



# Act on Food Safety

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## Potentially hazardous food

**P**otentially hazardous food (PHF) means food that has to be kept at certain temperatures (at 5°C or below or at 60°C or above) to minimise the growth of any pathogenic microorganisms that may be present in the food or to prevent the formation of toxins in the food.

Examples of PHF include:

- raw & cooked meat or foods containing raw or cooked meat such as casseroles, curries and lasagne;
- small goods such as Strasbourg, ham and chicken loaf;
- dairy products — milk, custard, dairy-based desserts such as cheesecakes and custard tarts;
- seafood — seafood salad, patties, fish balls, stews containing seafood and fish stock;
- processed fruit and vegetables — for example, salads and cut melons;

- cooked rice and pasta;
- foods containing eggs, beans, nuts or other protein-rich foods such as quiche, fresh pasta and soy bean products; and
- foods that contain the above mentioned foods — for example, sandwiches, rolls and cooked and uncooked pizza.

Some foods that are not potentially hazardous can become potentially hazardous if you alter the food in some way. For example, custard powder is not potentially hazardous

because it is too dry for bacteria to multiply, but when milk is added to the custard it becomes PHF.

### Temperature Control

Temperature control means maintaining food at a temperature of 5°C or below or 60°C or above. Temperature control is a way to prevent or limit bacteria from multiplying or producing toxins in food. Definition of PHF and temperature control requirements are set out in Food Standard 3.2.2 – *Food Safety Practices and General Requirements*.

## In this issue

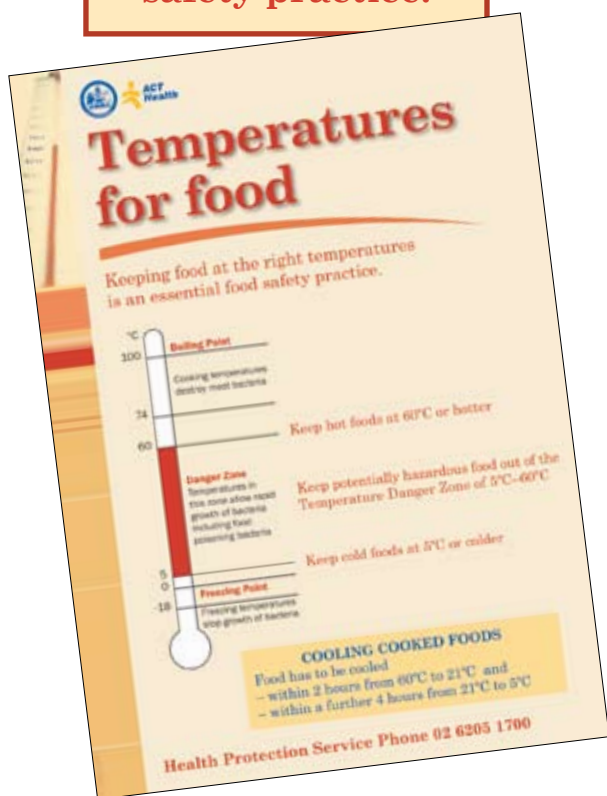
- **Potentially hazardous food;**
- **Temperature control; and**
- **Through the microscope: food, bugs and disease**



Food businesses are legally obliged to control the temperature of PHF to prevent food poisoning. The temperature control requirements apply to all food businesses that handle or sell PHF. These include:

1. restaurants
2. take-aways
3. clubs
4. supermarkets
5. mobile premises such as food vans
6. temporary structures such as market stalls
7. businesses operating from home
8. caterers
9. food businesses that sell food to the public, privately, for profit or to raise funds for a charity or community group.

**Keeping foods at the right temperatures is an essential food safety practice.**



## Food Reveal

**A food business must ensure that PHF is kept under temperature control when PHF is received, displayed, transported and stored.**

A food business must check food when it is received from a supplier. When receiving PHF, take all practicable measures to ensure that you accept food that is at a temperature of 5°C or below or 60°C or above. A food business should discuss the temperature at which PHF is to be delivered with the food transporter before the delivery. The duration of the journey may have to be considered.

By checking that food is delivered at a suitable

temperature and in a suitable state you will have better knowledge of the quality and safety of the food and therefore your final product. If PHF is not delivered at a suitable temperature it may have already deteriorated in quality or food poisoning bacteria might have had a chance to grow. If this product is further processed and it causes someone to be ill, it will be the food processor's responsibility, not the supplier's responsibility.



## Cooling of PHF

The time food takes to cool down is critical as it may allow pathogens to multiply to dangerously high levels. For this reason cooked PHF should be cooled within a specific time frame. PHF should be cooled from 60°C to 21°C within 2 hours; and then from 21°C to 5°C within a further 4 hours.

The following techniques may be employed to assist in the safe cooling of foods.

- Reduce the mass and volumes of food batches to be cooled.
- Use shallow containers (5 cm deep).
- Cut large joints of meat and poultry into small portions.
- Use a probe thermometer to ensure that food batches are cooling within the prescribed time period stated in the standards.
- Allow sufficient space for air to circulate around containers of food cooling in the refrigerator.
- Cover containers loosely to allow airflow whilst cooling, and once the food has cooled cover the containers securely.
- Cooled foods should be labelled with the date and time they were prepared, or alternatively with a use by date before storage.
- Cooled foods must be stored below 5°C.
- Make sure that cool rooms and refrigerators are working effectively.

## Food transport

A food business may purchase and transport its own food. Again remember PHF must be transported under temperature control. While the food is being transported to the food premises it must be protected from contamination.

## Food storage

When storing food, a food business must:

- protect the food from likely contamination;
- make sure that the environmental conditions under which the food is stored will not adversely affect the safety and suitability of the food;
- place PHF under temperature control; and
- ensure that frozen food remains completely frozen during storage.

## Food display

A food business must display PHF under temperature control.

Although PHF should be kept at 5°C or colder or 60°C or hotter wherever possible, this food can be kept safely between 5°C and 60°C provided it is between these temperatures **for less than four hours**.

**The 2 hour/4 hour guide** applies to ready-to-eat PHF. It provides guidance on how long this type of food can be held safely at temperatures between 5°C and 60°C and what should happen to it after certain times. The times refer to the life of the food, including preparation and cooling, not just to display times, so remember to add up the total time that the food has been between 5°C and 60°C.

### Total time limit between 5°C and 60°C — What you should do

- Less than 2 hours: refrigerate or use immediately
- Between 2 hours and 4 hours: use immediately
- More than 4 hours: throw out

### Compliance with the 2 hour/4 hour guide

To demonstrate compliance a food business must have written documentation, for example, time logs or monitoring sheets with dates and times to indicate when PHF was taken out of temperature control and when it was returned to temperature control. Verbal confirmation of compliance by the business is not acceptable. In the absence of documented evidence the food business will be deemed non compliant.

## THROUGH THE MICROSCOPE



### Food, Bugs and Disease

Food Standard 3.2.2 defines **food-borne disease** as a disease that is likely to be transmitted through consumption of contaminated food. More than 200 known diseases are transmitted through food. Food-borne disease can occur from any fresh or processed foods consumed in a range of settings such as homes, restaurants, large catering establishments, schools and institutions.

The causative agent or contaminant that causes food-borne disease can be chemical (e.g. pesticide

residues), biological (e.g. pathogenic microorganisms), any foreign matter, or other substance that may compromise food safety or suitability.

### What are biological contaminants or microorganisms?

We refer to them commonly as bugs or germs. They are a small form of life which cannot usually be seen by the naked human eye. They can be seen through a microscope. They are classified into bacteria, viruses, fungi, and parasites. Some microorganisms produce poisons called toxins. Microorganisms that are infectious and cause disease

are called pathogenic microorganisms or pathogens.

Microorganisms are present everywhere in our environment. They are present in soil, in the air we breathe, the water we drink, the food we eat, on our pets, on our skin, in our noses, throats, mouths, intestinal tracts, and other bodily cavities.

The good news is that a majority of microorganisms do not cause harm to humans. Some are useful to humans. Only a few microorganisms cause food-borne disease. Most cases of food-borne disease can be avoided through good hygiene and good food handling practices.

— *to be continued* —



## Frozen food

Frozen food must be frozen when delivered and must be kept frozen when stored, displayed for sale or during transport.

**The shorter the time foods, particularly cooked foods, spend between 5°C and 60°C the less are the chances of food poisoning.**

## Reheating food

If you reheat previously cooked and cooled PHF, you must reheat it rapidly to 60°C or hotter. This only applies to PHF that you want to hold hot in a bain-marie, oven or on the stove top. It does not apply to food you reheat to serve to customers for immediate consumption. Do not reheat food more than once. Left over reheated food should not be re-refrigerated.

## Use of thermometer

All food businesses that handle PHF must have a 'temperature measuring device' (thermometer) that is readily accessible and

can accurately measure the temperature of PHF to  $\pm 1^\circ\text{C}$ . A food business will need a thermometer that can measure the internal temperature of food because the surface temperature may be warmer or colder than the temperature at the core of food.

More detailed information about use of thermometers will be available in subsequent issues of this newsletter.

**For more information on these and related topics go to:**

ACT Health website: [www.health.act.gov.au](http://www.health.act.gov.au)

1. Information sheet: Temperature Danger Zone
2. Food Safety Poster: Temperatures for food

Food Standards Australia New Zealand (FSANZ) website: [www.foodstandards.gov.au](http://www.foodstandards.gov.au)

Food Standard 3.2.2 – *Food Safety Practices and General Requirements*;

Guidance on Standard 3.2.2;

Temperature control of potentially hazardous foods; and

FSANZ Fact Sheets:

1. Food Safety Standards – Receiving food safely
2. Food Safety Standards – Temperature control requirements



NOTE Information in this newsletter is intended as a summary only and cannot cover all situations. Food businesses are required to comply with all the provisions of the Australia New Zealand Food Standards Code and *Food Act 2001*, not just the contents of this newsletter. Please contact the Health Protection Service on 6205 1700 for more information on any of the articles in this newsletter or questions regarding food safety. We welcome and look forward to your feedback.

ENGLISH	If you need interpreting help, telephone:
ARABIC	إذا احتجت للمساعدة بالترجمة الشفوية، إتصل بالهاتف:
CHINESE	如果您需要口译员帮助，请拨电话:
CROATIAN	Ako trebate pomoć tumača telefonirajte:
DARI	اگر به کمک ترجمه شفاهی ضرورت دارید، به این شماره تيلفون کنید:
GREEK	Αν χρειάζεστε διεμνηέα τηλεφωνήστε στο:
ITALIAN	Se avete bisogno di un interprete, telefonate al numero:
LAO	ຕ້ອນຫລັກສາຍຊ່ວຍເຫລືອໃນການແປພາສາ. ໂທ: 131 450
MALTESE	Jekk ghandek bżonn l-ghajnuna t'interpretu, ċempel:
PERSIAN	اگر به ترجمه شفاهی احتیاج دارید به این شماره تلفن کنید:
RUSSIAN	Если вам нужна помощь переводчика, звоните по телефону:
SPANISH	Si necessita la asistencia de un intérprete, llame al:
VIETNAMESE	Nếu bạn cần một người thông ngôn hãy gọi điện thoại:

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**TRANSLATING AND INTERPRETING SERVICE**  
**131 450**  
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