What happens during a fire?

During a fire, smoke is released into the air. It consists mainly of extremely small oil particles in the form of soot and hot gases. These particles can stick to any surface. When plastics burn they release chemicals that mix into the smoke. If the smoke comes in contact with water or moisture, it forms a weak acid solution that can damage food, equipment and utensils. Smoke carries odours that cause an unpleasant taste that will remain in foods that may otherwise look fine. Chemicals used to fight the fire can also mix with smoke to create poisonous gases. These gases can pass through plastics and packaging materials to ruin the food inside.

Which foods are most likely to be affected?

The following foods should be discarded if they have been in contact with water, smoke, or fire fighting chemicals.

- Fresh produce, meat, poultry, fish and eggs.
- Opened containers and packages.
- Containers with peel off tops, or cork-lined, waxed cardboard or paraffin seals.
- All food in paper, foil, plastic, cellophane, cloth or cardboard boxes.
- Flour, sugar, spices, seasonings and extracts, and other staples in canisters.

If toxic fumes have been released and/or heavy soot accumulation is noticeable, foods stored in permeable packaging are often discarded. Examples of this packaging include cardboard, plastic wrap, crimp, snap-open and screw type cap containers. The contamination is impossible to remove.

Foods containing shortening or a high fat content – such as fatty fishes and dairy products – absorb smoke odours very easily. As a result, these foods are commonly discarded.

Bulging canned goods can be a sign of excessive heat and should be discarded. These cans may also have tiny leaks that are hard to detect. Because of this, owners may be ordered to hold canned goods for a specific time period to determine if the food is contaminated.

What should be done with non-food items?

If personal health products or over-the-counter medications were exposed to fire, call the following phone numbers to determine if the products can be salvaged:

- For products without a DIN number, call Health Canada – Consumer Product Safety at 1-866-662-0666.
- For products with a DIN number, call Health Canada – Drug Investigation Department 1-800-267-9675.

Public Health’s Role

A fire-damaged food premises cannot reopen until the public health inspector gives permission to do so in writing.

The local fire department notifies Public Health when a fire has occurred in a food
premises. Public Health must ensure that any items that may have been damaged or contaminated during the fire are properly inspected. This includes food products and/or utensils and equipment used in the preparation of food. Damage can occur from fire, heat, smoke, water and gases.

The public health inspector is responsible for the following:

• Conducts an on-site inspection.
• Prepares a list of which food products and equipment or utensils must be discarded.
• Ensures that any salvaged materials are properly cleaned and sanitized before reuse.

What does the public health inspector look for?

The inspector examines the scene to evaluate:

• Exposure of food, equipment or utensils to heat, smoke, and physical damage (such as floating and falling debris).
• Water damage from fire fighting activities.
• Contamination from the use of non-potable water in fire fighting.
• Residues from toxic or fire fighting chemicals.
• Chemical containers that may have burst due to heat or impact.
• Gases released from electrical insula-

tion, coolants, or burning building materials.
• Length of the power outage at the premises.