ERGONOMIC TECHNOLOGIES CORP.

Ergonomic Risk Assessment & Workplace Injury Prevention Solutions

Slips, Trips, and Falls in the Healthcare Environment

Overview

Slips, trips, and falls (STFs) remain one of the most persistent and preventable causes of workplace injury in the United States and healthcare environments are among the highest-risk settings of all. From acute-care hospitals and nursing facilities to clinical laboratories and outpatient clinics, healthcare workers are exposed daily to the hazards that make STFs inevitable: wet floors, cluttered walkways, rushed pace of work, and the physical demands of patient care.

The consequences are serious. STF incidents frequently result in disabling injuries that impact a healthcare worker's ability to do their job, generate costly workers' compensation claims, reduce staffing capacity, and ultimately compromise the quality of patient care.

479,480
nonfatal workplace injuries involving falls, slips & trips — U.S., 2024 (BLS)

867
workplace fatalities from slips, trips & falls — U.S., 2023 (BLS / NSC)

$9.99 Billion
annual cost to employers from same-level falls in medical expenses & lost wages (Liberty Mutual, 2024)

The Healthcare Problem

Healthcare has long ranked among the most physically demanding industries for worker safety. According to NIOSH and the U.S. Bureau of Labor Statistics, the incidence rate of lost-workday injuries from slips, trips, and falls on the same level in hospitals is approximately 90% greater than the average rate across all other private industries combined. STFs are the second most common cause of lost-workday injuries in hospitals, exceeded only by overexertion and musculoskeletal injuries.

An analysis of workers' compensation injury claims from acute-care hospitals showed that the lower extremities, knees, ankles, and feet are the body parts most commonly injured after STFs. The nature of injury is most often sprains, strains, dislocations, and tears. Notably, STFs are significantly more likely to result in fractures and multiple injuries than other types of workplace incidents.

Research conducted by NIOSH and its collaborators across three acute-care hospitals over a 10-year period demonstrated that implementing a comprehensive STF prevention program led to a 59% decline in STF-related workers' compensation claims — one of the strongest evidence bases for any workplace safety intervention in the healthcare sector.

59%
reduction in STF workers' compensation claims following a comprehensive prevention program (NIOSH, 3 acute-care hospitals, 10-year study)

55%
of all workplace slips, trips & falls are caused by wet or uneven surfaces (NSC, 2024)

18%
of all nonfatal injuries requiring days away from work are caused by STFs — the single leading cause (BLS, 2023)

Sources of STF Risk in Healthcare Facilities

Wet and Contaminated Floors

Contaminants on the floor are the leading cause of STF incidents in healthcare facilities. Water, cleaning fluids, IV fluids, urine, blood, grease from food service operations, and soap from hand-washing dispensers all create slip hazards. Ice machines that are poorly maintained, sinks with inadequate drainage, and decontamination areas where wet equipment is transferred between spaces are chronic sources of floor contamination.

Patient Care Environments

Patient rooms present multiple STF hazards: IV bags and urine collection bags may leak onto the floor; in-room bathrooms create wet surfaces; and the urgency of patient care can cause workers to move quickly through hazardous conditions without adequate attention. Patient handling equipment and mobility aids, if improperly stored or positioned, also contribute to trip hazards.

Building Access and Transition Areas

Building entrances and exits are high-risk zones, particularly in adverse weather conditions including rain, ice, snow, and leaf accumulation. Transition areas between flooring types, where tile meets carpet, or where anti-fatigue matting creates an elevation change are consistent sources of trip hazards that are frequently overlooked.

Walkways, Hallways, and Nursing Stations

Clutter in walkways and hallways is a significant contributing factor. Temporary electrical cords crossing aisles, improperly stored equipment, medication carts with protruding corners, and overcrowded corridors all increase STF risk. Drinking fountains and hand sanitizer dispensers, if positioned without floor drainage or absorbent matting, create persistent wet spots in high-traffic areas.

Environmental and Lighting Conditions

Inadequate lighting in corridors, storage areas, and patient rooms reduces a worker's ability to identify floor hazards. Glare from highly polished floors can mask wet patches. Sudden changes in light levels moving from a bright corridor into a dimly lit room also impair visual adaptation and increase risk.

Prevention Strategies and Best Practices

1. Written Housekeeping Program

A documented housekeeping program is the foundation of any effective STF prevention effort. All employees should know how to immediately contact the housekeeping department, where cleaning materials are stored, when to deploy wet floor signs and barriers, and what cleaning methods are appropriate for different surfaces and areas. The program should be provided to all employees at onboarding and updated regularly.

2. Floor Maintenance and Spill Response

- Encourage all workers to cover, clean, or report spills immediately, not to wait for housekeeping
- Deploy pop-up wet floor signs in convenient locations throughout the facility for rapid response
- Place water-absorbent walk-off mats at building entrances, water fountains, and ice machine locations
- Use no-skid waxes and grit-coated surfaces in areas prone to moisture such as shower and toilet areas
- Ensure paper towel holders and spill pads are accessible throughout the facility

3. Footwear and Personal Protective Equipment

Slip-resistant footwear is one of the most effective individual-level interventions available. Facilities should establish footwear policies appropriate to different roles and environments, particularly for food service workers, housekeeping staff, and clinical personnel who regularly work in wet areas. Waterproof footgear should be available for workers engaged in wet processes.

4. Walkway and Aisle Management

- All walkways must be kept free of clutter, stored items, and temporary obstructions at all times
- Temporary electrical cords crossing aisles must be taped, anchored, and clearly signed
- Carpets that have become bunched or buckled must be re-laid or replaced promptly
- Anti-fatigue matting and beveled-edge mats must be inspected regularly, they can themselves become trip hazards
- Access to exits must remain clear of obstructions at all times in compliance with fire safety requirements
- Handrails must be available throughout stairways and maintained in good repair

5. Environmental Controls

- Ensure adequate lighting in all corridors, stairwells, storage areas, and patient rooms
- For wet processes, install appropriate drainage and use raised platforms or dry-standing areas
- Inspect and maintain ice machines, sinks, and plumbing fixtures regularly to prevent leaks
- Monitor building entrances during adverse weather and deploy additional absorbent matting as needed

6. Training and Awareness

All healthcare workers should receive STF prevention training at onboarding and periodic refresher training thereafter. Training should cover hazard identification, reporting procedures, proper footwear, correct ladder use, and emergency response. Supervisors should conduct regular walkthrough inspections to identify and address emerging hazards before incidents occur.

7. Mold, Fungi, and Secondary Hazards

Wet floors in healthcare environments create a secondary hazard beyond the immediate slip risk. Persistent moisture promotes the growth of mold, fungi, and bacteria that threatens both employee health and patient safety, particularly critical in environments housing immunocompromised patients. Housekeeping protocols must address not only immediate spill response but also the underlying conditions that allow moisture to accumulate.

How ETC Can Help

ETC has conducted ergonomic and safety assessments in hospitals, nursing facilities, clinical laboratories, and ambulatory care settings across the United States. Our healthcare assessments address the full range of STF risk factors from floor surface conditions and walkway management to lighting, footwear policies, and housekeeping program development.

An ETC site assessment identifies the specific hazards present in your facility, quantifies risk exposure, and provides a prioritized action plan with practical, cost-effective solutions. We work directly with your EHS team, facilities management, and clinical leadership to implement programs that reduce injury, lower workers' compensation costs, and protect the people who care for your patients.

Contact ETC today to schedule a healthcare ergonomic assessment.

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