002-2004 to 2014-2016
Discussion & Implications

• Disproportionate representation of Aboriginal and Torres Strait Islander Queenslanders

• Highest incidence
  – 5–19 years of age
  – Northern HHSs

• Guide the development of the Action Plan
Limitations

• Results likely underestimate incidence
  – Cases missed
    • Missed diagnosis
    • Misdiagnosis
  – Failure to notify

• Small number of cases diagnosed annually
Conclusion

• Nothing ground-breaking
• Evidence required for strategy
• Guide development of Action Plan
• Use for strategy evaluation
Acknowledgements

• Daniel Williamson and the team at the Aboriginal and Torres Strait Islander Health Branch

• Mellise Anderson and the team at the Queensland RHD Register and Control Program