# Infectious disease management for Aboriginal children of Far West NSW

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Far West Local Health District New South Wales (NSW) covers an area of 194 000 km$^2$ and has approximately 30 000 residents. Ten percent of the population identifies as Aboriginal, but this proportion can be much higher in small communities surrounding Broken Hill. Aboriginal people in the Far West may identify with a range of different groups including: Barkindji, Maliangapa, Nyampa, Dieri and Wiljakali. Some of these groups have lived in the area for over 45 000 years.

For the most part, European colonisation of the Far West started about 180 years ago. The processes of colonisation have included removing Aboriginal people from family and traditional lands, disrupting traditional practices and interfering with existing public health and infection control strategies. Overall, there has been a rapid period of adaptation to new social and natural environments, with exposure to new pathogens and foreign, often enforced, methods for their management.[1]

Today, there is a higher prevalence of many infectious diseases in Aboriginal children in Far West NSW compared with NSW overall. Surveillance data show higher rates of pertussis, methicillin-resistant *Stapylococcus Aureus*, and gastrointestinal and skin infections in Aboriginal children of the region. Many of these infectious agents are of low pathogenicity and low virulence, thriving best where the environment and host are under stress.[2]

Adaptation to colonisation has resulted in a range of strategies to address host and environmental stressors. This includes strategies currently undertaken by the local Aboriginal Medical Service providing care to the Far West Aboriginal population. Maari Ma Health Aboriginal Corporation has taken a horizontal public health approach to infectious disease which includes strengthening child and community wellbeing. This approach reduces host susceptibility to infection through immunisation, better nutrition, breastfeeding, early literacy and maternal education.[3] Maari Ma also has an important role in developing an Aboriginal health workforce which helps ensure that infection control measures and education on treating and reducing the spread of disease are implemented and delivered appropriately.

Other horizontal approaches include addressing environmental stressors such as poor housing quality. In all settings, but even more so in rural and remote locations, house maintenance is an ongoing issue. In NSW, Aboriginal community groups and Land Councils are working with NSW Health, using the Housing for Health program, to upgrade existing housing to improve safety and health outcomes. All housing upgrade works are prioritised around life-threatening safety issues and nine healthy living practices.

The health priorities, or healthy living practices, include the provision of facilities for washing people – particularly children – once a day; the ability to wash clothes and bedding; the safe removal of waste water from the house and the surrounding living environment; improving nutrition by ensuring the ability to store, prepare and cook a meal; reducing the negative impacts of crowding; reducing the negative impacts of animals, vermin and insects; reducing the impact of dust; controlling the temperature of the living environment; and reducing hazards that cause minor trauma or injury.

NSW Health has assembled evidence from over 10 years of the Housing for Health program in NSW showing a 40% reduction in hospitalisations for infectious diseases in houses where the program had been conducted compared to houses not improved by the program.[4]

Since colonisation, the profile of infectious diseases in Far West Aboriginal children has changed, yet the underlying causes of these diseases are still being addressed. Aboriginal people are responding to this challenge through self-determination of medical services, health education, and through working in collaboration with government to strengthen the general wellbeing of communities.

## References

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