

# STARFISH - What are the most effective environmental health initiatives to reduce Strep A transmission?

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## INTRODUCTION

Remote-living Indigenous Australians have the highest reported rates of acute rheumatic fever (ARF) globally. ARF is an autoimmune complication triggered by preventable Strep A infections. Eliminating RHD in Australia requires addressing the critical evidence gap about how to prevent Strep A transmission.



STARFISH integrates a diverse team to answer the question:  
**What are the most effective environmental health initiatives (EHIs) to reduce Strep A infections and prevent ARF among communities at greatest risk?**

## AIMS

DISCOVER

- 1.1 Identify the mechanisms and enablers / barriers for **how Strep A is acquired and transmitted** between people living in remote Australian Indigenous communities, with consideration to the social determinants of health.
- 1.2 Identify, consult on, and **evaluate EHIs that may reduce the risk of Strep A transmission** between people.

CREATE

- 2.1 **Develop a package of feasible, optimised, acceptable, co-designed EHIs** that can be adopted to reduce the impact of Strep A infection and transmission, and other diseases with environmental health risk factors, in remote Indigenous communities at high risk of ARF.
- 2.2 **Develop EHI assessment and evaluation tools** for the sector to use in future service and research.
- 2.3 **Produce training packages** for environmental health and housing workers, and primary care clinicians to implement the feasible, optimised EHIs.

ACTION

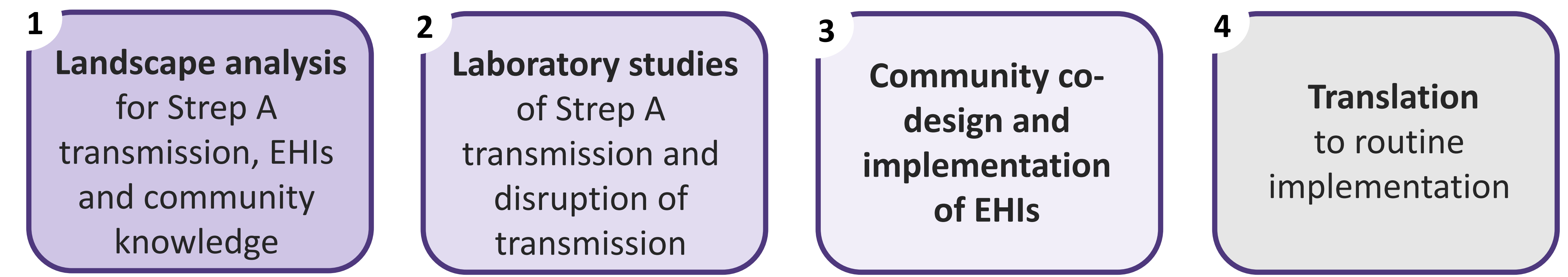
- 3.1 Identify, cost and recommend critical factors for an **evidence-based funding strategy for housing** that promotes wellbeing and health by reducing Strep A transmission, and thus ARF.
- 3.2 Work with local, national and international organisations to **incorporate this information into local, national and global initiatives** to reduce rates of ARF/RHD and other communicable childhood diseases with shared determinants.

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## METHODOLOGY



STARFISH Investigators specialise in:

- Indigenous research practices
- Infectious diseases
- Microbiology
- Public health
- Clinical trials
- Data linkage
- Architecture & housing
- Primary healthcare
- Spatial demography
- Environmental health
- Health economics
- Modelling



## CONCLUSION

STARFISH will produce evidence with embedded research translation, facilitating prevention of ARF and allow Australia to achieve its goal of RHD elimination in the next decade. Implications are likely to extend into major policy initiatives around remote housing and inform policy decisions by local communities, jurisdictions and nationally. We will explore opportunities to replicate this work in other settings worldwide.

## COLLABORATORS



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