

# COOKING FACILITIES

For some, one of the most enjoyable parts of attending the fair is the food. However, the process of cooking and consuming food can potentially lead to fires or illnesses (particularly when food is consumed near animals). Additionally wet floors near sinks or ice machines can create a slipping hazard.

Cooking equipment, especially mixers, slicers and grinders, add risks for lacerations. And prolonged use of equipment or other processes can lead to ergonomic injuries. Following the best practices on the next pages can help reduce the risk of such incidents and lead to a more positive experience for fair attendees, staff and volunteers.

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## FIRE PREVENTION

Many fires begin in kitchens and can quickly get out of hand. With the following equipment, proper inspection and training, the risks posed by fire can be greatly reduced. In addition to these best practices, agricultural societies should consider inviting the local fire marshal or fire department to conduct an

inspection prior to the fair. The inspection will identify if fire extinguishers and suppression systems are adequate, as well as allowing for a discussion about fire response procedures. *For more information about fire prevention, see Chapter 20, Fire Prevention.*

## VENTILATION HOODS

Cooking stations with fryers or other equipment that produce smoke or grease-laden vapor should have a ventilation hood to remove the smoke and grease vapor. Proper maintenance of the hood and duct systems should be conducted prior to the fair and other events, and as needed. Consider keeping written logs of maintenance checks and service performed.

Some best practices to consider regarding ventilation hoods:

- Use rooftop exhaust fans that have the ability to drain grease out of any traps or low points formed in the fan or duct.
- Install access panels in fans and exhaust ducts that allow grease to be trapped and cleaning to be done.
- Train employees about how to remove grease and oil sludge. Give special attention to ducts and exhaust fans.



*Train employees about how to remove grease and oil sludge.*

- Remove and clean filters regularly during the fair or other events. Some filters may need to be cleaned daily. A brownish tint on grease filters indicates that cleaning is necessary. Black-tinted filters should be removed and cleaned immediately.

*State, county or local health inspectors should conduct a health inspection of all food vendors to ensure that vendors and cooking facilities are up to current food codes.*

## HOOD-MOUNTED FIRE SUPPRESSION SYSTEMS

Cooking equipment that produces smoke or grease-laden vapor also requires a fire suppression system. The fire suppression system should have both manual and automatic activation options. The manual pull station for the fire extinguishing system should remain clear and provide for rapid egress.

Some best practices regarding hood-mounted fire suppression systems and fire prevention:

- Ensure that the spray nozzles of the hood cover the entire cooking surface.
- Regularly inspect nozzles to ensure that they are clean and free of grease buildup.
- Turn off stoves and appliances, and unplug electrical appliances when not in use.
- Never leave hot cooking equipment unattended.



*The nozzles above the cooking equipment spray wet chemicals once any smoke or grease-laden vapor is detected.*

- Develop and train employees and volunteers about evacuation procedures if they have any doubts about their safety or if extinguishing efforts fail. Emergency responders (911) should be called once the building is safely evacuated.

## CLASS K FIRE EXTINGUISHER

To augment the fire suppression system and precautions, a Class K fire extinguisher designed for suppressing cooking fires should be located within 30 travel feet of deep fat fryers. This type of extinguisher is specifically designed to extinguish fires from cooking oil, fats and grease. Traditional fire extinguishers that use dry chemicals or water may not extinguish grease fires and may actually spread the fire.

To help ensure safe and proper use of the fire extinguisher:

- Maintain clearance around the fire extinguisher and the path to the extinguisher for easy access.
- Place a sign near the extinguisher that reads, “The automatic fire suppression system covering the cooking areas must be activated before using the fire extinguisher.”

For more information, consult National Fire Protection Association Standard 96: Ventilation Control and Fire Protection of Commercial Cooking Operations ([NFPA.org](http://NFPA.org)).



*Keep a class K fire extinguisher within 30 feet of deep fat fryers.*

## SANITATION

Sanitation in cooking facilities is of utmost importance. Cross-contamination or undercooking can lead to foodborne illness. Contact with animals or other objects at the fair could contaminate food as well.

Handwashing should be required for cooks and those handling food and strongly encouraged for visitors. Hand washing stations should be provided during the fair events to give people ample opportunity to practice good hand hygiene.

## HAND HYGIENE

One of the most effective ways to prevent the spread of disease is proper hand washing.

Some best practices for hand hygiene include:

- Washing hands and forearms for at least 20 seconds.
- Cleaning between the fingers and under the nails.
- Use warm or hot water.
- Wash hands before beginning or upon returning to work; after touching bare skin or hair; after coughing or sneezing; after eating, drinking or smoking; after using the restroom; after handling soiled equipment or utensils; after handling money; and when switching between working with raw food and ready-to-eat items.



*Hand washing should be done frequently and thoroughly by employees throughout the day.*

- Hand washing facilities should be accessible, have plenty of soap and towels and have a posted “hand washing required” sign.

## CROSS-CONTAMINATION

Cross-contamination occurs when raw food, tools, surfaces, hands or gloves that handled raw foods come into contact with food that is ready to eat. The best approaches to preventing cross-contamination involve cleaning and sterilizing surfaces and tools, and washing hands frequently or after handling raw foods.

Also gloves or aprons that come into contact with raw food should not touch ready-to-eat food. Remember, before serving, meats should be cooked thoroughly to kill any potentially harmful germs or pathogens.

## ICE MAKERS AND FREEZERS

As people scoop ice or use the freezer, germs from hands can transfer to the ice or water. Items stored in the freezer or ice maker can then become contaminated from the ice or water.

To help keep people safe from germs, ice makers and freezers should be regularly cleaned and sanitized. Staff should wash hands frequently and remember the rules of cross-contamination. Ice makers and freezers can also develop mold over the off-season and should be thoroughly cleaned



*Ice makers or freezers are an often overlooked source of cross-contamination.*

before the beginning of the fair. Ice scoops should also be cleaned and sanitized regularly just as other cooking utensils.



## COOKING EQUIPMENT

Certain cooking equipment can present hazards to individuals using the machines. The main hazards associated with cooking and cooking equipment involve burns, cuts and electrocution. Other hazards are entrapment, slips, trips and falls.

*More information about the Minnesota food code is located in Minnesota Administrative Rules, Chapter 4626.*

### PREVENTING BURNS

The multiple heat sources found in kitchens present a serious burn hazard to food service workers. Employees or volunteers who serve hot foods are also at risk for burns. To help prevent individuals from being burned:

- Use hot pads or oven mitts to remove pans and kettles from the range or oven.
- Turn off burners that are not in use.
- Turn pot handles away from burners and walkways.
- Solicit help when handling large pans or kettles.



*Hot pads or oven mitts prevent burns when handling hot pans or kettles.*

- Avoid wearing loose clothing.
- Do not overfill serving containers with hot food items.

### PREVENTING CUTS

Staff involved with food preparation often come in contact with sharp cutting tools, such as knives. These tools can be a hazard if used or stored improperly. Staff and volunteers should be trained about the correct and safe use of knives and other sharp equipment. They should be trained to:

- Keep knives sharp.
- Store knives in racks, knife blocks or on magnetic strips.
- Use the correct knife for the job.
- Turn handles and blades away from walkways when not in use.
- Tighten or replace loose knife handles.



*Use a cutting board or block when chopping or slicing.*

- Keep fingers in the clear.
- Take great care when cleaning meat slicers. Consider using cut-resistant gloves when performing this task.
- Maintain all machinery regularly.

## PREVENTING ELECTROCUTION OR SHOCK

Many kitchen appliances and equipment run on electricity and care should be taken so these appliances and equipment do not lead to a shock. To help prevent electrocution or shock train staff to:

- Unplug electrical appliances when not in use. In addition to de-energizing the equipment, this can reduce the risk of fire ignition.
- Clean up water spills and keep hands dry. A wet floor or wet hands are better conductors of electricity than dry hands and surfaces.
- Electrical outlets should be protected with a ground fault circuit interrupter (GFCI) on all kitchen outlets or outlets within six feet of a water source. A GFCI is a fast-acting electrical circuit breaker that senses small imbalances in the circuit caused by current leaking to the ground, interrupting the power in as little as one-fortieth of a second. Each GFCI outlet should be periodically tested to ensure performance.



*Help prevent shock by unplugging electrical appliances when not in use.*

- Cooking and kitchen appliances should be rated for commercial use and certified by a nationally recognized testing laboratory, such as Underwriters Laboratory (UL). Household use appliances are not designed for the heavy uses expected during fairs. Certifications demonstrate that the equipment is properly grounded and safe to use.

## PREVENTING OTHER INJURIES

Kitchens and dining facilities pose other hazards for individuals, such as:

- **Entrapment:** Older style refrigerators or freezers may feature latches that could trap or asphyxiate children. As a best practice, these should not be used or should be equipped with a mechanism for trapped persons to free themselves.
- **Slips and falls:** These are common, particularly around sinks or areas where water can get onto floors. These areas should be kept dry or equipped with slip-resistant mats. People working in these areas should also wear appropriate footwear for the location.
- **Falls:** Items stored in high places should be accessed with step stools or ladders, rather than chairs, boxes or items with rollers to avoid people falling when storing or retrieving items.
- **Lifting injuries:** Individuals should practice safer lifting techniques when retrieving or storing items. Items should be stored in locations where they are easy to reach and carry.



*A cart makes awkward or heavy items easier to move.*

## Resource

More information about food safety and illness prevention is available through the United States Department of Agriculture Food Safety and Inspection website, [FSIS.usda.gov](http://FSIS.usda.gov).