To The Point
Restaurant Safety Best Practices

CHUBB®

Overview

From the growth of online ordering to sustainable or experiential dining, the restaurant industry is evolving. But as the restaurant industry evolves, the management of risk and safety is a constant need. For example:

- Deliveries and take-out are expected to outpace on-premise sales revenue. Deliveries have risks associated with owned/non-owned auto vehicles and the use of third-party vendors.

- The rise of foodborne allergens present additional risks that warrants formalized programs and training at all levels.

- Sustainable dining with locally sourced foods presents its own set of challenges to food safety.

- Seasonal or temporary shutdowns can create property and liability risks if not adequately addressed.

Traditional on-site dining continues to be influenced by the customer experience as restaurants work to innovate their dining spaces. When designing a restaurant layout, safety measurements are a critical consideration to mitigate risks for slip, trip and fall hazards. Operating a restaurant that is both aesthetically pleasing and safe for guests & workers continues to be a challenge.

Common risks within the restaurant industry are:

- **Employee safety** (Falls, Ergonomics, Lacerations, Burns)
- **Food safety** (Foodborne illness and Food Allergy)
- **Fires**
- **Delivery operations**
- **Seasonal Shutdown/Startup**
- **Safety and Security**

An effective restaurant risk management program is key for long term growth and profitability. Successful integration of restaurant programs reduces losses, improves morale, and supports a better experience for the customer.

Chubb Risk Consulting

The following are best practices for an effective risk management program:

Falls (Same Level & Elevated Work Surface)

Slips and falls are a leading cause of injury for both customers and employees. This risk starts from the entrance to the back of the house, including both the same floor level and elevated/transitioning floor levels.

Best Practices:
- **Floor material selection** - Identify floor materials that will help minimize the potential for slips, trips, and falls. Test how slippery the material is and reference the amount of friction during the selection process. Consider how the floor will 'perform' whether wet or dry.
- **Floor maintenance program** - Implement a program to inspect floors regularly and clean spills promptly. Use floor cleaners applicable for the floor surfaces and according to the manufacturer's instructions. Display 4-sided warning signs to alert customers where cleaning is occurring. Ensure signs are removed promptly once the floor is dry. Implement a mop cleaning/ maintenance program. Keep sump areas clean. Ensure adequate exhaust ventilation for grease vapors during cooking to prevent build-up on the floor.
- **Floor transitions and stairs** - Same level transitions, such as carpet to tile, should be smoothed and easily noticeable. Staircases/ramps/landings should be designed to code with non-slip stair treads.
- **Lighting** - Provide adequate lighting in high-risk areas such as the kitchen, storage, dishwashing, bars, and serving areas.
- **Inclement weather** - Walk-off mats should allow for a minimum of 10 paces in the normal direction of travel. Consider mats with rubber/coco fiber construction, contrasting color, and smooth edge transitions. Ensure adequate mats are on-site to rotate during heavy inclement weather
- **Ladder Use** - Materials should be positioned so more frequently used items will not require the use of a ladder. Ensure ladders are in good condition. Train employees on proper ladder usage.

- **Employee Footwear** - Require employees to wear non-slip footwear. Inspect employee footwear for defects/ cleanliness prior to each shift.

Ergonomics (Overexertion & Repetitive Motion)

Common tasks such as busing tables, lifting plates/trays, moving tables/chairs, transferring oil, and trash handling may result in a musculoskeletal disorder (MSD) including back and shoulder strains, tendonitis, etc. NSC (National Safety Council) averages workers' compensation costs of $33,972 by this accident cause.*

Best Practices:
- **Adjustability** - Provide height-adjustable workspaces (i.e. lower countertops, adjustable countertops, or stands).
- **Mechanical Aids** - Use mechanical aids to reduce the need to lift. Solutions include dollies/handcarts to move bulk items, bussing carts for handling used dishes, automatic plate and cup riser dispenser.
- **Storage Configuration** - Store items that are frequently used and heavy in the 'power zone' between the knees and shoulders.
- **Oil Transfer Safety** - Consider automated oil transfer devices to handle both clean and used oil to reduce the risks of burns and lifting injuries.
- **Body Mechanics** - Provide training on the use of neutral postures and avoiding awkward positions
- **Floor Mats** - Use Anti-Fatigue mats to reduce discomfort for long durations of standing. Consider mats with anti-slip and anti-microbial properties.
- **Ergonomic Utensils** - Use knives and utensils with ergonomically designed handles.

Lacerations (including amputations)

The food preparation process presents both hazards for lacerations and amputations. Handling broken dishes, glassware and trash can present laceration hazards. Using improperly guarded slicers, grinders or mixers can result in amputations and other loss scenarios (caught-in, pinch points, etc.).

Best Practices:

- **Equipment Guards** - Require machines to have appropriate guarding utilized during normal operations, (safety cages for mixers, emergency shut-offs, mandolin guards). Cleaning and/or maintenance of the equipment should include lock-out/tag-out procedures with adequate guards as well.

- **Push Sticks** - Use push sticks or other hand tools to help feed or remove food from grinders, slicers, or choppers and keep hands and fingers out of the danger zone.

- **Inspect Tools and Equipment** - This includes dinnerware for missing guards, chips/cracks, and damage.

- **Personal Protective Equipment** - Use cut-resistant gloves during maintenance activities, food preparation (including meat slicing, shellfish prep "Shucking"), and/or cleaning activities. Prohibit loose clothing to prevent the potential of clothing getting caught in any machinery.

- **Knife safety** - keep knives sharp, clean, and stored correctly. Select the right knife for the task and exercise proper cutting techniques.

- **Broken Glass** - Train employees on broken glass cleanup. Use tools (tongs, brushes/pans) to limit picking glass by hand. Consider segregating broken glass in dedicated receptacles from regular trash/ recycling. Use puncture-proof containers for storing broken glass.

Burns

Burns may affect patrons and restaurant workers during serving and food preparation. Other sources of burns involve tasks such as changing grease filters above hot cooking surfaces and transferring cooking oil.

Best Practices:

- **Appropriate Training** - Provide employees training on the preparation and serving of hot food items. In addition, provide first aid training for the treatment of burns.

- **Maintenance** - Schedule maintenance on cooking equipment during non-business hours.

- **Protective Equipment & Coverings** - Use protective equipment (i.e. hot pads, mitts, aprons) when handling hot foods or containers. Ensure deep fryers are covered when not in use or cooling to prevent accidental contact.

- **Automate Oil Transfers** - Automated oil transfer of both clean and used oil can reduce the risks of burns.

Foodborne Illness

Risk factors that can cause foodborne illness include: E. coli/biological contamination, poor personal hygiene, inadequate cooking methods, inadequate food temperature storage/handling, and using contaminated equipment. Restaurant food safety is subject to local, state, and federal regulations. Guidance can be obtained from the FDA, CDC and U.S. Department of Health & Human Services.

Best Practices:

- **Hazard Analysis Critical Control Point (HACCP)** - Implement a restaurant food program that identifies and mitigates potential food safety hazards. Establish Standard Operating Procedures (SOP) to ensure consistency.

- **Supply Chain** - Validate supplier food safety programs. Inspect incoming products. Require the supplier to sign contracts with adequate risk transfer mechanisms in place.

- **Training** - Train employees on food safety including HACCP principles. Train new hires initially and regularly thereafter for full-time, part-time including temp, or leased employees.

- **Clean** - Conduct effective sanitation throughout the day on common food contact surfaces, equipment and facility. Perform deep cleaning regularly and after hours.

- **Employee Hygiene** - Require food production employees to cover hair (hairnets, hats) and have clean PPE in food production areas. Require front house employees to have clean hair, nails, and a professional and well-maintained appearance. All employees should wash their hands frequently and should remove or secure jewelry.

- **Employee Health Monitoring** - Implement a policy that includes prohibiting food handling when workers may be sick (viral infection, vomiting, diarrhea) and/or who have traveled to countries that may have high risk. Employees should self-report these conditions.

- **Segregate Raw and Cooked Foods** - Use dedicated utensils and cutting surfaces for fish/seafood, meats, poultry and eggs. Consider dietary restrictions (Kosher, Halal, Vegan etc.,). Washing and sanitizing thoroughly will prevent cross-contamination.

- **Cooking & Storing Temperature** - This is especially important for such foods as fish, poultry, and pork. Use food thermometer to accurately monitor food temperature. When holding food above 140 degrees Fahrenheit, use chafing dish, warming tray or slow cookers. Refrigerate food promptly (perishable foods within two hours). Avoid the "danger zone" (i.e. holding food at temperatures between 40 degrees Fahrenheit and 140 degrees Fahrenheit).

According to the National Fire Protection Association (NFPA), cooking equipment is the leading cause of fires.

Food Allergy Safety

Food allergy reactions can range from mild irritations to life-threatening situations, including anaphylactic shock. Primary means of mitigating a reaction is early recognition and management of exposure. The FDA has identified eight major food allergens - **milk, eggs, peanuts, tree nuts, wheat, soybeans, crustacean shellfish**, and **fish**. These eight allergens represent 90% of documented food allergy incidents in the U.S. and are most likely to be associated with a life-threatening reaction. Highly sensitive individuals can be impacted with airborne allergen exposures. Others can be impacted through physical contact and various concentrations of ingestion.

Best Practices:
- **Identify Exposures** - Identify allergen exposures through your operations including ingredient management, storage/handling, food prepping, and food/drink serving.
- **Transparency with Customers** - Communicate presence of allergens to customers. This includes menus (including online/digital food ordering), marketing materials (signs), and verbal communications.
- **Separate Allergens** - Segregate raw ingredients and allergens, according to food safety best practices and major allergen categories. Consider using separate containers, shelving systems, refrigerated areas, food contact surfaces, cooking equipment and utensils.

- **Sanitation** - Adopt effective sanitation procedures to eliminate/reduce the extent of food allergen proteins on surfaces. This is critical when segregation can't be completed.
- **Training** - Employees should be trained on identifying allergens, storing/ handling procedures, sanitation, and communication. Train servers/ hosts to ask customers for any allergen concerns
- **Medical response** - Develop Standard Operating Procedures for responding to medical conditions such as allergic reactions. Provide training to employees on actions during an event.

Fires

According to the National Fire Protection Association (NFPA), cooking equipment is the leading cause of fires within an eating and drink establishment, accounting for 61% of incidents. Fires involving grease or grease vapors are the leading cause of fire in a restaurant. Having an appropriate, and well maintained, fire suppression system and exhaust ventilation system within the kitchen cooking operations will reduce the likelihood and mitigate the damage of a fire within the premises.

The exhaust filters should be cleaned daily.

Best Practices:

- **Ventilation System** - Recommended installation of ventilation controls per NFPA 96. The exhaust filters should be cleaned daily. The exhaust duct and ventilation should be cleaned at minimum semi-annual, but can be as frequent as weekly, depending on volume of cooking and extent of buildup. Clean wood stoves/ wood-fired ovens weekly at a minimum to reduce the buildup of creosote. Ensure wood stoves are fully extinguished and never left unattended.

- **Deep Fat Fryer** - Ensure deep fat fryers are separated from any open flame by either adequate clearance or by installing a baffle plate.

- **Automatic Extinguishing System** - Recommend installing a UL 300 compliant Automatic Fire Extinguishing System. Inspect fire extinguishing systems nozzles over the cooking area (including hood) to ensure they are aligned properly; manual pull station and automatic fuel shut-off are marked, operational and accessible. Recommend the system be connected to a UL Listed central station monitoring alarm company and inspected semi-annually or more often if required by local code.

- **Fire Extinguishers** - Require class-K fire extinguishers in the kitchen areas and inspect annually. Provide training on emergency action plans and PASS (Pull, Aim, Squeeze, Sweep).

- **Detection and Sprinklers** - Heat detection may provide an alternative solution to smoke detection within the kitchen. High temperature rated sprinkler heads should be considered to reduce the potential of accidental water discharge.

- **Life Safety** - Ensure facilities meet NFPA 101 life safety and/or local code requirements. Ensure adequate inspection/ testing/ maintenance on life safety controls and fire alarm system. Keep all egress points (egress doors and stairways) free from obstructions and in acceptable working condition.

- **Tableside Cooking** (Flambé', portable cooking, in-table cooking/ hibachi) **or Flaming Foods/Drinks** - Ensure adequate height and distance between cooking and guests & combustible materials (ceilings, drapes, tablecloths, clothes). If igniting alcohol, ensure safe distance from guests. Limit alcohol to 80 proof (40% alcohol) as higher proof are highly flammable and difficult to control. Have portable fire extinguishers readily available. Inspect emergency shut-off for gas tables regularly. Prohibit/ Limit flaming alcohol drinks/ food, or ensure strict controls are in place.

- **Outdoor Patio Heaters/Flame Pits** - Ensure outdoor heaters/ flame pits are permitted and meet local fire codes. *Never Use Indoors* as toxic fumes can be deadly. Only use on stable ground and ensure heaters are secured from falling over. Use screens/ shields to limit sparks and contact by guests. Store outdoor propane cylinders in a secure area to prevent theft and from falling over. Post no seating signs or define areas for seating near fire pits.

Delivery Operations

Deliveries can be completed with in-house drivers or utilization of third-party vendors. In-house drivers can utilize company vehicles or personal vehicles. A driver operating their personal vehicle for business is considered a non-owned vehicle risk and represents a potential hazard exposure. In the event of a serious vehicle accident, there are liability risks that may impact your restaurant. Bicycle and/or foot deliveries may present unique workers compensation risks as well. In some local jurisdictions, bicycle deliveries are regulated.

Best Practices

- **Third-Party Vendors** - As with all third-party relationships, require appropriate risk transfer mechanisms be implemented to reduce the extent of liability. Mechanisms to consider include contract agreements (including indemnification language, hold harmless, etc.) and certificate of insurance (additional insured designation with appropriate limits). The contractual risk transfer agreements should be reviewed with legal counsel.

- **Company-Owned Vehicles** - Implement a fleet safety program. This includes the driver selection process, training, and appropriate fleet management. Certain vehicles may be subject to regulatory guidelines from the U.S. Department of Transportation (DOT).

- **Non-Owned Vehicles** - Non-owned vehicles should have personal coverage for both property damage and bodily injuries. Require employees to have insurance with adequate limits. Recommend policies be reviewed by legal counsel.

- **Develop a Driver Selection Program** - Identify acceptable driver criteria. Conduct initial and on-going motor vehicle record review (MVR) on all drivers. Review driver history for the past three years to identify any violations or other issues which could pose a risk to your organization.

- **Bicycle Deliveries** - Recommend commercial bicyclist safety courses for bicycle delivery people. Provide or require cyclists to wear proper PPE including reflective clothing on the upper-body apparel, a helmet in good condition, and knee protection. Whether personal or company provided, require bicycle to have a headlight, taillight, reflectors (including on each wheel), brakes, and a basket/pannier for carrying the goods. Inspect bicycles regularly.

Seasonal Shutdowns/Startup

Some restaurants or kitchens have seasonal operations with temporary shutdowns. There may be other reasons that will influence a temporary shutdown that will impact the startup and resuming of operations. Inadequate procedures and policies for shutdown and startup can have significant risks to property, employees and patrons. Liability risks should follow food safety, employee health procedures, and sanitation procedures as outlined in the above sections.

Best Practices:
- **Property Maintenance** - Including cold weather and inclement weather preparations. Implement snow removal procedures (including roof). Prepare for hurricane or high windstorms with protection of openings and securing any equipment.

- **Premises/Building Security** - Including guard service, burglar alarms, physical barriers.

- **Pest Control & Landscaping** - Maintain adequate pest control and landscaping even during shutdown periods.

- **Water Intrusion Mitigation** - Inspect/repair roof, façade, windows and any other penetrations; shut-off and drain non-essential water systems; consider detection devices with monitoring.

- **Equipment** - ensure appropriate inspection, testing, maintenance, and storage; including building systems and cooking equipment.

- **Refrigeration** - complete sanitation, inspection, and maintenance; any analog thermostats may need recalibration.

- **Employment** - orientation and training prior to startup is critical for all employees.

Safety and Security

Workers and guest's safety and security exposures in an establishment can range from threats and verbal abuse to physical assaults and even homicides. Creating a safe environment for both guests and workers is critical. Situations of "lone employees" performing outside tasks, especially after dark present an opportunity for assault/robberies. No employee should be left by themselves to "close up."

Best Practices:
- **Cash Handling & Deposits** - Develop policies and procedures for cash handling and deposits. Consider using 3rd party "armored car" services for cash pickups. When going to the bank, use non-descript bags for cash. Vary times and dates of bank drops. Do not place safes along the outer walls. Limit access to management offices and safes.

- **Safe Opening & Closing** - Where possible, require two persons on-site always. Limit public access to only seating hours.

- **Deliveries** - Implement procedures for back of the house deliveries. Verify delivery drivers prior to opening doors. Do not provide keys/access codes to non-employees.

- **Threats** - Procedures and training for identifying, responding, and reporting threats. Provide training for what to do in the event of a robbery or other hostile action. Limit trash disposal after dark. Ensure parking lots and outside areas have adequate lighting.

Resources

[Occupational Safety and Health Administration (OSHA)](#) - Contains safety materials, guidance, and direction concerning restaurant worker safety and preventing food borne illness.

[State of California - Industrial Relations (CAL/OSHA)](#) - Numerous items and materials concerning restaurant safety, some in multiple languages.

[National Restaurant Association](#) - Multiple resources for the restaurant owner

[Centers for Disease Control](#) - US government website with information concerning food safety and food-borne illness

[WorkSafeBC](#) - Safety site of British Columbia. Contains food service safety materials and information, some in multiple languages

[National Safety Council](#) - Information and material concerning common workplace hazards such as slips and falls, lifting, and ladder use. Injury Facts*

Chubb Insurance - On-site assistance and client access to safety materials.

- [Liquor Liability](#)
- [Slip and Fall Hazards](#)
- [STF Facility Design](#)
- [Retail Establishments](#)
- [Special Events Checklist](#)

[Retail and Food Service HACCP (U.S. FDA)](#)

[U.S. Dept. of Health and Human Services- Food Safety](#)

[NFPA Structure Fires in Eating and Drinking Establishments](#)

Learn More & Connect

For more information on protecting your business, contact your local risk engineer, visit the [Chubb Risk Consulting Library](#), or check out [www.chubb.com/riskconsulting](#).