

# After a Fire, Is the Food Safe?

Prepared by MSU Extension Food Safety Area of Expertise Team; edited by Joyce McGarry, MSU Extension

Residential fires are, unfortunately, a common occurrence. Some 2 million American homes are damaged or destroyed by fire yearly. In the aftermath of fire, people are left to salvage their lives and belongings. Whether it is the whole house involved or just a fire in the kitchen, people try to save what they can — including food. It is not always a good idea to save food that has been in a fire.

Food exposed to fire can be compromised by three factors:

- The heat of the fire.
- Smoke fumes.
- Chemicals and water used to fight the fire.

## Heat from the fire

Foods in cans or jars may look o.k., but if they have been close to the heat of a fire, they may no longer be safe to eat. Heat from a fire can activate some heat-loving food spoilage bacteria. If the heat is extreme, the cans or jars themselves can split or rupture, rendering the food unsafe.

#### Fumes from a fire

One of the most dangerous elements of a fire is the toxic fumes released from burning materials. Those fumes can kill — they can also contaminate food. Any type of food stored in permeable packaging — cardboard, plastic wrap, etc. — should be thrown away. Toxic fumes can permeate the packaging and contaminate the food.

Discard any raw foods stored outside the refrigerator, such as potatoes or fruit that could be contaminated by fumes.

Food stored in refrigerators or freezers can also become contaminated by fumes. A refrigerator seal is not airtight, and would likely not stop fumes from getting inside.



If food from your refrigerator has an off-flavor or odor when it's prepared, throw it away.

# Chemicals used to fight fires

Chemicals used to fight fires contain toxic materials that can contaminate food and cookware. The chemicals cannot be washed off the food.

Foods that are exposed to chemicals should be thrown away. These include foods stored at room temperature, such as fruits and vegetables, as well as foods stored in permeable containers, such as cardboard and screw-topped jars and bottles (even if they haven't been opened.)

Canned goods and cookware exposed to chemicals can be decontaminated by washing in a strong detergent solution and then soaking in a bleach solution (1 teaspoon bleach per quart of water) for 15 minutes.

## Fire stoppers

The American Red Cross recommends that you:

- Make your home fire-safe by installing battery-powered smoke detectors on each floor and in the garage. Test the detectors twice a year, and keep a working fire extinguisher in the kitchen.
- Plan two emergency escape routes from each room in the house. Have rope or chain ladders for upstairs rooms. Agree on where to meet after the family escapes.
- Have practice fire drills. Instruct everyone to crawl low under smoke.

