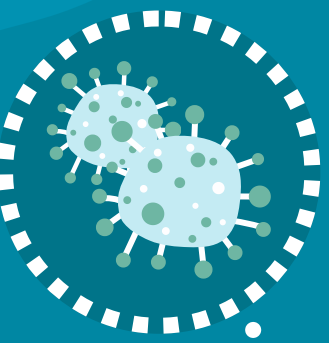
THE QUICK FACTS ARF/RHD

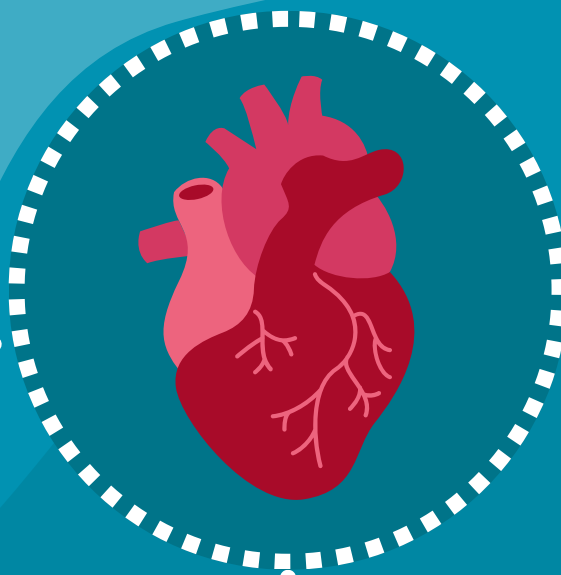


Rheumatic Heart Disease (RHD) is a serious heart disease involving irreparable damage to the heart valves. RHD develops following repeated episodes of Acute Rheumatic Fever (ARF)

ARF is an inflammatory disease that develops as a result of recurrent or untreated infection with Group A Streptococcus bacteria (GAS)

GAS infections are commonly found in the throat (e.g. pharyngitis) and skin (e.g. impetigo/school sores)

GAS infections and ARF are treated with a penicillin (BPG) injection. For those with ARF, BPG injections are recommended every 21-28 days for a minimum of 10 years to prevent it from developing into RHD



BPG injections are extremely painful and have been nicknamed the “peanut butter shot” for their thick consistency

RHD can be fatal. Symptoms include arrhythmias, stroke, and inflammation of the heart.

Treatment for RHD includes valve replacement surgery, or a full heart transplant

The ARF diagnosis rate is highest among 5-14 year olds

Between 2018-2022:

- 95% of ARF diagnoses occurred in First Nations people
- 78% of RHD diagnoses occured in First Nations people
- The prevalence rate of RHD in First Nations people *increased*

ARF and RHD are entirely preventable and therefore public health priorities

CSIRO Indigenous Health Team Projects

91.8% of ARF infections in Australia occur in regional and remote areas

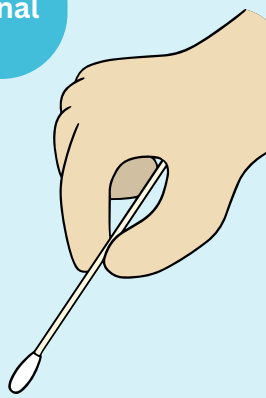
AIG Remote Laundries Evaluation

In the Northern Territory, overcrowding and a lack of washing facilities have been identified as facilitating the spread of GAS. In 2019 the Aboriginal Investment Group (AIG) launched the Remote Laundries Project as a means of protecting Communities against GAS skin infections. These laundries are permanent, free facilities for communities to use.

Our team will utilise the Social Impact Framework (funded by the Heart Foundation) to conduct a mixed-methods evaluation of the Remote Laundries Project. Doing so will assist in building evidence of the Project's impact on the social, cultural, economical, and physical health outcomes of communities where it is employed. Furthermore, we aim to assist AIG in building evidence of the Project's impact on reducing the spread of GAS.

For more, visit - https://www.remotelaundries.org.au

STOPPING ARF Skin Trial



The gold standard for diagnosis of GAS Infections is by bacterial culture at a lab. However, as most infections occur in rural and remote settings, transporting patient samples to labs that are many hours away makes testing difficult and means it is rarely utilised. As a result, all suspected GAS infections are treated with an extremely painful antibiotic injection, regardless of a confirmed diagnosis.

CSIRO is leading this research project partnering with Aboriginal Community Controlled Health Organisations to trial the TGA approved Roche Diagnostics cobas Liat Point of Care Test (PoCT) that can detect GAS in a throat sample in just 15 minutes. In addition, CSIRO will be conducting a clinical trial that will test the effectiveness of this PoCT to detect GAS in a skin sample, whilst also forming the first comprehensive (i.e. pharyngitis and impetigo) GAS infection prevalence study in Northern Australia.

ADDITIONAL RESOURCES

- RHD Australia Website
- ABC Four Corners Special
- Deadly Heart Documentary

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