

Extract taken from SA Health webpage: [Fires and food safety requirements for businesses | SA Health](#)

Fires and food safety requirements for businesses

Fires can affect one business (a single premise fire), or it may affect numerous food businesses (bushfire, shopping centre, food court).

Fires are unfortunate and often terrifying but once the fire has been put out, it is important to understand that fire damage can jeopardise the safety of food.

It is the responsibility of the food business that has been damaged by a fire to assess its own food safety risks; however Local Government may be able to help with this assessment.

How does a fire make food unsafe?

Food exposed to fire can be contaminated by toxic chemicals, and can be spoiled or made more prone to spoilage by bacteria. There are three aspects of fire situations that can make food unsafe:

Smoke and fumes

Toxic fumes released from burning materials are the most dangerous elements of a fire. Fumes and smoke released from the fire can contaminate food and drink, making it unsafe to eat or drink.

Heat from the fire

Heat from the fire may activate food spoilage bacteria in jars or cans of food, and can partially or fully cook fresh foods. This can make previously safe food, such as that in cans and jars, unsafe. If the heat is high enough, cans or jars can split or rupture, making the food unsafe.

Chemicals used to fight fire

Chemicals used to fight fires may contain toxins and can contaminate food, making it unsafe to consume. These chemicals cannot be washed off.

Why food is not safe after being in a fire

Food is not safe after being in a fire or after the extinguishing system has discharged as:

- heat can cause jars and cans to split and crack allowing contaminants to enter
- even if cans and jars appear undamaged, heat can cause the food to spoil
- smoke and chemicals from the fire and extinguishing system can penetrate plastic packaging, plastic wraps of all kinds, and get under bottle caps or screw tops
- firefighting chemicals can taint food and beverages, and packaged products.

What must be disposed of

Food and beverages that were in or near a fire that must be disposed of:

- All foods and beverages stored in screw top jars or bottles, permeable packaging such as cardboard, foil, paper or plastic wrap.
- All unwrapped fruits and vegetables.
- Foods stored outside the refrigerator and which were exposed to smoke and fumes.
- Foods from the refrigerator or freezer if there are any signs of smoke damage as refrigerators or freezers seals are not airtight.
- Ice, in both serving bins and machines.
- All foods that were touched by firefighting chemicals. These chemicals are very poisonous and cannot be safely washed off foods. If you are not sure if the food was touched by firefighting chemicals, throw it away.
- All single-service utensils (plastic plates, cups etc.), and all packaging that were exposed to smoke and firefighting chemicals.

Refrigerated and/or freezer foods

If the refrigerator or freezer has not been exposed to heat, smoke, fumes or fire-fighting chemicals but there has been a power outage because of a power outage, food may or may not be salvageable. Refer to '[Power failures and food safety requirements](#)' page.

Cooking food will not eliminate the risk of food borne illness as some bacteria produce a toxin, which is not destroyed at the temperature used to cook or reheat food.

Cleaning and sanitising: premise, equipment and utensils

Cleaning and sanitising must be conducted prior to reopening. Surfaces may look clean, chemicals from extinguishers and fine particles may be on surfaces of equipment and utensils.

- A professional cleaning service or restoration company may be the best option depending on the scale of the fire. The businesses insurance agent may have recommendations, but the business must confirm that the cleaning service is familiar with food service operations.
- Remove and discard from the premises all damaged equipment, utensils, linens and single service items.
- Refrigerated display and storage cases and other refrigerator equipment used to store food should be cleared of all contaminated products prior to cleaning and sanitising. Special attention should be given to lighting, drainage areas, ventilation vents, corners, cracks and crevices, door handles and door gaskets.
- Carefully check dishes, pots, pans, cutlery and kitchen equipment that might have been in contact with smoke or firefighting chemicals. Throw away damaged or cracked items, items made from porous material such as wood, plastic or rubber including wooden chopping boards as they cannot be adequately cleaned and sanitised.

- Take apart and clean the non-electrical pieces of any kitchen equipment that can be safely taken apart, rinse in clean hot water, then sanitise.
- Clean cupboards and counters with hot soapy water then sanitise before storing dishes or food.
- Heat Sanitation: Sanitise silverware, metal utensils, pots, pans and kitchen equipment in pieces by boiling in water for 10 minutes.
- Commercial and most domestic dishwashers are capable of sanitising all eating and cooking utensils as part of their normal cycle.
- Chemical sanitation (refer to [dilution table](#))
 - Wash all items, utensils equipment, surfaces and structures with detergent and hot water, then rinse thoroughly.
 - Apply bleach as needed according to the tables below. Do not be dilute chlorine in hot water.
 - Leave bleach or chlorine on for the time recommended by the chemical supplier and then rinse again.
- Air dry items because towels might have been splashed with contaminated water.
- Safety Precautions when using bleach to sanitise the food business
 - Wear protective equipment such as safety glasses, face mask, disposable gloves and enclosed shoes.

Cleaning dilution rates

Bleach for food contact surfaces, equipment and premise (200ppm)

Bleach for Food Contact Surfaces, Equipment (200ppm)			
Water	4% chlorine (household bleach)	12.5% chlorine	65% Chlorine (hypochlorite granules)
5L	25ml	10ml	0.8g
10L	50mL	20ml	1.6g
50L	250ml	100ml	8g

This information is directly from the [SA Health website](#).