



Australian Government

Department of Families, Community Services
and Indigenous Affairs

National Indigenous Housing Guide

IMPROVING THE LIVING ENVIRONMENT
FOR SAFETY, HEALTH AND SUSTAINABILITY

Improving the lives of Australians

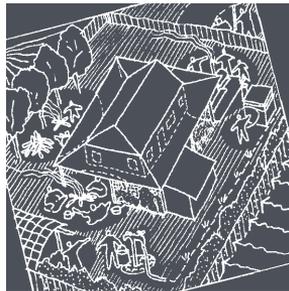


third edition

National Indigenous Housing Guide



*Improving the
living environment for
safety, health and sustainability*



Acknowledgements

The *National Indigenous Housing Guide* is based on the work of a group of people, both Indigenous and non-Indigenous, from across Australia who share a goal of improving the living environment, health and wellbeing of Aboriginal and Torres Strait Islander peoples. Their professional and technical backgrounds range from Indigenous community housing managers, architects and other building professionals, academics, public health and medical professionals, board members of Indigenous housing authorities, and Australian Government and state and territory government Indigenous housing officials.

In many different ways these people assist Indigenous communities in the design, construction, maintenance and management of houses. Collectively, they have contributed decades of experience and knowledge to the content of this *National Indigenous Housing Guide*. Their wealth of experience also helps to make this an authoritative guide.

Data collected from more recent Housing for Health projects over the past six years have also provided valuable input to the guide. These data reflect the living conditions of more than 25,000 Indigenous people whose houses have been involved in Housing for Health projects around Australia. The data collected with these peoples' involvement, gives the guide its legitimacy.

The Australian Government Department of Families, Community Services and Indigenous Affairs is grateful for the time, effort and commitment of everyone who contributed to this edition of the guide.

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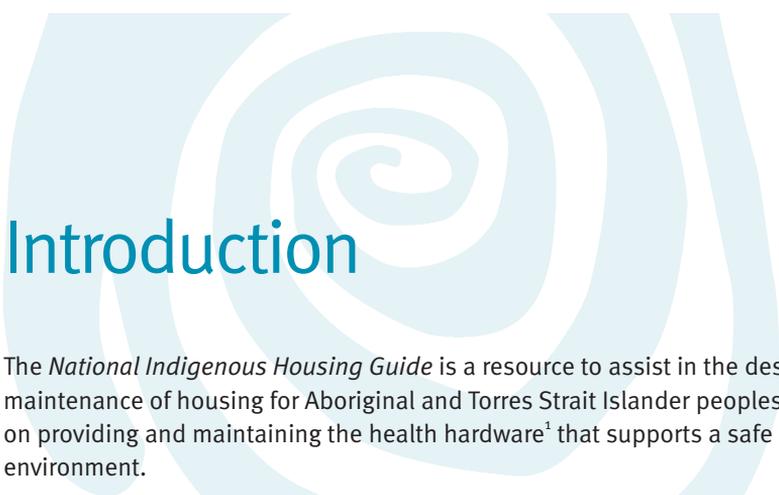
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Introduction

The *National Indigenous Housing Guide* is a resource to assist in the design, construction and maintenance of housing for Aboriginal and Torres Strait Islander peoples, with a particular focus on providing and maintaining the health hardware¹ that supports a safe and healthy living environment.

The guide is linked to the national reform agenda agreed by Australian and State and Territory Housing Ministers in September 2006, which aims to improve the sustainability of Indigenous housing management and move to one level of service delivery in each jurisdiction. Under the Indigenous Housing Management Improvement System (IHMIS), which is being developed in collaboration with state and territory jurisdictions, providers of Indigenous housing services will be required to meet and maintain standards of governance and service delivery in order to receive government funding to deliver those services.

The IHMIS includes a Repairs and Maintenance Standard that will require housing stock to be maintained in a condition which provides the health hardware (as detailed in the National Indigenous Housing Guide, for example taps, hot water system, toilets, showers, kitchen and drains) to fully support the maintenance of safety and healthy living practices.

All organisations providing Indigenous-specific housing services are to be assessed against standards for governance and service delivery. The standards reflect current best practice of organisations providing social housing, along with the specific circumstances of Indigenous clients. They are consistent with the approach of comparable standards such as the National Community Housing Standards. The standards will provide a benchmark for continuous improvement in the provision of high quality housing services to Indigenous people.

This guide provides practical information on the design, selection, installation, construction, renovation and maintenance of housing health hardware and other aspects related to environmental health, for example dealing with dust, insects and dogs. It is a resource for everybody involved in providing housing to Indigenous people, including community councils, Indigenous housing workers, council staff, architects, project managers, tradespeople and government officials. If used in tandem with local knowledge, the guide can help to improve housing and health outcomes, and community development projects.

Information in the guide is based on the experience of communities, housing design consultants and builders, and is supported by data from housing surveys conducted since the mid-1980s. The information is also supported by research and technical standards and cleared by state and territory governments.

¹ Health hardware originally used by Dr Fred Hollows to describe the physical equipment necessary for healthy, hygienic living. The equipment must have design and installation characteristics that allow it to function and to maintain or improve health status. In a water supply system, for example, health hardware includes both the bore and the basin plug, as well as the shower rose, taps and drain.

To make sure it remains useful and relevant, the guide will be assessed and updated again in 2009. As part of this process, the Australian Government will host an internet forum and invite comments and suggestions for improvements to the guide. Details of the web address are available at <http://www.facsia.gov.au>.



Background

The link between hygiene and infectious diseases has been known for centuries and there is indisputable evidence that poor environmental and living conditions promote the spread of infectious diseases.

In 1987, an environmental health review, *Uwankara Palyanyku Kanyintjaku (UPK)*², was conducted in the Anangu Pitjantjatjara (APY) Lands in the north-west of South Australia. The review identified health problems that could be reduced by changes in the living environment for Indigenous communities in remote Australia. As a result, a prioritised list of nine ‘Healthy Living Practices’ that could help prevent the spread of infectious diseases was developed, see ‘How to use this guide’ and Part B ‘Health and housing’.

To achieve good health outcomes at a household level, individual living environments must be equipped with the health hardware that enables residents to carry out Healthy Living Practices. To maintain positive health outcomes at a community level, most houses in the community must have health hardware that works most of the time, and community infrastructure, such as power, water and waste systems must be operating without interruption. Functioning health hardware and the capacity to perform Healthy Living Practices reduces the pool of infectious organisms and, therefore helps to reduce rates of diarrhoeal disease, skin infections, pneumonia, eye infections and other transmissible diseases.

The UPK study found that many houses in the APY Lands did not have functioning health hardware to enable Healthy Living Practices, and the community systems that provide water and remove waste from houses frequently broke down. The project also identified that communities did not have maintenance resources or systems to deal with these problems.

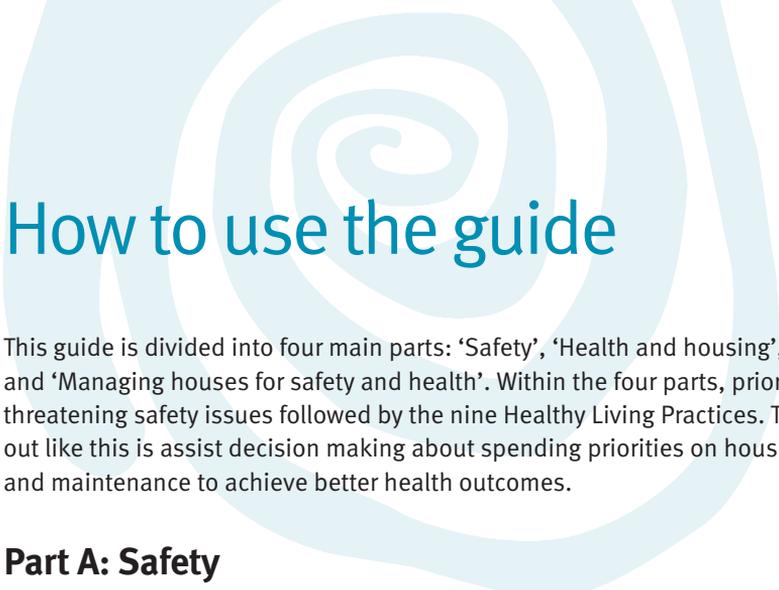
Environmental health and design consultants, Healthabitat, conducted a project at Pipalyatjara in the APY Lands in 1992–93³ to improve the function of health hardware. Although there are many problems measuring health change in small communities, there were fewer clinic presentations for skin and eye infections following the project.

The project also refuted claims that Indigenous people do not use health hardware – residents involved in the project enthusiastically used these facilities when they were functioning and maintained. The myth that the primary cause of housing failure is due to Aboriginal people damaging their houses was also dispelled by this project – a comprehensive survey of the health hardware in houses showed that breakdown was caused by poor design and construction and lack of maintenance, rather than misuse or vandalism.

2 Nganampa Health Council Inc., South Australian Health Commission and Aboriginal Health Organisation of South Australia 1987, *Report of Uwankara Palyanyku Kanyintjaku, An Environmental and Public Health Review within the Anangu Pitjantjatjara Lands*, Alice Springs.

3 Pholerros, P, Rainow, S & Torzillo, P 1993, *Housing for Health, Towards a Healthy Living Environment for Aboriginal Australia*, Healthabitat, Newport Beach.

Similar surveys in communities around Australia over the past seven years continue to confirm that health hardware failed in 67 per cent of houses because of lack of routine maintenance; 25 per cent because of poor initial construction; and less than 8 per cent because of misuse, abuse or vandalism.



How to use the guide

This guide is divided into four main parts: ‘Safety’, ‘Health and housing’, ‘Healthy communities’ and ‘Managing houses for safety and health’. Within the four parts, priority is given to life threatening safety issues followed by the nine Healthy Living Practices. The reason the guide is set out like this is assist decision making about spending priorities on housing design, construction and maintenance to achieve better health outcomes.

Part A: Safety

Part A identifies life threatening dangers that are the highest priority when designing, upgrading or maintaining a house, or designing and maintaining community infrastructure.

Important safety issues in houses include:

- electrical safety, to avoid electrocution
- fire prevention, detection, and means of escape in the event of a fire
- gas leaks, explosions or severe breathing difficulties
- structural collapse.

At a community level safety issues include:

- electrocution through faults in the main electrical distribution system
- contaminated water supply, for example high levels of bacterial organisms from faeces
- waste water system failures that lead to people being exposed to contaminated waste water.

Part B: Health and housing

Part B provides information on the health hardware required to ensure the nine Healthy Living Practices are taken into account when designing, upgrading or maintaining a house. In order of importance, these practices are:

1. the ability to wash people, particularly children
2. the ability to wash clothes and bedding
3. removing waste safely from the house and immediate living environment
4. improving nutrition: the ability to store, prepare and cook food
5. reducing the negative effects of crowding
6. reducing the negative contact between people and animals, insects and vermin
7. reducing dust
8. controlling the temperature of the living environment
9. reducing trauma, or minor injury, by removing hazards.

Part C: Healthy communities

Part C discusses community planning and essential services. If these are not working properly then the health hardware in houses will be less effective.

Topics covered in the healthy communities section include:

- water
- energy/power supply
- waste water
- solid waste
- community planning
- landscaping and dust control.

Note: Parts A, B and C of the guide include design ideas, a checklist to improve the quality of construction, and tips for maintenance.

- In each **Design and specification** section, the word ‘ensure’ is used to describe design features that are vital for safety and health; and ‘consider’ is used to describe features that could make the house function well, make it more comfortable for residents, and less expensive to run, but these features are not so vital. Adopting as many of the design ideas as possible increases the potential to deliver safe and healthy housing.
- Each **Quality control** section relates to housing construction. Necessary inspections, tests and warranties are listed. The word ‘check’ is used to describe visual checks and simple tests that can be undertaken by non-trades and community staff. The work ‘trade test’ is used to describe tests that need to be undertaken by a licensed trade person.
- The **Maintenance** section describes maintenance activities that will make sure the house continues to function in a safe and healthy way. Again the words ‘check’ and ‘test’ are used. ‘Repair’ is also used to describe maintenance jobs that can be undertaken by community staff without trades training, and ‘trade fix’ is used to describe jobs that will require a licensed tradesperson.

Part D: Managing houses for safety and health

Part D includes information about routine maintenance required to keep houses safe and healthy. It provides advice about simple steps that communities can take to set up a housing management system and checklists for community and trade fix.

The guide also has three **appendices**. Appendix 1: ‘Housing for health methodology’ outlines this approach to assessing and fixing Indigenous housing. Appendix 2 ‘Issues to consider in the design and construction of houses’ covers consultation and socio-cultural factors, universal access and managing the construction process. Appendix 3: ‘Using this guide with reference to the Building Code of Australia, Australian Standards and other relevant guidelines’ provides an easy way to look up a range of national standards about a particular item of health hardware.

The ‘**Useful resources and references**’ section includes details of the publications and resources about Indigenous housing design, construction, maintenance and other issues.

Following the references is an **alphabetical index**.

A **glossary** appears at the end of the guide. The glossary explains technical terms, commonly used words, and shortened forms used in the guide.

Important points to remember

This guide is best used throughout housing design, construction and maintenance processes as both a resource and a checklist. Supporting data, references, resources and technical information are provided throughout the guide. As well as the technical information, to achieve the best possible housing outcomes, it is essential that Indigenous community members be consulted about their local knowledge and specific needs.

Extent and quality of available information available

Symbols are used to indicate the level of information available and research undertaken about each topic in the guide. For example:

 Indicates this may be an emerging issue that needs attention, and that little research has been done.

 Means the issue is well described, occurs commonly, and that extensive, reliable research has been done.

Building codes and standards

All Australian governments aim to provide buildings that ensure safety and health. State and territory governments have their own legislation and regulations to achieve this goal. The Building Code of Australia (BCA) and Australian Standards (AS) give detailed information about these requirements. The following table sets out this regulatory system and shows the position of the guide in relation to these codes, standards or guidelines.

Codes, standards or guidelines	Scope
State and Territory Building Acts and Regulations	Administrative matters and powers
The Building Code of Australia	Technical requirements for health and safety
Australian Standards ⁴	Technical and business standards
State and territory housing and environmental health standards and guidelines	State and regional specific guidelines
The National Indigenous Housing Guide	Safety and health prioritised design, construction and maintenance guidelines

The guide has been developed to complement the Building Code of Australia, Australian Standards, state and territory building standards, state and territory environmental health, building and planning legislation and local government building regulations. The guide does not over-ride national or state/territory government codes, standards or guidelines and does not include all the requirements of other relevant codes and standards, as these also need to be considered. Appendix 3 ‘Using this guide with reference to the Building Code of Australia, Australian Standards and other relevant guidelines’ can assist with this task.

⁴ Standards Australia represents Australia at international standards forums; develops and maintains Australian standards; and promotes excellence in Australian design and innovation.

Data used in the guide

The survey data used throughout the guide has been derived from Housing for Health and Fixing Houses for Better Health projects undertaken throughout Australia over the past seven years; see Appendix 1 'Housing for Health methodology'. The data show the condition of the houses *before* work commenced to fix the health hardware under the Housing for Health project.

In the 2003 (second) edition of the guide, data from less than 800 houses were available. In this guide the data are drawn from a group of over 3,500 houses and include urban, urban fringe, regional, remote and very remote regions⁵ covering desert, temperate and tropical conditions.

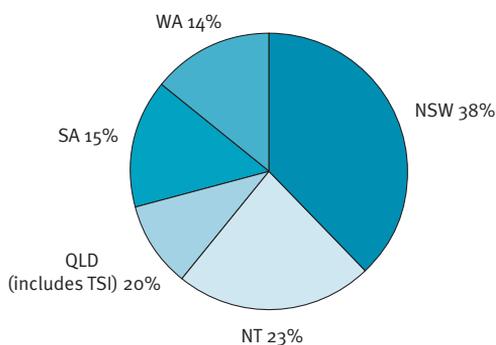
While the data are not a representative sample of Indigenous housing nationally, it provides a snapshot of houses where surveys have been undertaken over the last seven years and raises questions for designers and housing managers to consider in their particular geographic and social area.

The data reveal the living conditions of over 25,000 Indigenous people at a point in time before any fix work commenced. Data from a repeat survey after fix works were completed show that conditions in houses improved significantly as a result of the Housing for Health projects.

The details presented in the data reveal key design, construction, maintenance and management issues. Ignoring these details could mean that residents are provided with poorly functioning living environments. The data are not intended to limit the design range or creativity of designers and housing managers around the widely differing environments of Australia.

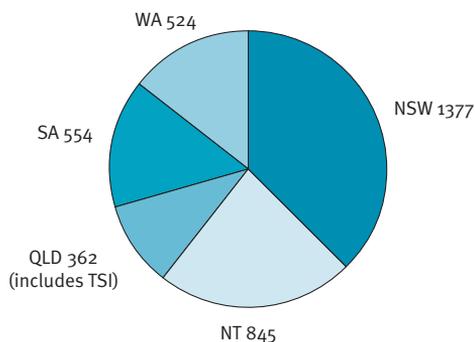
The charts below show two important breakdowns of the houses in the data collection.

Distribution of houses by state/territory (by percentage)



5 From *Accessibility/Remoteness Index of Australia* (ARIA).

Distribution of all Survey Fix 1 houses (by number)



Changes in the condition of houses

Survey data tables appear throughout this guide. These data tables indicate whether the condition of particular items in surveyed houses have changed since the last edition. The changes are measured by comparing 2003 trends (published in the second edition of the guide) with 2006 trends, where available. The symbols in the last column of each survey data table indicate whether the condition of an item has improved or worsened since 2003. The symbols are:

- < = decrease indicated of 5% to 10%
- << = decrease indicated of more than 10%
- + = increase indicated of 5% to 10%
- ++ = increase indicated of more than 10%