PURPOSE, SCOPE, AND APPLICABILITY

It shall be the policy of the University of Tennessee, Health Science Center (UTHSC), to protect students, staff, visitors and contractors from injury while on the UTHSC premises or while on premises under the control of UTHSC. Slip, trip and fall accidents are a common type of accident for all employers and can result in significant injury, especially for older and disabled individuals.

This policy has been developed to address falls and fall accidents that occur on the same walking surface, (interior and exterior) at UTHSC. It is meant to cover only the general aspects of the associated standards (i.e. OSHA) and cannot cover every aspect of walking/working surfaces.

This program covers all Campus employees, students, faculty, and staff working within University owned, leased or subsidiary facilities. This guideline is applicable to daily users and those who only occasionally have cause to use the equipment.

ABBREVIATIONS, ACRONYMS AND DEFINITIONS:

**Slips** occur when there is insufficient friction or traction between a person’s feet (foot wear) & walking/working surface, resulting in loss of balance. Floor and ground surfaces shall be stable, firm, and slip resistant. Accessible surfaces must be slip resistant to minimize hazards to people with disabilities, especially those who are ambulatory or semi-ambulatory or who use canes, crutches, and other walking aids.

**Trips** occur when the foot or lower leg hits an object and the upper body continues moving, resulting in loss of balance and also when stepping down to lower surface and losing balance.
Falls: Occurs when too far off center of balance

Two types of falls:

- Fall at same level
  - Fall to same walking or working surface, or fall into or against objects above the same surface
- Fall to lower level
  - Fall to level below the walking or working surface

RESPONSIBILITIES:

Employees, students, and visitors shall:

- Wear proper footwear based on the work environment.
- Use prescribed exterior walkways and not take short cuts (e.g. down banks).
- Report any slip, trip or fall hazards to their immediate supervisor or Principal Investigator.
- Eliminate slip, trip and fall hazards where feasible. Examples include, moving a power cords that crosses a walkway, cleaning up spills, removing clutter, etc

Campus Safety Shall:

- Eliminate or mark fall hazards where feasible.
- Provide technical assistance to departments regarding slip, trip and fall hazards.
- Investigate complaints involving slips, trip and fall hazards.
- Investigate accidents that involve a fall and where there may have been a contributing environmental factor such as missing handrail, slippery walking surface. Note that the Fall Hazard Investigation form (Appendix B) may be used to guide and document a fall investigation.
- Update and revise UTHSC’s Slip, Trip and Fall policy periodically.
- Inspect facilities to identify fall hazards.

Department Heads and Supervisors shall:

- Identify work locations that are “Higher Risk Areas.”
- Properly address slip, trip and fall hazards promptly and consulting with CAMPUS SAFETY if a slip, trip and/or fall hazard cannot be abated.
Ensure appropriate training is provided for all employees who will be working in higher risk areas where slip, trip and fall hazards are prevalent.

Evaluate employees’ compliance with safe work practices.

Eliminate slip, trip and fall hazards that fall under their control and have been reported.

**Contractors and Subcontractors Shall:**

- Comply with all provisions of this Policy.
- Ensure that his or her employees are appropriately trained and use appropriate footwear while on campus.
- Report concerns or hazardous conditions at UTHSC facilities to Campus Safety or their liaison on campus.

**PROCEDURE:**

Personnel should recognize and avoid slip, trip and fall hazards. Hazards that are identified on campus must be reported to an appropriate campus representative such as a work area supervisor or Campus Safety.

Factors, such as the ones listed below, all contribute to an increased risk of slip, trip and fall injury.

- Failing eyesight &/or visual perception
- Age
- Physical condition & fatigue
- Stress or illness
- Medications, alcohol & drug effects
- Carrying or moving cumbersome objects or simply too many objects at one time
- Not paying attention to surroundings or walking distracted
- Taking unapproved shortcuts
- Being in a hurry and rushing

Common slip, trip, and fall hazards result from:

1. Wet or contaminated floors (e.g. grease, liquids, ice, oil, dust fine powders, etc.)
2. Uneven walking surfaces, holes, changes in level, broken or loose floor tiles, defective or wrinkled carpet or uneven steps/thresholds
3. Mats or rugs not lying flat on the floor.
4. Obstructions and accumulation of objects in walkways (e.g. hoses, cords, cables, debris, etc.).
5. Unguarded platforms, walkways, and work areas 30 inches above ground.
6. Inadequate illumination

Higher Risk Areas:

For purposes of this policy, an area where slip, trip, or fall hazards frequently recur due to building conditions or work processes is considered a Higher Risk Area. Personnel working in Higher Risk Areas must be informed by their supervisor about the hazard and the appropriate work area controls to mitigate the hazard. This may include the availability and use of appropriate engineering controls (e.g., use of mats or barricades), work practices (e.g., frequent mopping or maintenance of floors) or personal protective equipment (e.g.; slip resistant footwear).

In general, use of barricades when the floor is slippery or presents a tripping hazard. Barricades will be removed as soon the hazard it corrected. Or, place non-skid mats at building entrances during inclement weather. Inspect mats periodically or as needed to ensure they are properly controlling the hazard.

Footwear:

Proper footwear is an important component of our slip, trip and fall prevention program. Footwear needs to be appropriate for the task. In many of the work areas other than our offices, high heeled shoes and leather soled shoes are considered unsafe and must be avoided. It is the responsibility of each employee to obtain and maintain slip resistant footwear in a serviceable condition. Supervisors will ensure that employees are wearing appropriate slip resistant footwear at all times in the workplace.

Slip-Resistant Footwear

Supervisors of employees who work in potentially slippery higher risk areas should consider slip-resistant footwear for use by their employees. When selecting slip-resistant footwear, the following should be considered:

- Level of slip-resistance (i.e. Polyurethane and microcellular urethane soles are more slip-resistant compared to nitrite and styrene rubber).
- Tread design, tread hardness, and shape of sole and heel. (i.e. High elastic soles with raised-tread and cross-hatch patterns are more slip-resistant compared to rough and flat soles. Tread patterns should cover the whole sole and heel area.)
• Proper support and comfort.

NOTE: The use of slip-resistant footwear alone is not adequate in preventing slip-related accidents. General housekeeping procedures, safe work practices, and matting/floor treatments (as necessary) must be used.

Floor Mats and Other Floor Treatments

UTHSC’s goal is to maintain all floor surfaces in a slip resistant condition. In those work areas or situations where this isn’t feasible, mats or runners will be used to provide slip resistance. It is everyone’s responsibility to monitor mats and runners to ensure they continue to provide proper slip resistance and have not become a tripping hazard.

Where mats have been used to control wet areas, either entry ways to the building or wet processes, the following conditions require immediate action.

Where work processes are expected to create wet floor surfaces, such surfaces shall be protected against slipping by using mats, grates, cleats, or other methods that provide equivalent protection.

Where wet processes take place, drainage shall be maintained and false floors, platforms, mats, or other dry standing places provided.

Floor mats:

1) Floor mats shall be placed at building entrances and higher risk areas where walking-working surfaces may be wet. Examples of these areas include:
   • Areas adjacent to food counters and food preparation areas
   • Cooking areas
   • Dishwashing areas
   • Frying stations

2) The design of floor mats should have the following features:
   • Slip resistant surface on both top and bottom sides.
   • Beveled edges, flat edges or similar design to help reduce the likelihood of workers tripping on the mat’s edges.
   • Slots or similar design to help promote drainage and prevent accumulation of water & grease.
   • Antibacterial treatment or similar design to help prevent the growth of mold and mildew.
3) Floor mats should not be installed and used in a way where the mat itself becomes a slip or trip hazard.

Other Floor Treatments:

Other floor treatments may be used to reduce slip hazards associated with wet floors as long as they meet federal or industry standards as prescribed.

Seasonal Issues

The changing seasons create unique weather-related conditions for which the following procedures have been developed:

- Winter snow and ice removal.
  - All building entrances will be cleaned of snow and ice, and will be treated with salt, one prior to the opening of business.
  - Exterior walkways will be inspected hourly and treated as needed.
  - Parking lots will be inspected daily. Any snow or ice that has accumulated between cars will need to be removed.
  - During the fall, daily inspections will be made and action taken as needed to ensure walkways are cleared of leaves.

Floor Maintenance Procedures

A floor maintenance procedure must exist where routine or occasional floor cleaning is performed by departmental staff. Consulting with floor cleaner product manufacturer for guidance on suggested cleaning procedures is recommended. The following should be considered when developing a floor maintenance procedure:

- The type of floor finish products used, including slip-resistant polymer finishes, strippers, degreasers and general cleaners.
- Proper application methods for products, including proper dilution and time schedules for each component or process.
- Proper warning system used during floor maintenance operation to alert building occupants of the presence of potential slip, trip and fall hazards.
- Documentation of products used, including Safety Data Sheets, and specifications regarding the slip-resistance level of the product.
- Periodic review of maintenance program, especially after a report of an employee “near miss” or actual accident.
HAZARD CONTROL/MITIGATION MEASURES

General Housekeeping Procedures / Safe Work Practices

Housekeeping plays such a critical role in the success of our slip, trip and fall prevention program that all employees must make housekeeping their top priority. The following housekeeping procedures and safe work practices must be followed to prevent accidents associated with slip, trip and fall hazards:

- **General Safety**
  - Walkways will be kept clear of electric cords, hoses or any other potential hazards. If walkways cannot be kept clear, then they need to be blocked off until the task is completed.
  - Avoid running or walking too fast, especially in higher risk areas.
  - Avoid carrying items that will obstruct one’s view of their walking pathway.
  - Avoid walking through potential slip, trip and fall hazards.
  - Use extra caution when traveling both outdoors and indoors during/ following wet weather.

- **General Housekeeping Procedures**
  - Clean up spills immediately. For greasy liquids, use suitable cleaning agent.
  - Do not leave floors wet after cleaning – clean them to a completely dry finish if possible. If "clean-to-dry" is not possible, then use barriers and "wet floor" warning signs to keep people off the wet area.
  - Use cleaning methods that do not spread the problem. Small spills are often better dealt with using a paper towel instead of a mop that wets a larger area of floor.
  - Do not use cardboard to soak up spills.

- **Slip Hazards**
  - Floors, platforms, and walkways shall be maintained in good repair, and reasonably free of oil, grease, or water. Mats, grates, or other methods that provide equivalent protection shall be used on areas where operation requires walking on slippery surfaces.
  - Slip-resistant floor coatings should be used in areas that are likely to be wet or subject to frequent spills. 

- **Slip hazards must be identified and removed promptly.**
• Warning signs or other equally effective means (barricades) should be used as a warning system in areas where a slip hazard is present.

• Trip Hazards
  • Platforms and walkways shall be free of obstructions and dangerous projections (e.g. extension cords, power cables, hoses, carts, boxes, debris).
  • Position equipment to avoid cables crossing pedestrian routes; use cable covers securely affixed to surfaces, or consider use of cordless tools.
  • Surfaces in poor repair (i.e. holes, surface upheaval, and broken tiles) shall be repaired or guarded by readily visible barricades, rails or other equally effective means.
  • Ensure floor mats and rugs lay flat and do not have curling edges.

ACCIDENT REPORTING

All accidents due to slips trips and falls shall be reported through established UTHSC Accident Reporting procedures for Employees or Students.

INSPECTIONS:

The Campus Safety department performs safety inspections in UTHSC owned and leased properties. Inspections include an evaluation of slip, trip and fall hazards. Supervisors and employees should routinely examine their work areas for slip, trip and fall hazards and take the necessary action to minimize this risk. Hazardous conditions that cannot be abated should be referred to Campus Safety for resolution. A Slip, Trip and Fall Hazard Inspection Form is contained in Appendix A and may be used to evaluate work areas.

TRAINING:

For employees working in higher risk areas, training should be provided to ensure employees are in compliance with safe work practices. Department-specific trainings may be arranged upon request by contacting Campus Safety at 448-1334.

All employees who may be required to work in a higher risk area should be trained on the following:
• Recognition of potential hazards associated with working in a higher risk area.
• The use of control measures to prevent slip, trip and fall related accidents.

RECORDKEEPING

Campus Safety shall maintain the following record related to falls

1. Accident reports and investigations
2. Inspection reports, which include information on slip, trip and fall hazards
3. Complaints involving fall hazards

ASSOCIATED STANDARDS

1. American Disabilities Act (ADA), Code of Federal Regulations (CFR) at 28 CFR parts 35 (title II) and 36 (title III)
2. AMERICAN NATIONAL STANDARD/National Floor Safety Institute, ANSI/NFSI B101.3, Test Method for Measuring Wet DCOF of Common Hard Surface Floor Materials
3. AMERICAN NATIONAL STANDARD/National Floor Safety Institute, ANSI/NFSI B101 (series) Safety Requirements for Slip, Trip and Fall Prevention.
5. OSHA 29 CFR 1910.22 Walking-Working Surfaces
6. OSHA 29 CFR 1910.145 Specifications for accident prevention signs and tags
7. OSHA 29 CFR 1910.141 Sanitation
8. OSHA 29 CFR 1910.136 Design and Construction Requirements for exit routes
9. OSHA 29 CFR 1926 (General Construction) –Subpart C - General Safety and Health Provisions; 1926 Subpart L - Scaffolds; 1926 Subpart M - Fall Protection; and 1926 Subpart X - Stairways and Ladders

FORMS

1. Inspection Form-Appendix A
2. Fall Investigation Form-Appendix B
<table>
<thead>
<tr>
<th>Appendix A:</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSPECTION FORM</td>
</tr>
</tbody>
</table>
### Slid, Tri & Fall Hazards - Inspection Form

<table>
<thead>
<tr>
<th>Building:</th>
<th>Floor:</th>
<th>Area/ Room#:</th>
<th>Higher Risk Area</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Floor Condition</strong></td>
<td></td>
<td></td>
<td>Yes ☐ No ☐</td>
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<tr>
<td>1. Floor is kept free from slip hazards such as food or liquid spills, and other debris.</td>
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<td>2. Walkway is kept free from trip hazards such as torn carpets, electrical cords, fallen articles, broken tiles, etc.</td>
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<td>3. Carpet/rugs are in good condition &amp; secured to the floor.</td>
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<td>4. Floors are properly designed to allow for good drainage.</td>
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<td>5. Floors drains are not plugged/ allow adequate drainage.</td>
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<td>6. Floor mats are in good condition, free of grease, and used appropriately (i.e. mat is not a trip hazard).</td>
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<td>7. Floor mats have beveled edges, and where appropriate, are grease resistant and promote drainage.</td>
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<tr>
<td><strong>Others</strong></td>
<td></td>
<td></td>
<td>Yes ☐ No ☐</td>
<td></td>
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</tr>
<tr>
<td>1. Portable signs, and equipment used for spills cleanup are available for use.</td>
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<td>2. Slip-resistant footwear is worn by employee.</td>
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<td>3. Illumination is adequate.</td>
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<td>4. Stepladders are in good condition and have non-skid feet.</td>
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<tr>
<td><strong>Building perimeter / Stairways/ Special Areas</strong></td>
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<td>Yes ☐ No ☐</td>
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<tr>
<td>1. Sidewalks &amp; ramps are free of defects (e.g. cracks, breaks, holes).</td>
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<td>2. Sidewalks &amp; ramps do not show signs of surface upheaval or unevenness.</td>
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<td>3. Stairway’s surface and nosing (leading edge of stair tread) are free of defects (e.g. broken steps, cracks).</td>
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<td>4. Handrail is present and secured at stairways &amp; ramps.</td>
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<td>5. Guardrails are present and secured on working surfaces that are more than 30 inches above floor or other working areas (Exception: loading dock).</td>
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<tr>
<td>6. Restroom floors free from defects and properly maintained. No evidence of plumbing leaks.</td>
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<tr>
<td>7. Other:</td>
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</tbody>
</table>

**Other Comments/ Notes**

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**Inspected by:**

**Date:**
Appendix B
Fall Hazard Investigation Guide

The following example should be used to investigate falls that occur on the same walking surface including stairs on UTHSC property. It shall not be used to investigate falls from elevated surfaces.

Walking Surface:

<table>
<thead>
<tr>
<th>Carpet</th>
<th>Concrete</th>
<th>Metal</th>
<th>Wood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>Brick</td>
<td>Synthetic</td>
<td>(Specify)</td>
</tr>
<tr>
<td>Sheet</td>
<td>Tile</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Vinyl</td>
<td>(Vinyl)</td>
<td>(Specify)</td>
<td></td>
</tr>
</tbody>
</table>

Illumination:

<table>
<thead>
<tr>
<th>Adequate</th>
<th>Natural</th>
<th>Artificial</th>
<th>Foot-Candles</th>
</tr>
</thead>
</table>

Slip and Trip Hazards

<table>
<thead>
<tr>
<th>Oil</th>
<th>Water</th>
<th>Lubricants</th>
<th>Cords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projections</td>
<td>Storage</td>
<td>Elevator Landing</td>
<td>Other</td>
</tr>
<tr>
<td>(Specify)</td>
<td>(Specify)</td>
<td>(Specify)</td>
<td>(Specify)</td>
</tr>
</tbody>
</table>

Stairs and Handrail Dimensions

<table>
<thead>
<tr>
<th>Tread depth</th>
<th>Riser Height</th>
<th>Handrail Height</th>
<th>Nosing depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in)</td>
<td>(in)</td>
<td>(in)</td>
<td>(in)</td>
</tr>
</tbody>
</table>

Other Factors

Did the person have a medical condition that contributed to the fall? ________________________________

Was the person distracted by a cell phone, blackberry, Ipod or other device? ________________________________

Was the person wearing corrective lenses? ________________________________

Was the view obstructed? ________________________________

Footwear sole material ________________________________ Footwear heel height ________________________________

Ramp or inclined walking surface: ________________________________ Walk-off mats ________________________________

* Use the back of this sheet for additional details or comments. Include photos where possible.