

# Winning Slip & Fall Cases in Restaurants

Do you want to win your slip, trip, and fall cases that take place in restaurants? Of course, you do. Did you know that slips, trips, and falls in the restaurant industry are completely different from slips, trips, and falls in any other industry? Here we will help you find out just how different they really are and give you some critical insider insight that will help you win these restaurant industry cases and may even inspire you to want to take on more restaurant industry matters to expand your legal practice.

More than three million food service employees and over one million guests are injured annually as a result of slips, trips, and falls in America's restaurants. According to the National Floor Safety Institute (NFSI), the hospitality industry spends over \$2 billion dollars on such injuries each year; and these injuries are increasing at a rate of about ten percent annually.

Slips, trips, and falls can happen in the dining room, kitchen, buffet area, parking lot, entryway, restroom, stairways—anywhere on the premises. Many times they happen while employees are working around ice bins where ice can easily fall onto the floor forming puddles; working in busy, congested areas; walking or running on slippery or uneven floor surfaces; carrying dishes around blind corners or stairs; and using single door entry to and from the kitchen area. Slips, trips, and falls are often a result of failing to follow proper floor cleaning procedures, such as not following instructions on cleaning product labels, using the wrong cleaning agent for the flooring surface, not properly rinsing the cleaning product after scrubbing, using dirty or insufficiently maintained equipment and tools, not posting proper warning signs, or failing to schedule cleaning in a timely fashion.

A great number of these slip, trip, and fall incidents are preventable by restaurant management keeping safety top-of-mind and a major priority. Management must create a safer and healthier environment for all employees and guests by developing, implementing, maintaining, and providing ongoing training of an industry standard slip and fall protection program (written operating policies, practices, and procedures). It is *Restaurant OSHA Safety and Security* and restaurant industry standard for management to not only develop and implement a slip and fall protection program, but also to commit to providing ongoing training of the program to employees, and further, to evaluate the program on a regular basis to ensure the program's effectiveness and determine whether the program needs to be changed, revised, or updated in some way to make it more effective.

## The Different Types of Slips, Trips, and Falls

Slips, trips, and falls can be classified into five basic types:<sup>111</sup> 1) slips caused when there is insufficient slip-resistance between a person's foot (shoe) and the walking surface (floor); this is also referred to as an insufficient coefficient of friction (COF)—resulting in a slip/sliding motion throwing off one's center of gravity and balance, causing him/her to fall; 2) trips caused when one catches his/her foot on an unexpected raised surface (or object) in his/her pathway; 3) stumps, caused when one's foot suddenly encounters an object or raised flooring surface that abruptly impedes his/her walking stride; 4) falls caused by unexpected step-downs, which occur with sudden changes in elevation of the flooring surface; and 5) falls caused by forced twisting/rotation, which occurs when one encounters an object that forces the foot or ankle to suddenly turn and can no longer support the pressure of walking.

Falls often occur in the workplace from unprotected sides, wall openings, and floor holes, as well as unsafely positioned or improperly used ladders and step stools (including using

furniture, fixtures, equipment, tools, and facility for other than their intended purposes). Where protection is required, employers must select fall protection systems and procedures appropriate for the specific situations, use proper implementation and installations of safety systems, supervise employees properly, and train workers in the appropriate selection, use, and maintenance of all protection systems, procedures, and equipment.

## The Common Causes of Slips, Trips, and Falls

Many different types of contaminants or obstacles can cause a slip, trip, or fall. According to NIOSH (National Institute of Occupation Safety and Health), the top ten slip, trip, and fall hazards are:

- Contaminants on the floor (food, water, dirt, sand, etc.)
- Indoor walking surface irregularities (holes, cracks, sudden changes of elevation, etc.)
- Outdoor walking surface irregularities (potholes, cracks, obstacles, etc.)
- Weather conditions (rain, ice, and snow, etc.)
- Inadequate lighting
- Stairs and handrails (or lack thereof)
- Stepstools and ladders (when not safely positioned or when improperly used)
- Tripping hazards (clutter, loose cords, curled mats, etc.)
- Improper use of floor mats and runners
- Poor drainage (pipes and drains, etc.)

OSHA has found some of the most common causes of slips to be wet products or spills on smooth floors or walking surfaces (such as water, mud, grease, oil, food, blood, and offal); loose, unanchored rugs or mats; and transitioning from one surface to another (i.e., carpet to vinyl). Additionally, OSHA states that common causes of trips include: ruffled or rolled-up carpets/mats, carpets with curled edges, irregularities in walking surfaces—thresholds or gaps (transitioning from one floor type to another), and missing or uneven floor tiles and bricks. Causes for trips include, for example, debris, accumulated waste materials, and uneven surfaces.<sup>112</sup>

(Note: *Offal* is the internal organs and entrails of a butchered animal used for food (such as the liver or kidney). Offal is inherent to the restaurant industry and is recognized by OSHA as a slip and fall hazard. Aside from creating a bad smell if the workplace is not kept clean and sanitized after processing, offal and offal-based moisture can create slick and hazardous surfaces. The work area should be designed to prevent odors, discharge, splatter, and spillage of offal with the proper use of exhaust ventilation, extraction/collection systems, processing areas with raised or lipped edges, drip pans, etc.)

OSHA states that environmental conditions that increase the risk of slips, trips, and falls include poor housekeeping, improper cleaning methods and products, and inadequate or missing signage. In the process of designing for the workplace, OSHA advises using adequate ventilation to avoid smoke, steam, and condensation of water and grease onto the floor.

## Standards for Walking and Working Surfaces

Restaurant employers and employees must comply with all applicable restaurant industry and OSHA standards pertaining to walking and working surfaces. Under the OSH Act, employers are responsible for providing a safe and healthful workplace.

OSHA's mission is to assure safe and healthful workplaces by setting and enforcing standards and by providing training, outreach, education, and assistance. Employers must comply with the General Duty Clause of the OSH Act, which requires employers to keep their workplace free of serious recognized hazards,<sup>113</sup> and all other applicable OSHA standards, such as:

- OSHA, Walking-Working Surfaces Standard, General requirements section 1910.22(a)(2)—states the following: The floor of every workroom shall be maintained in a clean and, so far as possible, a dry condition. Where wet processes are used, drainage shall be maintained, and false floors, platforms, mats, or other dry standing places should be provided where practicable.<sup>114</sup>
- Sections 1910.22(a)(3)—1910.22(b)(2) state: To facilitate cleaning, every floor, working place, and passageway shall be kept free from protruding nails, splinters, holes, or loose boards . . . Aisles and passageways shall be kept clear and in good repairs, with no obstruction across or in aisles that could create a hazard. Permanent aisles and passageways shall be appropriately marked.<sup>115</sup>

It is important to note that, in the restaurant and bar industry, the workroom includes areas such as the dining room, bar, patio, buffet line, and other similar places where employees and customers share the same space for their respective uses and needs. This condition (referred to as *shared space*) is one of the factors that make the restaurant industry unique.

## Slip Resistance and Co-efficiency of Friction

The National Restaurant Association (NRA) provides the following information: “The first step in preventing accidents is to test how safe your floors are . . . Monitor the coefficient of friction (COF), the measure of slip resistance, at various spots throughout your restaurant.” Further: “A greasy floor . . . or uneven flooring could send an employee or guest to the hospital and land your business with an expensive lawsuit and rising insurance premiums.” The NRA recommends using mats with high-traction backing, such as those certified by NFSI (National Floor Safety Institute) and to put mats on a clean, dry surface. Also, in greasy areas, the Occupational Safety & Health Administration (OSHA) recommends using non-skid waxes and floor surfaces coated with grit to create non-slip surfaces.<sup>116</sup>

Slip resistance is generally measured by defining the Coefficient of Friction (COF) between two surfaces. The American National Standards Institute's (ANSI), A 1264.2-2001 Standard for the Provision of Slip Resistance on Walking & Working Surfaces suggests a Static COF of greater than or equal to 0.5 for walking surfaces under dry conditions, and many knowledgeable professionals would opine that the 0.5 value could be legally enforced under the General Duty Clause of the OSH Act. However, the NFSI (National Floor Safety Institute) has developed an additional test method, ANSI/NSFI B101.1, defining “High Traction” walkways as having a measured static COF of greater than or equal to 0.6 for wet walking surfaces—as more than 80 percent of slip-and-fall accidents take place on wet surfaces. Many service providers are

readily available to measure the COF of floors, and they can best render an opinion on whether a particular restaurant establishment has safe or unsafe floors.

## The Proper Cleaning Process for Each Surface

Tribology research (the study of the interaction between sliding surfaces) indicates that dirty floors are a common cause of slips and falls. “Contaminants may accumulate on floor surfaces due to inadequate cleaning processes, resulting in the reduction of surface roughness as soil, grease, or other contaminants fill in the pores or valleys in the floor surface. The accumulation of contaminants alters these surface features and consequently reduces the uncontaminated floor’s original friction characteristics.”<sup>117</sup> Further, “A floor cleaning protocol must consider the floor type, the contaminants involved, and a cleaning solvent most suitable for both.”<sup>118</sup>

Additional findings revealed, among other things, that: “A restaurant kitchen floor is only clean when the polymerized grease film is also removed . . . ”<sup>119</sup> (polymerized grease film is a thin coating of grease, soil, and even cleaning chemicals that develops on floors over time). Accordingly, “occasional testing of floor surfaces to monitor slip resistance levels and determine effectiveness of the floor cleaning protocol”<sup>120</sup> should be performed for a floor maintenance program to be effective.

The following recommendations, among others, should be implemented:

- Select floor cleaning and maintenance products with proven slip resistance characteristics that are compatible with the particular flooring surfaces in your facility. It should be noted that the National Floor Safety Institute states that ten out of the eighteen products that they tested that were approved for tile floor cleaning actually made the tile floors more slippery after they were cleaned using the product.<sup>121</sup>
- Provide proper signage and equipment to be used as a warning system during floor maintenance and quick reference for cleanup operations, such as safety cones, wet-floor signs, safety data sheets (SDS) and specifications regarding the slip-resistance level of products, safety posters, etc. (Note: OSHA’s poster informing employees of their rights and responsibilities must be posted in a prominent location at all times to be in compliance and to meet industry standard.)
- Implement carpet runners and mats that adhere to OSHA and ADA (Americans with Disabilities Act) guidelines.
- Consider foreseeable conditions, such as the weather (rain, mud, dirt, sand, snow, etc.), and provide employee access to slip resistant footwear (consider making this a requirement).
- Provide for regular site safety and health inspections.

## The Importance of the Right Cleaning Product

There are many cleaning products on the market, each designed to clean particular types of flooring. Take the time to make sure that you select the proper cleaning product/agent for each flooring surface of your restaurant. Read product labels and check the floor manufacturer’s recommendations of cleaning agents to be used (and not to be used); be sure not to mix

products that can cause toxic vapors or gases to develop. Using the most effective product for the job will help to keep your floors clean and your employees, customers, and visitors healthy and safe.

When selecting cleaning products, keep the following in mind:

- Detergents or surfactants increase penetration of water-soluble soils and contaminants.
- Emulsifiers, soaps, and degreasers help to dissolve and suspend fat-soluble soils (using too little will be insufficient for removing grease; using too much may dissolve the grease, but leave a slippery residue behind).
- Biological agents blend naturally occurring bacterial with powerful enzymes for efficient, effective, safe cleaning and removal of excessive grease.
- Caustics and acids (harsh or corrosive agents) chemically break down and strip contaminants.
- Other additives and agents (for slip-resistance, shining, sealing, fragrance, drying, and disinfectants) can help to minimize the chances of slips and falls.

## Equipment Maintenance

Clean mops are most effective; mops can become contaminated quickly and spread grease and soil instead of removing it. It is restaurant industry standard to:

- Use clean mops; replace, remove, or thoroughly clean dirty mops (refer to the manufacturer for best cleaning instructions).
- Utilize dirt screens or water contaminate-separating agents for cleaner water in the mop bucket(s).
- Utilize several mop buckets to have separate compartments for dirty mop wringing, dirty mop rinsing, and cleaning solution dipping (floor squeegees may be used to spread cleaning solution to help minimize cross-contamination).

If using floor cleaning machines or power brushes, this equipment must be properly maintained (sometimes these devices offer better application of chemical cleaning products and provide better scrubbing, rinsing, and vacuuming of wet floors than doing so manually). Deck brushes are usually better equipped for cleaning up grease, as they are less likely to spread oil and grease around than a mop (carefully select those that are ergonomically designed to help avoid upper body and back stress to the user).

## Proper Procedures for Washing Floors

- Always choose the best time to clean (when other employees, customers, etc. are not around—unless, of course, you are cleaning up a spill) to allow for longer periods of drying time and the least chance that someone might slip or fall on the wet, freshly washed flooring surface.
- Set up appropriate warning/caution signage to keep others away while washing floors.

- Provide safe access around the work area when others are present.
- Prior to washing the floor, remove excess dirt or grease by wiping, scraping, and/or sweeping (this makes cleaning easier and helps reduce the likelihood of contaminants from spreading).
- Avoid contact with surrounding restaurant equipment and machinery with water, cleaning agents, and cleaning tools and equipment.
- Use only the designated tools and cleaning materials for the particular area/zone of the restaurant that you are currently cleaning (check for labels and color codes).
- Rinse floors after scrubbing.
- Use a wet vacuum, floor machine, or squeegee to force excess liquids into floor drains and speed up the drying process.
- Clean smaller areas/sections of the floor at a time for easier, more manageable clean up and to prevent cross-contamination.
- Start by cleaning the less soiled/contaminated areas; finish that area first, then proceed to the next dirtiest until complete (be sure to keep drainage in mind).

## Employee Training Pertaining to Floors

*OSHA Safety & Health Program Management Guidelines* state the following in regard to training: “Employee training programs should be designed to ensure that all employees understand and are aware of the hazards to which they may be exposed and the proper methods for avoiding such hazards. Supervisors should be trained to understand the key role they play in job site safety and to enable them to carry out their safety and health responsibilities effectively.”<sup>122</sup>

OSHA Employer responsibility; 1926.21(b)(2): The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.<sup>123</sup>

Proper training procedures are vital. For example, the American Society for Testing and Materials and the National Bureau of Standards have studied the reliability of test devices for measuring the floor surfaces and the effect of cleaning materials on walking safety. They can now predict how a floorcare product will behave when applied according to a manufacturer’s recommendations to a particular surface. The National Safety Council reports that, “many slip accidents are caused by improper cleaning methods”<sup>124</sup> or the improper chemicals used on a particular surface . . . “if soap or commercial strippers are used on a floor, care must be taken that no residue remains when the floor dries.”<sup>125</sup>

The Food Service Sanitation Environment suggests the following preventative measure when it comes to the importance of training related to floors in order to avoid slip, trip, and fall incidents: Select floor tiles for “durability and slip rating”<sup>126</sup>—higher slip ratings are “very effective in high traffic areas that get water and grease spills. If you are renovating an existing facility, you can purchase a special treatment to improve the slip rating of floor tiles.”<sup>127</sup> They further state: “a restaurant operator can buy the best equipment, fixtures, and services . . . but

without an adequately managed sanitation program, a poor outcome could result. Training of all staff members is the most important job of restaurant managers and owners.”<sup>128</sup>

## Best Practices for Preventing Slips, Trips, and Falls

In addition to being recommended by OSHA, as well as ISSA (known as The Worldwide Cleaning Industry Association), and Alliance (an OSHA Cooperative Program), it is restaurant industry standard to implement, enforce, and train the best safe practices, including, but not limited to, the following:

- Identify and correct (minimize, eliminate) possible slip, trip, and fall hazards.
- Report to management any blind corners, problems with floor surfaces, or hazardous areas.
- Provide absorbent rags, mops, and squeegees to allow workers to clean up spills quickly to prevent falls.
- Provide adequate authority and resources to responsible parties.
- Provide for facility and equipment maintenance.
- Select high-traction, slip-resistant flooring materials.
- Use non-skid waxes and surfaces coated with grit to create nonslip surfaces in slippery areas or use non-slip mats.
- Know the slip-resistance of your flooring materials; have flooring coefficient of friction (COF) audits performed consistently.
- Provide non-slip matting in areas that tend to be wet. (Some types of matting may not be effective in areas that tend to be greasy. The use of non-skid waxes and floor surfaces coated with grit may be helpful in these areas.)
- Designate specific tools and cleaning materials for use in only certain areas/zones (label or color code them accordingly), such as “for fryer areas only,” “Front of the House (FOH) only,” and “Back of the House (BOH) only.”
  - FOH: covers areas of exposures, such as outside curbs, ramps, parking stalls; entrance foyers (and to-go area); central walkways and aisles; dining rooms, banquet rooms, bar, and restrooms; elevated areas, steps, and ramps.
  - BOH: covers areas of exposures, such as the kitchen; dish/ sink areas; expo line, cook line, and prep areas; walk-in coolers and freezers; storage rooms; beverage stations; ice makers; stairs; and, back dock, trash, and receiving areas.
- Although you cannot mandate proper foot attire for your restaurant customers or visitors, restaurant employees should wear non-slip shoes (or use non-slip shoe covers) and avoid wearing sandals or open-toe shoes, high heels, or shoes made out of canvas. This is especially important if doing wet processes or greasy tasks such as spraying down

parking lots or mopping floors. Employers implementing a shoe policy program may fund proper footwear.

- Lace and tightly tie shoes.
  - Avoid leather or smooth soles.
  - Do not wear open-toed shoes.
  - Avoid porous fabrics such as canvas—they do not provide enough protection. Hot liquids, if spilled on canvas, would easily burn through the canvas and burn your feet.
- Do not wear pants or clothing that are over-sized, baggy, or extend below shoe level, causing a potential trip hazard.
  - Do not run or move too quickly, so as to create a dangerous condition.
  - Do not store items on the floor that might be tripped on, most especially hot cooking oil.
  - Carry items only at a height that you can safely see over.
  - Keep passageways and walkways sufficiently wide for easy movement, free of clutter and crowding, clear and in good repair with no obstruction across or in aisles that could create a hazard (for example, provide floor plugs for equipment to avoid power cords running across aisles and pathways).
  - Keep floors clean and dry (in addition to being a slip hazard, surfaces that are continually wet promote the growth of mold, fungi, and bacteria that can cause infections).
  - Clean up spills immediately (refer to section 52.1: Handling and Containing Spills).
  - During rush periods or peak traffic periods, spot mopping (cleaning only the immediate affected area of the spill) is the safest and most effective method to clean (floor pads or towels may work as well).
  - Provide adequate drainage; and for wet processes, maintain drainage (replace any loose drain covers); keep grates/drains free from debris and blockage; provide false floors, platforms, mats, or other dry standing places where practicable.
  - Decrease overcrowding by adding additional supply stations or carts with supplies at convenient locations.
  - Provide adequate lighting, especially in serving and preparation areas.
  - Alert employees and guests to step-ups and step-downs by using hazard tape or other warning signs.
  - Provide mirrors for blind corners.

- Provide windows on swinging doors so you can see if someone is coming out. Also, provide two-way doors—one for only going in and one for only coming out. Follow a set traffic pattern to avoid collisions (for example, enter on the right side, exit on the left), and place signage on doors.
- Keep all places of employment clean and orderly and in a sanitary condition.
- Provide warning signs for wet floor areas and when mopping.
- Keep exits free from obstruction; access to exits must remain clear of obstructions at all times.
- Repair any uneven floor surfaces; re-lay or stretch carpets that bulge or have become bunched to prevent tripping hazards.
- Do not overfill bussing containers (in addition to causing strain injuries from lifting, overfilling creates the potential danger of spills and items falling out—not only posing a hazard for slips, trips, and falls, but also causes distractions for those carrying the containers who may be trying to focus on keeping the items from falling).
- Use safety gear (personal protective equipment—PPE) to protect eyes, face, skin, and feet.
- Inform employees of the dangers of mixing certain chemicals.

## Handling and Containing Spills

OSHA states that employees should “wipe up spills immediately”<sup>129</sup> and “provide warning signs for wet floor areas.”<sup>130</sup>

OSHA Standard 1910.22(a)(1):<sup>131</sup> All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition.

OSHA Standard 1919.145(c)(1)(ii):<sup>132</sup> All employees shall be instructed that danger signs indicate immediate danger and that special precautions are necessary.

OSHA Standard 1910.145(c)(2)(i):<sup>133</sup> Caution signs shall be used only to warn against potential hazards or to caution against unsafe practices.

OSHA Standard 1910.145(c)(2)(ii):<sup>134</sup> All employees shall be instructed that caution signs indicate a possible hazard against which proper precaution should be taken.

OSHA Standard 1910.145(c)(3):<sup>135</sup> Safety instruction signs. Safety instruction signs shall be used where there is a need for general instructions and suggestions relative to safety measures.

The reasonable and customary *Restaurant OSHA Safety and Security* and restaurant industry standard policies and procedures for cleaning up spills on floors, which are trained and

relied upon by those doing business across the industry and which are endorsed by the National Restaurant Association,<sup>136</sup> as well as major insurance companies<sup>137</sup> and industry sources<sup>138</sup> across the country, are as follows:

- *Train Your Staff*: All the right tools and cleaning products are not sufficient if the staff has not been trained to use them correctly.
- *Caution Customers and Never Leave a Spill Unattended*: Don't leave a spill unattended while getting a mop, towel, paper towel, or any other cleaning materials. Station one team member/ employee at the spill who can verbally warn and direct customers and other employees around the spill, while another team member/employee gets the cleaning materials needed.
- *Spill Containment*: Train staff to pick up contaminants (food, ice, etc.) and clean up spills immediately—as soon as they or a customer spots them.
  - *Small Spills*: Clean up small liquid spills with paper towels or floor pads, and wipe the floor completely dry.
  - *Large Spills*: For larger spills, use cleaning tools and solutions designed to cut through grease and grime without leaving a slippery residue. Color-code your cleaning tools. Avoid using the same mop in the front of the house (FOH) that you use in the back (BOH), as this only spreads the grease around.
- *Containment*: Large or small, during rush periods or peak traffic periods, spot mopping (cleaning only the immediate affected area of the spill) is the safest and most effective method for cleaning spills. Keeping the spill contained in the smallest area possible, instead of increasing the dangerous condition by spreading it out across the floor, is crucial to maintaining safe walking and working surfaces. Many times this is referred to as “spill creep” or “spill expansion.”
- *Use Signage*: Place a “Caution, Wet Floor” sign, cones, or similar signage by the spill, and keep it posted until the area is clean and completely dry. Be sure to remove signage when it is not needed, as leaving signs out indefinitely or much longer than necessary only creates a dangerous situation in and of itself—as employees and customers will come to ignore the signage when they have become too accustomed to seeing it at times when it is not necessary to be displayed.

Employers and management personnel who do not comply with these well founded, consistently-executed systems, policies, procedures, and practices create, maintain, and operate in an environment with a higher level of risk than what is considered reasonable and customary—one that is more likely to result in injury, harm, damage, and/or catastrophic events and incidents than those who do comply.

If you are in the restaurant business long enough, chances are, at one point or another, an incident will occur on your premises involving an employee, a customer, or another individual who is injured, harmed, or maimed because of a slip, trip, or fall of some nature. The higher level of awareness that is created and maintained by management, the better your culture of safety will be across the entire organization, and the less likely that something bad will happen.

If you have a restaurant or bar industry slip, trip, or fall matter and need an experienced expert feel free to give us a call at 800.300.5764 or find us online, [www.RestaurantExpertWitness.com](http://www.RestaurantExpertWitness.com).

Until next time. Kindest Regards and God Bless.

Howard Cannon—is the world’s most sought-after forensic Restaurant Expert Witness, with 200+ cases and several hundred pre-litigation consulting matters to his credit. He is called on by judges, juries, plaintiffs and defense lawyers, members of the media, and industry executives to provide his unbiased opinions pertaining to an astonishing variety of incidents where employees, customers, and vendors become injured, harmed, sickened, maimed, or killed on the premises of restaurants and bars across the United States.

To contact Restaurant Expert Witness – Howard Cannon, call 800.300.5764 or visit our website at [www.RestaurantExpertWitness.com](http://www.RestaurantExpertWitness.com)

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