

## Slips, Trips, and Falls: Taking an Even Bigger Toll

Hard-surface floors of medical facilities can become danger zones. These include entranceways as well as lobbies, hallways, patient rooms, and bathrooms that have recently been mopped—the most common areas prone to slips, trips, and falls.



Slip, trip, and fall accidents are typically defined as types of

"fall-down" accidents that occur when the interface of the victim's shoe and the floor fails. According to Christopher Tricozzi, Vice President of Sales for Crown Mats and Matting, the leading matting manufacturer in the United States, the following best describes each incident:

- A slip occurs when there is not enough traction between the walker's feet and the surface. This might

result from walking on oil, ice, and other slippery substances.

- A trip happens when the walker's foot contacts an object, such as a cord, wrinkled carpet, or uneven flooring, that causes him or her to become unbalanced.
- A fall occurs when the walker loses his or her balance. Once someone loses footing and support on any surface, a fall is likely.

Slips and falls are among the leading causes of death in the United States, usually topped only by auto accidents.

According to various sources, they are either the number one or number two cause of accidental injuries in public facilities. It is estimated that:

- More than 9 million slips and falls occur in the United States every year.
- As many as 25,000 people *per day* are hospitalized in this country as a result of a slip and fall.

- On average, 55 people per day die because they have slipped or fallen.
- More than half of all Americans over the age of 40 report they have experienced a slip or fall accident.
- More than 35 percent of all slip and fall accidents involve children.

And injuries are not the only problem associated with slip and fall accidents. They can be “legal battlegrounds.” The responsibility for a slip and fall injury may be placed on the property owner, both parties in varying degrees, or even the victim.

If a medical facility is found to be at fault, it can result in a costly lawsuit. And even if the court decides the responsibility for the accident must be shared by both parties or may even be the result of the victim’s negligence, the legal fees can be daunting and lead to increased insurance premiums.

Additionally, when it comes to slips and falls occurring in medical facilities, there are some added and costly complications. The Center for Medicare and Medicaid Services (CMS), which is the component of the federal government's Department of Health and Human Services that oversees Medicare and Medicaid programs in nursing homes and elder-care centers, may deny payments to cover the costs of treating a slip and fall victim if the accident occurs in their facility. This means that treatment “tab” is now the burden of the healthcare facility where the accident occurred.

Further, the Americans with Disabilities Act requires public businesses to maintain their floors in a slip-proof condition. If found to be in violation of this requirement, they may face fines up to \$50,000 for the first offense, climbing to \$100,000 for a second.

These costs can negatively impact a healthcare facility's bottom line, yet they are largely preventable. And the fact that so many public facilities have experienced slip and fall losses should motivate the owners and facility managers of healthcare properties to review and enhance their slip and

fall accident-prevention practices. These usually focus on three primary areas:

- Floor selection
- Effective matting systems
- Floor maintenance

### **Floor Selection**

Often, the key concerns when selecting a floor for a healthcare facility are costs, durability, and maintenance needs. Surprisingly, safety is not always at the top of that list. One reason for this is that many building owners/managers consider slips and falls to be more “inevitable” than preventable. Whenever a new hard-surface floor is installed, whether in a new or existing facility, prevention of slip and fall accidents should be a top priority.

According to the Chubb Group of Insurance Companies, flooring materials should be smooth without being slippery. Although floors may look even, they often have slight irregularities. These should not be greater than one-quarter inch to one-half inch in height.

Another important factor to consider, according to the insurance company, is the material's *coefficient of friction* or *slip-resistant rating*. This indicates whether the flooring material provides traction sufficient to prevent slipping. Studies suggest that a rating of .50 is a minimum standard with a higher rating indicating greater slip resistance and safety. When slip/trip legal battles ensue, many courts have allowed this minimum value to be recognized as the base level for safety.

Some studies indicate that floors with unusual designs or colors may result in fewer slips, trips, and falls. The reason: the look of the floor catches walkers' eyes, which tends to make them more careful in how they walk through the facility.

### **Effective Matting Systems**

Matting systems have long been used to help prevent slip and fall accidents. And, with the growing interest in Green cleaning, some matting companies have developed matting systems that are even more effective at capturing moisture, oils, and other substances that can result in a slip or fall.

Referred to as high-performance matting, these reduce the amount of soil entering buildings. Not only do they perform more effectively than conventional matting systems, usually provided by rental services, but they are typically of higher quality. Whereas a rental mat may have a warranty of 90 days, a high performance matting system may have a product warranty of one, two, or more years, indicating how much better they are constructed.

“A high-performance scraper mat (which scrapes soil and debris off shoe bottoms) should be placed outside the entrance of a medical facility,” says Tricozzi. “Directly inside the entry, a high-performance wiper/scraper mat with a dual-level construction should be installed. These wipe clean shoe bottoms and store soil, water, and other contaminants below shoe level.”

The “final defense,” as Tricozzi calls it, is a wiper mat placed directly after the wiper/scraper. “This [entire system] involves 15 feet of matting and helps ensure that as much as 80 percent of all moisture is removed from shoes, helping to prevent slips and falls.”

## **Floor Maintenance**

“Retail products intended for home use should never be used to maintain floors in commercial or public facilities,” says Michael Schaffer, President of Tornado Industries, “Products not made for commercial use can actually cause a floor to be more slippery.”

To prevent this, Schaffer says that chemicals used for floorcare must be selected with a high coefficient of friction in mind. “Compatibility of the various products used for different floorcare needs is also critical and facility managers should work closely with their vendor in the selection of chemicals. In addition, cleaning personnel must use the products correctly or they can actually reduce the slip-resistant rating of both the finish and the floor.” he says

As to equipment, Schaffer suggests facility managers, particularly those at medical facilities, select floorcare machines that meet these criteria:

- Are ergonomically designed so that they work *with* the user to help prevent worker fatigue that can lead to accidents

- Have variable height adjustments so that they “fit” different-sized workers
- Have built-in vacuum systems to help protect indoor air quality (IAQ)

More specifically, he suggests that managers consider two new types of floorcare machines. One system, which is based on cylindrical technology, uses counter-rotating brushes instead of pads. These have proved to be effective at removing soils embedded in floors because the brushes can reach deep into floor pores and grout.

Additionally, of special interest to medical facilities, is the latest generation of battery floor machines often referred to as “battery glazers.” According to Schaffer, in addition to avoiding the trip and fall dangers associated with power cords, these new generation glazers are whisper quiet, operating as low as 59 decibels. “These compact units can operate for as long as two hours between charges, and are perfect for use in patient rooms and work areas, causing little if any disturbance,” he says. Further, some of these machines also have vacuum systems, as mentioned earlier, so they help protect IAQ.

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Steven Di Pilla, author of the book *Slip and Fall Prevention: A Practical Handbook*, writes that we all take about 18,000 steps per day amounting to more than 6 million steps per year. “This represents a tremendous amount of exposure and makes it all the more likely for a slip, trip, or fall to occur.”

Wise floor selection, high-performance matting systems, and proper floorcare chemicals and equipment are imperative to making the floors of healthcare facilities safer. “Facility managers can do much more to prevent slips, trips, and falls than they realize,” says ----- . “And because the consequences are so severe, they must put slip/trip/fall prevention at the top of their list of priorities.”