

Facilitator — August/September 2013



Change Language: Choose

Repairs and Maintenance

Robert Kravitz

A Closer Look at Slip-and-Fall Accidents

Understanding slip-and-fall accidents is the path to preventing them

It is possible—with all the other demands on their plates—that restaurant owners and managers are unsure or unaware of the statistics when it comes to slip-and-fall accidents in U.S. food service facilities. According to the National Floor Safety Institute, each year more than 4 million slip-and-fall accidents occur in U.S. restaurants. Here is a breakdown of these 4 million injuries:

- About 3 million food service employees are injured as a result of a slip-and-fall accident, typically occurring in the kitchen or food-preparation areas
- About 1 million restaurant guests are injured by a slip-and-fall accident
- Of these guests, the most likely victims of slip-and-fall accidents are Caucasian women, 60 years or older
- Part-time restaurant workers are twice as likely to experience a slip-and-fall accident compared to full-time staff
- Younger workers are more prone to slip-and-fall accidents than older workers
- Costs per claim are highest among older workers
- The food service industry spends more than an estimated \$2 billion annually for medical and legal costs as a result of slip-and-fall accidents
- These medical and legal costs are increasing at a rate of about 10 percent each year.

Although many of these food service slip-and-fall accidents occur because employees do not wear proper footwear, there are other variables to consider. For instance, inadequate signage or indications of a potential floor surface hazard, improper training and poor floor maintenance, the primary factor, must also be considered. According to the NFSI, attention to floor maintenance and the use of slip-resistant footwear can reduce as much as 75 percent of all work-related slip-and-fall accidents.

Now that we have a better idea of how serious slip-and-fall accidents are in the food service industry, it seems somewhat ironic how some restaurant designers select floor coverings for their facilities, including for back of the house areas. According to the NFSI, a recent poll found these to be the five top reasons a certain floor covering is selected:

- Appearance
- Cost factors
- Ease of maintenance
- Durability
- Safety

In order to address risks properly and ultimately improve the slip-and-fall statistics, it is crucial for decision-makers to make preventative safety a priority in food service. When restaurant owners, managers and designers are made aware of the injury rates, associated medical claims and potential costly legal ramifications, slip-and-fall measures can be viewed as a cost savings and must be much higher on the floor covering selection criteria.

Not All Falls Are Alike

Because falls, in general, frequently result in injuries and often have legal ramifications, floor care experts, doctors and lawyers categorize falls into four main types. Educated restaurant owners and managers are aware of these classifications, which is helpful when implementing solutions to properly address hazards.

While there is some overlap, the four categories are:

Trip-and-fall: This is actually one of the most common types of falls. Examples of this fall are when someone trips on a power cord, does not see a step or encounters an unexpected object on the floor.

Stump-and-fall: This is far less common than a trip-and-fall. This type of fall occurs when walking on an uneven floor surface or walking onto a sticky or tacky area of the floor.

Step-and-fall: This fall occurs when there is a sudden, unexpected height change in the floor. Often, this unexpected change in the floor is a step down, which can make it all the more serious.

Slip-and-fall: As discussed, this is also one of the most common types of falls. (See Sidebar: Primary Causes of Slip-and-Fall Accidents in Restaurant Kitchens)

It is important to note that not all falls result in injuries, and some injuries can be more serious than others. When victims land on a “fleshy” part of the body, they often escape serious injury or may not be injured at all; however, when landing on an arm, awkwardly on a bone or on the head, the severity of the injury increases.

Coefficient of Friction

Floor covering manufacturers and floor care chemical and equipment manufacturers have developed ways to make floors less slippery. Essentially, they use a testing system that determines how slippery a floor is or how much safer a chemical or a cleaning system is after use on a floor. This testing system is referred to as coefficient of friction, or more commonly COF.

Using COF testing equipment, a shoe-like material is pushed or dragged over a floor. After three tests, if the system registers a COF of 0.5 or more, it is considered safe or at least less hazardous. If it measures 0.5 or less, it is considered potentially unsafe and slippery.

Similar tests are conducted on different cleaning chemicals, finishes and glosses that are applied to a floor, as well as certain floor care machines and systems. Some restaurant owners and managers who have experienced significant slip-and-fall accidents at their properties have even purchased this testing equipment or hired a professional to evaluate their floors on a regular basis. And, if an accident does occur on a floor that scored a COF rating of 0.5 or more, it shows that the restaurant had taken action to ensure floor safety.

COF testing may also be required in order to comply with some OSHA and ADA guidelines.

The Cleaning and Maintenance Connection

Because cleaning and maintenance are critical to preventing slip-and- fall accidents, a thorough discussion of floor-cleaning methods is also critical. The ways in which kitchen and food service floors are cleaned can vary significantly. Some restaurants still hose down kitchen floors after sweeping and then mop with a chemical degreaser, which is designed to melt away grease and other soils.

Further, there are systems that actually dilute cleaning chemicals and water together as they are used. The mixture is then pressure washed onto the floor.

However, the type of cleaning that most often occurs in restaurant and food service kitchens is conventional mop and bucket cleaning. While this equipment is inexpensive, research is finding that mop and bucket cleaning is unfortunately among the least effective ways to clean floors. In fact, the traditional mopping process, which utilizes equipment that quickly becomes soiled, can spread more soils across the floor, potentially leading to a slip-and-fall accident.

Case in point: A woman walked in a fast food restaurant, slipped, fell and was injured. She filed a lawsuit against the fast food outlet, which claimed the floor installed was selected because it had a high COF and that the floor was properly maintained, cleaned and mopped at various times during the day. However, a closer investigation turned up the cause of the accident: residue buildup in the floor's pores and grout areas from frequent mopping. It was later determined that this buildup caused a slippery condition to occur, which eventually led to the woman's slip-and-fall accident.

This is why many restaurant and food service managers are looking for cost-effective alternative cleaning methods that do not require the use of mops. One cost-effective solution that has emerged in recent years is referred to as "crossover" cleaning systems. These systems use a trolley bucket that is rolled over the floor. As it moves, it releases fresh cleaning solution directly onto the floor. No mops are used; instead, the floor is then agitated with a deck brush, if necessary, to loosen soils and grease. A wet/dry vacuum system attached to the trolley bucket is then used to vacuum up soils, grease and moisture. This step is important because it removes all contaminants and allows the floor to dry quickly.

There are other alternatives as well. Some restaurants use steam vapor cleaning systems that essentially melt away grease and soils. While this can be a slow process, it can also be effective. Another method is the use of no-touch or spray-and-vacuum cleaning systems. Similar to the pressure washing systems mentioned earlier, these machines apply chemicals to the floor, power wash the floor, and also vacuum up moisture and contaminants.

With 4 million people injured due to slip-and-fall accidents in restaurants every year, and with the costs of these accidents increasing about 10 percent each year, it is clear this is an issue that all restaurant owners and managers must become more aware of and take steps to address. Along with the cleaning processes mentioned here, another way to lower risk is to talk about safety. Educating food service workers on ways to protect themselves is also one of the best ways to prevent a slip-and-fall accident and injury.

Robert Kravitz is a former building service contractor and now a writer for the professional cleaning, building, education, medical and hospitality industries. He may be reached at rkravtz@rcn.com.