



This section provides details of key facts about food safety and Indigenous environmental health issues for Aboriginal and Torres Strait Islander environmental health practitioners.

### What is food safety?

Food safety describes the handling, preparation, transport and storage of food in ways that prevent foodborne illness (food poisoning). Food can transmit disease from person to person as well as serve as a growth medium for bacteria that can cause food poisoning.

### What is food poisoning?

Food poisoning can be caused by both bacteria and viruses, although bacterial infections are more common. Some organisms produce a toxin which causes the illness even after the organism is no longer present. Some of the most common types of food poisoning bacteria are salmonella, staphylococcus, clostridium, shigelia, campylobacter and bacillus. The usual symptoms of food poisoning can be any of the following, either alone or in combination:

- diarrhoea
- vomiting
- nausea
- stomach cramp or pains
- fever
- headache
- weakness

# What foods cause food poisoning?

Foods can be contaminated during production, manufacture, cooking, holding (either heated or refrigerated), reheating, transport or by food handlers and their utensils. Some foods may be contaminated by bacteria before they are handled, for example foods that grow in the soil or have been in contact with dirty water (water from a septic tank or greywater).

Some foods are more susceptible to contamination than other foods, such as meats, seafood, dairy products and other food that requires refrigeration.

Bacteria require time to multiply to dangerous levels that may cause illness. The temperatures between 5°C to 60°C are optimal for bacterial growth and are known as the temperature danger zone. Foods that require refrigeration should be stored below 5°C and foods that are being served hot should be reheated or stored at temperatures greater than 60°C.

Insects, such as flies and cockroaches, and rodents, such as rats and mice, can spread bacteria to food when they crawl or walk over it.

# Why are Indigenous communities at risk of food poisoning?

Some of the food hygiene issues that are of particular concern in remote communities are:

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- safety and hygiene in places where food is stored, prepared, handled and sold
- the selling of out-of-date foods
- the selling or serving of contaminated foods (weevils, discolouration, broken packets, mould, blown cans)
- storage and temperature of food in freezers, chillers and refrigerators, for example, milk products need to be kept constantly below a temperature of 4°C
- cooking temperatures high enough to kill harmful bacteria when food is being prepared for sale
- control of disease carrying pests
- transportation of food

## How can people prevent food poisoning?

Food poisoning is very easy to prevent if care is taken at all stages of preparation or production. For example:

#### Purchasing

Do not purchase goods with defects in packaging such as improper sealing, dented cans, foreign objects and signs of spoilage. This is particularly important when foods have been transported over long distances.

#### Best before date and use by date

Foods with a 'best before' date can be sold after that date, provided the food is not damaged or it has not deteriorated or perished.

A 'use by date' must be displayed on foods that deteriorate and pose a significant health risk after a certain time. The 'use by date' tells us when the food is no longer safe to eat. Foods should not be sold after this date.

#### Storing foods

Storing foods correctly helps keep them safe and can also help retain their nutrient value, freshness, aroma and texture.

Storing foods in the refrigerator stops organisms from breeding and slows down the rate of chemical change in the food. The refrigerator temperature should be kept at 5°C or less, a freezer at -15°C (food should be 'hard frozen'). Food in bain maries should be kept at a constant temperature of 60°C or above.

#### Personal hygiene

It is important to wash hands thoroughly before touching food, and to minimise the risk of contamination from clothing, jewellery, infections and illness.

#### Cross contamination

Cross contamination occurs when organisms normally found on raw food move to cooked food.

#### Cleaning and sanitising

All work surfaces, crockery, cutlery, cooking utensils and other equipment should be thoroughly cleaned and sanitised using warm water and detergent.

### What is the role of the environmental health worker?

The environmental health worker has a vital role to play in terms of food safety. This role can include:

- ensuring that people selling or producing food for sale are licenced
- checking that food for sale has been prepared in a safe and hygienic place and that the food is safe to eat
- · undertaking regular inspections of places selling food
- providing education on food safety

Environmental health workers do not have to manage food safety in private homes but they can help people and promote ways in which food can be kept safe.

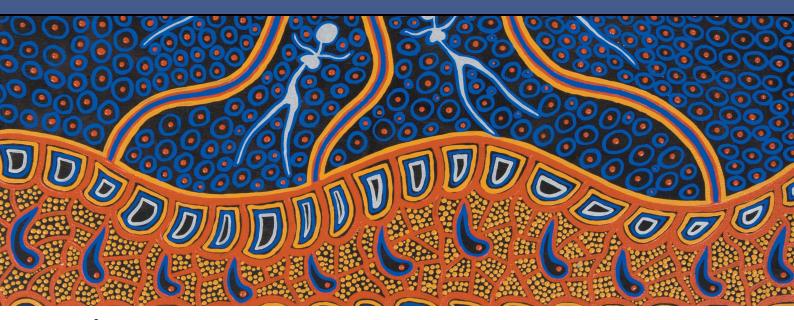
# Who regulates food safety in Australia?

The official guidelines for food safety in Australia is produced by Food Standards Australia and New Zealand, a bi-national Government agency whose main responsibility is to develop and administer the 'Australia New Zealand Food Standards Code' (the Code). The code also contains requirements for foods such as; additives, labelling and GM foods.

### References

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The Australian Indigenous Health*InfoNet* is an innovative Internet resource that contributes to 'closing the gap' in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the Health*InfoNet*'s work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The Health*InfoNet*'s work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The Health*InfoNet* also provides easy-to-read and summarised material for students and the general community.

The Health*InfoNet* encourages and supports informationsharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The Health*InfoNet* is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www. healthinfonet.ecu.edu.au) is free and available to everyone. **Director** Professor Neil Thomson

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FEATURED ARTWORK

Seven sisters

by Josie Boyle







Department of Health and Ageing

