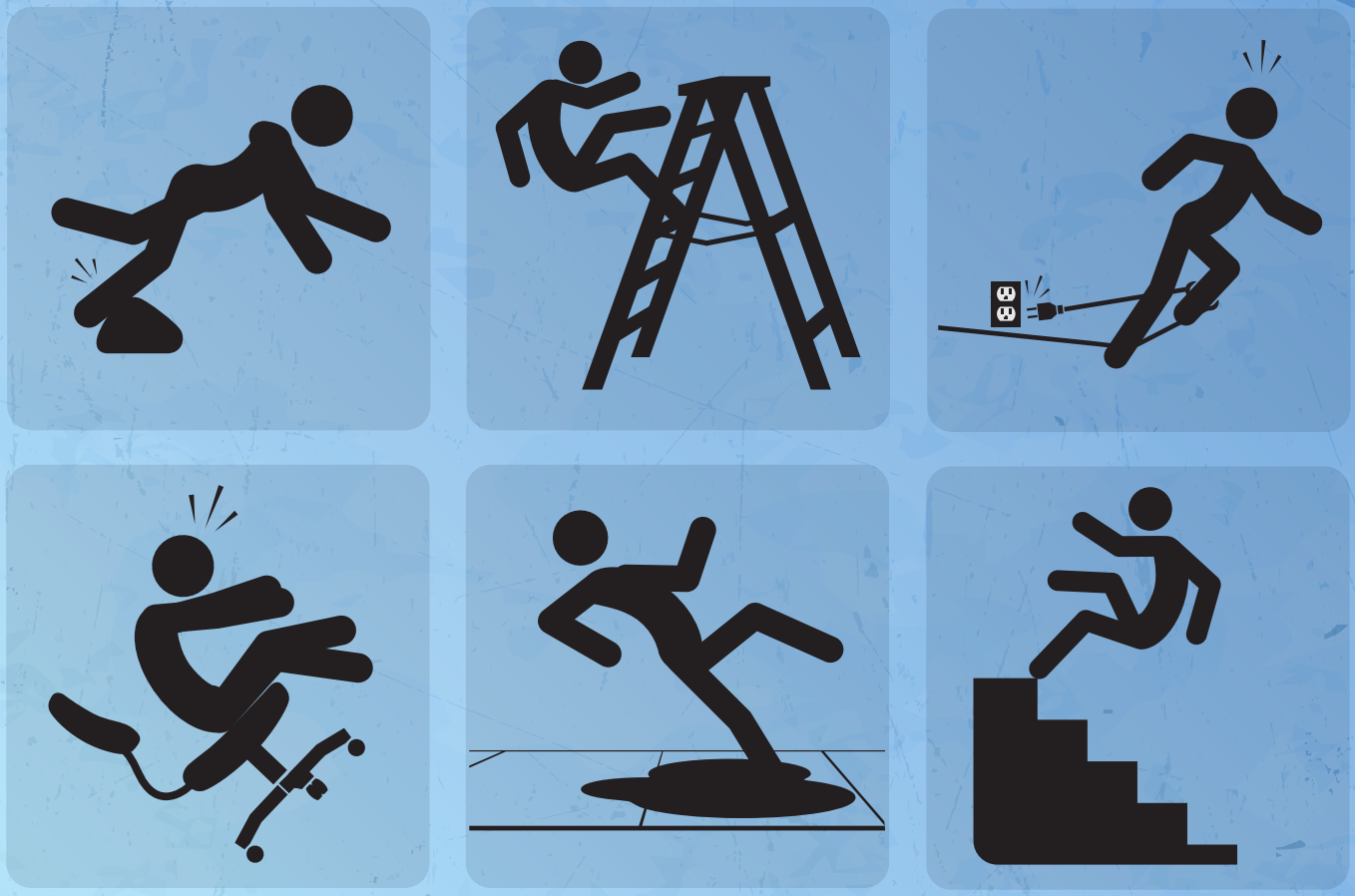
Christian Brothers Risk Management Services

SLIP. TRIP. FALL.

Prevention Resource Toolkit



CHRISTIAN BROTHERS SERVICES

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Slips, trips and falls are among the most common accidents that occur in the workplace. According to the National Safety Council, slips, trips and falls account for:

- Fifteen percent of all accidental deaths
- Twenty percent of all disabling injuries

Every year, falls cause an estimated 564,000 disabling injuries. It is therefore, of the highest importance that proper management controls be put in place, facilities assessed, and necessary corrections made so that slip, trip and fall hazards are removed to the best extent possible.

How to Use this Toolkit

This Toolkit has been developed to provide resources to help your organization implement appropriate controls to manage slip, trip and fall hazards. It contains sample documents that can serve as templates and be modified according to your needs. Where possible, documents have been created with specific operations or departments in mind.

Sample **Policies** in the Toolkit include:

- Slip, Trip and Fall Prevention Policy
- Footwear Policy
- Snow and Ice Removal Policy

The Toolkit also contains ***Best Practices*** to guide management of slip, trip and fall exposures in various operations such as nursing home resident rooms, stores and classrooms, as well as facility areas of focus such as entrances, stairs and parking lots.

Checklists have been developed to help assess the presence of slip and fall exposures at a facility. They may be used annually or on a more frequent basis. Checklists have been developed for:

- Nursing or Retirement Facilities
- Educational Facilities
- Thrift Stores, Gift Shops and Book Stores

Finally, the Toolkit has a section on ***Accident and Incident Investigation*** that will help management identify the root cause of a slip, trip and fall incident to prevent re-occurrence. It includes investigation procedures and a sample form that can be used to conduct the investigation.

Slip, Trip and Fall Prevention Policy

Slips and trips resulting in falls are a common cause of injuries to employees, clients and guests within ***[Affiliate Name]***. Planning and pro-active management together with good housekeeping and maintenance can dramatically reduce these accidents. Our goal is to provide a safe environment that is free of slip, trip and fall hazards.

This policy assigns responsibilities to designated parties and describes procedures to follow to address the issues associated with slips, trips and falls. This policy can be used as a stand-alone policy or sections of this policy can be incorporated into existing job descriptions.

Responsibilities

Administrator

- Ensure the effective implementation of this policy.
- Allocate sufficient resources to enable the policy to be delivered.
- Monitor the overall effectiveness of the policy.
- Following a slip, trip and fall accident, ensure any corrective measures are implemented to prevent similar accidents. Develop process where root causes identified in accident investigations are addressed.

Managers/Supervisor

- Regularly assess areas and operations to determine potential for slips, trips and falls.
- Ensure completion of necessary repairs, corrections and improvements to provide safe walking surfaces.
- Train employees on proper procedures to report any slip, trip and fall hazards, and any accidents or near-misses that occur.
- Conduct an incident investigation after a slip, trip and fall accident to determine the root causes and implement corrective measures.

Employees

- Follow established procedures to minimize the risk of slips, trips and falls.
- Report to management any concerns regarding slip, trip or fall hazards.
- Wear appropriate footwear to minimize slips, trips and falls.

Footwear Policy

Proper footwear is a critical component in preventing slips, trips and falls. The purpose of this policy is to ensure all employees wear footwear that is appropriate for the tasks they perform, and to provide guidance on the selection and maintenance of proper footwear. This policy can be incorporated into the organization's dress and personal appearance policy.

The following are suggested footwear to be used by employee groups:

Administration, office staff and teachers: Dress shoes may be worn, but soles should be slip-resistant. Although a professional appearance is required, this should not preclude safe footwear for the floors that are being walked upon. For leather soled shoes, anti-slip or grip tape should be applied to the sole to reduce the possibility of a slip and fall accident.

Healthcare, food services, housekeeping: These employees are at great risk for slips and falls due to exposure to water, grease or slippery walking surfaces. These employees should wear slip-resistant, rubber soled footwear. Polyurethane and microcellular urethane soles are more slip-resistant compared to nitrite and styrene rubber. Open toed shoes are prohibited.

Maintenance employees are also at great risk for slips and falls due to exposure to water, grease or slippery walking surfaces. Slip-resistant rubber soled footwear with good ankle support is recommended. In addition, footwear that is resistant to oil, chemicals and heat would be appropriate. Open toed shoes are prohibited.

Groundskeepers should wear shoes or boots that are slip-resistant with deeper treads and larger cleats. Footwear should provide good ankle support due to uneven surfaces encountered. Open toed shoes are prohibited.

Slip-Resistant Shoes

There is no definitive standard by OSHA or other regulatory body of what constitutes a slip-resistant shoe. This is because slip-resistance of a shoe depends on many factors, including the type of material composing the sole of the shoe, presence of moisture or contaminants on the surface, and slope of the walking surface. A workable definition of a slip-resistant shoe is that it inhibits slippage under prevailing conditions. It should also provide above average traction when moisture or contaminants are present on the floor.

Two typical properties of slip-resistant shoes are:

- Soles made of soft rubber material.
- Soles have tread patterns that channel water or other contaminants out from under the shoe so the sole can make contact with the surface.

What NOT to Wear

Certain types of footwear contribute to slips, trips and falls, and should therefore be prohibited. These include:

- Open heels
- Spiked heels
- Flip flops, dressy flip flops and flip flop-style sandals
- Shoes with hard plastic or smooth leather soles

Leather is an inconsistent material and changes over time. Leather soles can wear and become saturated with water, oil or grease.

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Footwear Policy

Proper Footwear Policy Informational Guidance

Appropriate footwear is one that fits properly and is comfortable. It should have an adequate non-slip sole. Softer soles are generally more slip-resistant than harder materials because they grab the surface more effectively.

Another characteristic of proper footwear is appropriate tread. Tread patterns should cover the entire sole and heel area. A good tread pattern has random patterns perpendicular to the direction of travel. Tread patterns that run in the direction of travel tend to accentuate forward motion, and should be avoided. Also, avoid tread patterns that would trap liquid rather than disperse it, as this can create a hydroplaning effect.

Shoe vendors can be consulted to provide assistance in the purchase of appropriate slip-resistant shoes. Three brands that offer such shoes are Shoes-for-Crews, Lehigh Safety Shoes and Red Wing Shoes.

Footwear for Ice and Snow Conditions

When walking outside on ice and snow, employees should be encouraged to wear ice and snow appropriate shoes/boots and carry office/dress shoes into the building.

For maintenance employees, sometimes walking on ice becomes unavoidable, as when applying salt to a sidewalk after a freezing rain. In these situations, traction devices can be placed over the shoes to reduce the risk of slipping. These devices "dig" into the surface and help improve the coefficient of friction between the shoe and the ground. Yaktrax and ICEtrekkers are two such devices.

Care should be observed when using traction devices. They become dangerous when used indoors on non-icy surfaces such as concrete or tile, as they only sit atop the hard surface rather than "dig" into it. They may also damage the interior floor. Therefore, the devices should be stored just inside the building entrance and removed promptly once inside, to prevent the risk of slipping and falling, as well as prevent damaging the floor via the "teeth" of the devices. Placing a seat near the storage area of the devices will help employees safely don and doff these devices.

Shoe Replacement

Worn or damaged footwear can contribute to an injury by not providing adequate support, or by not maximizing contact with the floor surface. Shoes should be checked regularly to ensure treads are not worn away or clogged with contaminants. The bottoms/soles of shoes should also be kept clean to ensure maximum contact area with the ground surface.

A good practice is to replace shoes when two pennies can be placed on an area of the shoe's sole that has been worn smooth. It is especially important to monitor the condition of the heel of the shoe, since most slips occur when the heel slides forward.

Shoe Limitations

No shoe is 100 percent slip-proof. Just like earplugs, safety glasses, gloves and other personal protective equipment, slip-resistant shoes help to reduce hazards and improve safety, but they don't make floor surfaces slip-proof.

Snow and Ice Removal Policy
Floor and Grounds Maintenance Policy

Snow and Ice Removal Policy

Wintertime snow and ice bring an increased risk of slips and falls due to slippery sidewalks, parking lots and work areas. It is of the utmost importance that these areas be cleared as soon as possible of snow and ice to limit the possibility of injury due to a slip and fall.

The maintenance department is responsible for removing snow and ice as soon as prudently possible. Enough equipment and manpower shall be provided to accomplish the tasks in good time.

All snow removal and icing treatments shall be diligently documented in a ***Snow and Ice Removal Log*** (see pg. 32).

Floor and Grounds Maintenance Policy

Smooth and clean walking surfaces are the foundation of a good slip, trip and fall prevention program. Interior and exterior walking surfaces shall be regularly cleaned and maintained to be free of cracks, bumps, depressions, obstructions, moisture and other contaminants.

Interior floors shall be maintained free of cracks, depressions, bumps and obstructions. Any crack or unevenness measuring greater than ¼ inch shall be repaired. Floors shall be smooth but not slippery walking surfaces. They shall be cleaned on a frequency that maintains them to be free of water, dirt, dust and other contaminants that could cause a slip and fall accident.

Grounds, especially sidewalks and parking lots, shall also be maintained free of cracks, depressions and obstructions that could present slip, trip and fall hazards. Any crack or unevenness measuring greater than ¼ inch shall be repaired. Walkways shall be cleared of leaves, twigs and other debris that could present slip, trip and fall exposures. Water drainage systems shall be maintained to be properly functioning and not allow water to accumulate at, or direct water across walkways.

Although the ***maintenance and housekeeping departments*** are the primary parties responsible for keeping walking surfaces hazard-free, ***everyone*** can and should assist in walkway management by doing such things as reporting hazards, picking up and disposing of trash and wearing appropriate footwear.

Best Practices by Area

Common Areas: Hallways, Meeting Rooms, Rec Rooms

These areas are where many people may pass through or congregate. It is important that common areas be kept free of slip, trip and fall hazards.

Door thresholds and transitions should be level and flush to the floor. Foyers and entryways should have runners or floor mats. All runners and mats should be flush with the floor and secured to the floor with double sided tape or other means.

Floors should be free from debris and clutter such as paper, boxes, paper clips, etc. Tile should not be missing, loose, cracked or buckled. Carpets should not bunch up, or be torn or frayed.

Lighting should be adequate. If lights are turned off at certain times to conserve electricity, motion sensors should be installed to ensure they are turned back on upon a person's arrival.

Any change in elevation (e.g., raised floors) should be marked by contrasting paint or other means. Handrails should be provided at such points.

Aisles should not be crowded with furniture or other obstructions. Furniture in hallways should be limited to one side only. Furniture should be sturdy and not give way when leaned upon.

Items stored on shelves should be within easy reach so a chair or ladder is not required to access.

Decorations and displays should be positioned away from doorways and walkways.

Cords

Electric cords should not cross walking paths. Having an adequate number of electric receptacles will help keep cords away from walking paths. Unused portions of cord should be bundled and tied up.

If for some reason a cord has to cross a walkway, it should be securely taped down or covered with a cable protector to minimize its tripping hazard.

Conference tables should have electric receptacles provided at the table so laptop cords do not stretch across chairs or walking paths to access a receptacle on a wall.

Drinks and Trash

The floor below water fountains should be provided with moisture managing mats. The pressure and water flow should be controlled so that water does not fall to the floor.

Drink containers brought into common areas should be covered.

Sufficient covered trash receptacles should be placed in strategic locations. The containers should be emptied regularly, at such a schedule that they normally do not become full.

Best Practices by Area

Dietary

The food preparation, cleaning and food serving operations in the dietary area present slip, trip and fall exposures that should be controlled. The following are guidelines to consider:

Basics

- The area should be considered well-lit. A minimum 1000 lumens for the kitchen and 500 lumens for the dining area may be used as a general guideline, but the best guideline is that all who enter are able to see clearly.
- Floors should be in good condition. There should be no missing tiles, holes or crevices that could present slip, trip and fall hazards.
- Floors should be cleaned regularly and on a frequency that reduces the chances of slips, trips and falls.
- An anti-slip coating can be applied to the floor surface. Proper floor maintenance should especially be adhered to for coated surfaces.
- Carpets should be smooth and have no frayed edges. Re-lay or stretch carpets that bulge or have become bunched to prevent tripping hazards.

Kitchen

- Swinging kitchen doors should be equipped with portal windows.
- Aisles and passageways should be kept clear and in good repair, with no obstruction across or in aisles that could create a hazard.
- Provide floor or ceiling receptacles for equipment, so power cords do not run across pathways.
- Maintain drainage where wet processes are used. Provide false floors, platforms, mats or other dry standing places where practicable.
- Inspect refrigerated and freezer cases for water leakage onto the floor surfaces. If a leak is present, place absorbent strips and water absorbent mats on the floor to collect the moisture until the unit is repaired. Replace absorbent material as necessary.
- Beware of moisture and condensation drips from carts or boxes removed from the freezer. Have towels ready to absorb any drips.
- Drying carts and racks can be used to facilitate drying. The racks should not be overloaded. Racks should be placed on a surface or mat that facilitates proper drainage. If that isn't available, towels or other absorbent material should be used to catch dripping water from the pots.
- Casters on all racks should be inspected regularly for proper functioning and repaired.
- The kitchen should be restricted to kitchen staff only. Residents, students, teachers or other non-dietary persons should be prohibited from entering.

Dining Areas

- Aisles and passageways should be sufficiently wide for easy movement and should be kept clear at all times.
- Patrons may be served in groups to minimize overcrowding in aisles and walkways.
- Spills should be reported and cleaned up promptly. "Wet floor" signs should be easily accessible and erected when the spill is present. The signs should then be removed when the hazard has been eliminated.
- Furniture should be sturdy and stable. Neither chairs nor table should roll or give way when leaned upon.
- Chairs should be easy to get out of. Chairs with arm rests should be available for those who need additional support in standing up.
- Electrical cords should not cross aisles. If temporary cords are necessary, they should be covered with a cable protector to minimize the tripping hazard.

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Dietary

Floor Mats and Other Floor Treatments

Floor mats help remove grease, moisture and other contaminants from shoes. Mats should be provided at any location where these items are present, such as:

- Areas adjacent to food counters and food preparation
- Cooking areas
- Dishwashing areas
- Frying stations

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 and grease.
- Antibacterial treatment or similar design to help prevent the growth of mold and mildew.
- Floor mats should not be installed or used in a way where the mat itself becomes a slip or trip hazard.

Cleaning and Maintenance

Spills are a common occurrence in eating areas. Cleanup materials and wet floor signage should be stored so they are easily accessible near the places they are often used.

Leaks on equipment should be repaired as quickly as practicable to prevent drips or accumulations on the floor.

After a grease trap is cleaned, the floor area around the trap should be cleaned to ensure adequate slip resistance.

Grease Buildup

Meat cutting activity and food preparation may need to ensure proper cleaning protocols are followed daily to avoid polymerization. Grease buildup occurs when grease and surface dirt or residue are not properly removed from floor surfaces. Such a floor may look clean but the surface roughness of the floor tile has been covered over, creating less slip-resistance for workers. Grease in kitchens and meat counter areas may also be tracked to other areas of the facility. Aggressive bristle brushing daily with hot water and an appropriate degreaser for the floor type are normally used to clean these areas. Spot cleaning during the day, as well as sound cleaning after service hours, should be completed to control slips and falls.

Entry and Egress and Doorways

The transition area where a person enters a building is one of the most vulnerable for slips, trips and falls.

The transition from interior to exterior should be on the same level, if possible. If there is a change in elevation, the change should be highlighted by a bright color and hand rails provided. The door threshold should be in good condition, fastened tightly and flush with the floor.

Ensure that roof drainage systems do not direct or allow water to collect at entrance paths. Outside the building entrance, a canopy system constructed over the entryway will help to decrease the moisture and other materials brought into the building. A designated area for storage of (wet) umbrellas and coats will help minimize dripping water in the building.

If the weather is rainy or snowy, persons will enter the building with wet and/or dirty shoes. A built-in recessed grate system is ideal for high traffic entrances to remove moisture, dirt and other materials from shoes before they are tracked into the building.

A mat system is also a good method to prevent tracking of moisture, dirt or mud, and other materials into the facility. If the indoor floor surface is a hard floor like marble or tile and the transition area does not have a mat or runner, the probability of a slip and fall is greatly increased.

A two-mat system can be used to remove debris from shoes:

- A scraper mat placed outdoors removes heavy debris from footwear.
- A wiper/scraper mat placed indoors scrapes and wipes off remaining debris. The mat should be flush to the edge of the doorway.

Ensure the mat backing is appropriate for the surface on which it is placed. The mat should not move while being walked upon. Ensure mats are well-maintained and the edges do not curl and create a trip hazard. The surface under the mat will need to be cleaned occasionally, otherwise dust may accumulate underneath and the mat may move when stepped on. During rain or snowstorms, mats should be monitored and replaced when they become wet and soggy. Old and ratty mats should be disposed of before they become frayed or tattered and become a slip hazard themselves.

Signage should be posted at entrances to areas where there are known hazards. For example, in a swimming pool area, warn that there is water on the floor.

All access routes should be kept free of obstructions such as plants, furniture, garbage cans, etc.

Cleaning equipment such as mop and buckets should be stored nearby in proper rooms and not walkways, for easy access when they are needed.

Grounds Maintenance

Groundskeeper Safety

Proper footwear should be worn. Groundskeepers should wear shoes or boots that are slip-resistant with deeper treads and larger cleats. Footwear should provide good ankle support due to uneven surfaces encountered. Open toed shoes are prohibited.

Storage areas should be organized with no tripping hazards. Keep garage and storage sheds well-lit and tidy.

Use the proper ladder when it is necessary to reach for elevated items. Use material handling aids such as carts or wheelbarrows when having to carry many items.

Be aware of slippery surfaces presented by wet leaves, mud, etc., which may hide uneven surfaces that compound the slipping hazard.

When walking on steep slopes, walk sideways to reduce the chance of slipping. Take short steps and keep your feet from crossing in front of each other. This position improves traction. If possible, keep your hands free when walking on steep slopes so you can use them to keep your balance.

Groundskeeper Duties

Regularly sweep areas for trip and fall hazards. Notify supervisor of any hazards. Place warning signs or barricades in front of hazards until they are corrected or repaired.

The following items should be reviewed:

- Sidewalks kept clear of tree roots, weeds, grass or other growths that present tripping hazards. Regularly trim outdoor foliage to keep them away from walkways.
- Hoses and other equipment not placed in walk areas where they may present tripping hazards. Hose reels provided to make it easy to keep hose out of walkways.
- Walking paths adequately lighted. Be sure that lighting is adequate to clearly identify changes in the walking surface or highlight any obstructions.
- Prior to heavy rains or snowfall, check drains and gutters to ensure proper water drainage. Remove icicles where/when possible. Look for ice conditions that could develop on walking surfaces from runoff from roofs, downspouts and other areas.
- Ensure elevation difference between sidewalks and adjoining grass/ground is minimized. Ensure the adjacent surfaces are flush, and at the same level. There should be no gaps or level differences that may twist an ankle or trap a foot, resulting in a fall.

Best Practices by Area

Housekeeping

Good housekeeping is a foundation of a safe facility and critical to prevention of slips, trips and falls. The large majority of slip and fall accidents involve moisture or contaminants on the floor. It is of the utmost importance to keep floors clean.

Housekeeping Safety

The housekeeping department itself can contribute to preventing hazards in their areas by wearing proper footwear. Housekeeping employees are at great risk for slips and falls due to exposure to water, grease or slippery walking surfaces. These employees should wear slip-resistant, rubber soled footwear. Polyurethane and microcellular urethane soles are more slip-resistant compared to nitrite and styrene rubber. Open toed shoes are prohibited.

Storage of housekeeping equipment should be orderly so that trip hazards are not created. Equipment should be put away quickly so they don't become a trip hazard.

Work should be executed at an appropriate pace. People working in a rush can get into a situation which may lead to a slip, trip or fall. The following precautions should be undertaken:

- Take your time and pay attention to where you are going.
- Adjust your stride to a pace that is suited to the type of flooring and the tasks you are doing.
- Make wide turns at corners.

Proper Visibility

- Always ensure the available light sources provide sufficient light for your tasks.
- Ensure that things you are carrying, pushing or pulling do not prevent you from seeing any obstructions or spills on your walking path. Use carts or dollies when necessary.
- Use a flashlight when entering a dark room.

Housekeeping Duties

Conduct regular sweeps of areas to identify slip, trip and fall exposures. Report hazardous conditions to your supervisor. Mark hazardous areas clearly and barricade if necessary.

Follow manufacturer's directions regarding dilution of cleaning solutions. Improper mixture can result in slippery surfaces as well as damage to floors.

Cleaning equipment should be available near high hazard areas such as entrances and break areas so they are easily accessible should a clean-up be needed.

During rainy or snowy weather, monitoring should be increased for mat replacement and floors for cleaning up of moisture and dirt.

Specific areas to be cleaned should be assigned. The following are recommended cleaning guidelines:

- Floors cleaned on a scheduled basis.
- Floors free of dust, trash, debris and foreign objects.
- Walking paths kept clear.
- Leaks, spills or drips are cleaned and mopped immediately.
- Tall "Wet Floor" signs or barricades placed where appropriate and removed when the floor is clean and dry.
- Barricades and signs should be erected for potential fall hazards, such as cracks or holes in flooring, until the hazards are repaired.
- Mop hallways one-half at a time, at low traffic times with warning signs erected.
- Excess water should be removed with a squeegee and not a mop.
- Spreading grease-absorbent compound on oily surfaces will assist in cleaning the area.
- Always close file cabinet or storage drawers.
- Cover cords and cables that cross walkways.
- Have burned-out light bulbs replaced as soon as possible.
- When using equipment with cords, keep the cord within your sight to ensure it does not become a trip hazard for others. For example, when rounding a corner while vacuuming a hallway, unplug the cord and re-plug at your new location so the entire cord remains in view.

Maintenance

Good maintenance of facilities is another key component of keeping a facility slip, trip and fall-free. The maintenance department can set a good example by keeping its work areas free from slip, trip and fall hazards.

Wear proper footwear. Maintenance employees have a high risk for slips and falls due to exposure to water, grease or slippery walking surfaces. Slip-resistant rubber soled footwear with good ankle support is recommended. In addition, footwear that is resistant to oil, chemicals and heat would be appropriate.

Materials and equipment should be stored properly and securely, in their designated areas. Supplies should not be stored too high. Rolling stock should be chocked or secured by some other means. Hand tools should be returned immediately to their designated storage areas.

Walkways, aisles and stairs should be kept clear of loose objects such as rolling stock, tools, hardware, electrical cords, etc. Often employees will be carrying loads so it is important to not have anything in walkways that could present a tripping hazard.

Spill kits should be provided in mechanical shops in the event of oil or other chemical spill. Absorbent material should be readily available.

Use material handling aids such as carts when handling many or large items.

Use the proper ladder to reach for items.

Maintenance Duties

Conduct regular sweeps of areas to identify slip, trip and fall exposures. Report hazards to your supervisor. Post warning signs or barricade hazards until they are repaired.

Light bulbs should be replaced immediately when they go out. Faulty switches should be repaired or replaced. Leaks on equipment should be repaired immediately to prevent drips or accumulations on the floor. Establish preventative maintenance on plumbing, light bulbs and other items so the number of incidents that could contribute to accidents are minimized.

Minimize carpet and matting trip hazards. Tripping hazards such as turned up edges, uneven carpets, holes and cracks should be repaired immediately. Eliminate uneven floor surfaces.

Beware of operations that may create slippery floors, such as spray painting, high pressure water cleaning or chemical spraying. The floors around these work areas should be properly cleaned after the activity to ensure the floor is not slippery.

Provide adequate lighting in poorly lit areas such as halls and stairwells.

Provide barricades and direct traffic during major repair operations. Post warning signs of the hazards until the repair is completed.

Offices

Much time is spent in one's office, so it is important to keep these spaces free of slip, trip and fall exposures.

Lighting should be adequate and glare free. The lighting guideline for an office is 500 lumens, but the best guideline is that all persons perceive the room as well-lit.

Floors should be flat, smooth and not slippery. There should be no cracks, bumps or depressions. Rugs should not be crumpled, bunched up, wrinkled or uneven. Torn or frayed carpet should be repaired or removed.

Floors should be dry and spills cleaned up immediately. Miscellaneous items and trash should be kept off the floor.

Surface transitions should be highlighted. For example, carpet trim may be used to highlight a change from tile to carpet.

Walking paths should be kept clear of obstacles. Items should not be stored in aisles.

Drink containers brought into the office should be covered.

Electrical Cords and Computer Cables

Electric cords should be kept away from walking paths. If a cord must temporarily cross a walkway, it should be taped securely to the floor with a highly visible tape or covered with a cable cover to minimize trip exposures.

Excess cord should be rolled up and securely tied. Cord reels may also be used to automatically roll up excess cord. Loose cords may be taped or clipped to desks. Installing permanent wiring and providing a supply closer to the need should be considered as an alternative to having a cord crossing a walkway.

There should be enough electrical outlets to eliminate the use of extension cords. Outlets should be installed near computers and other electronic equipment so cords remain out of walkways. Any floor outlets should be installed in such a way that they do not pose a tripping hazard.

Conference tables should have electric receptacles provided at the table so laptop cords do not stretch across chairs or walking paths to access a receptacle on a wall.

Computers cables should be kept off the floor and grouped together. They should also be kept away from the computer user's legs. The use of zip ties and Velcro straps can be used.

Furniture

All drawers should be kept closed when not in use.

Weight capacities of chairs in use should be reviewed to ensure they are adequate. Office chairs should have a stable base with a minimum five (5) pedestal points, and be at least 20 inches in diameter.

Casters on chairs should be securely fastened and appropriate for the type of floor on which they are being used (i.e., carpet vs. hard flooring).

Waste baskets, low tables, filing stools and office equipment should be placed under desks, against walls or partitions, or in corners to minimize their tripping hazard.

Employees should be trained to eliminate slip, trip and fall hazards. Training should include:

- Keep all legs/wheels of a chair on the floor at all times. Don't lean back on the chair or put all your weight at the very front edge of the chair. Either can cause the chair to tip over.
- Don't use a smartphone while walking. This includes listening to music or other audio show while walking. Attention should be focused on the path of travel.
- Don't read while walking. It is important to focus on the path in front of you.
- Wipe up all spills immediately or contact housekeeping.
- Pick up any clips, rubber bands, paper or other debris found on the floor.
- Make sure view of the walkway is not compromised when carrying large packages.
- Do not stand on chairs or desks. Use an appropriate ladder to reach elevated items.
- Do not run or rush. This is a common contributor to slip, trip and fall accidents.

Best Practices by Area

Resident Rooms

(Nursing Homes, Long-Term Care and Retirement Facilities)

Resident Vulnerabilities

Because of age, nursing home residents may suffer from diminished physical capacity which makes them more vulnerable to slip, trip and fall exposures. Some factors diminish residents' ability to detect a fall hazard. These include:

- Poorer perception of slipperiness
- Slower dark adaptation
- Increased glare sensitivity
- Decreased color sensitivity

Decreased balance control and slower reaction time can affect residents' ability to respond to a slip or trip and prevent a fall situation. Other factors can increase the potential of being involved in a fall, such as weaker leg muscles resulting in a shuffling gait.

Because of the above factors, it is important to eliminate any items in a resident's room that could contribute to a slip, trip and fall injury, and offer supports that could help prevent such injuries.

Basics:

Floor

- The floor should be free of cracks, holes, bumps or depressions. The entire floor should be a smooth but not slippery walking surface.
- The floor should be on a regular cleaning schedule.
- Walking paths should be clear of furniture or other obstructions such as electric cords.

Lighting

- The room should be considered well-lit by residents and employees. A minimum of 150 lumens is recommended, although the best guideline is if residents and employees can see clearly. Dimmer switches would help residents adjust room lighting to desired levels.
- Light sources should be configured to reduce glare.

Room Configuration

- The room should be free of clutter and furniture laid out so walkways are clear.
- Tripping hazards such as throw rugs and loose electric cords should be removed.
- If throw rugs cannot be removed, they should be secured to the floor via double sided tape or other means.
- Handrails and grab bars should be supplied to provide support. Key locations include the shower, toilet and bed.
- Non-slip materials should be provided inside the shower and bathtub, as well as outside the shower and bathtub.
- Bed brakes should be locked and functioning properly.
- Furniture such as chairs and tables should be solid and not roll, slide or give way when leaned on for support.
- Some residents may find raised toilet seats with arm rests make transferring easier.

Resident Services

- Call lights should be within easy reach of residents.
- Ensure call lights work and are answered promptly.
- Consider installing tennis ball-type devices on walkers. These allow the walker to glide over the floor. Jerky motions increase the risk of a slip or trip leading to a fall.
- Ensure assistive devices like wheelchairs, walkers and canes are properly maintained and fitted.
- Resident's shoes should fit properly and have slip-resistant soles. Tennis shoes are preferred over house slippers, which are floppy and have smooth soles.
- Residents should be supplied with non-skid socks.

Restrooms

Water is prevalent in restrooms, so it is very important to clean them regularly to ensure the floor is clean and dry at all times.

The floor surface should be slip-resistant. Keep it free of clutter and clean up any puddles of water or condensation. There should be no missing tiles, holes, irregularities or cracks that could present a tripping hazard.

The restroom should be adequately lit with no glare. A lighting guideline for restrooms is 250 lumens, but the best guideline is that all persons perceive the room to be well-lit. Motion sensors may be used during off-hours to save energy, while ensuring lighting upon a person's arrival.

Cleaning and Maintenance

When cleaning, "Wet Floor" signs should be put up until the floor is dry, but then promptly removed. Excess water should be removed with a squeegee instead of a mop as it leaves less moisture on the floor.

Toilets, faucets and drains should be working properly. Toilet seats should be securely bolted to the toilet. Preventative maintenance on plumbing devices will help control leaks and overflows.

A telephone number to call in case of restroom emergency or maintenance problem should be posted in a highly visible area such as the restroom door.

Housekeeping should keep a log that clearly shows the time, date and cleaning chores completed for each restroom.

Layout

Provision of handrails and grab bars near the toilet will provide support in using the facilities.

Liquid soap dispensers should be installed over sink counters so any dripping will fall into the sink.

Hand dryers and paper towel dispensers should be positioned close to sinks so people don't drip water from their hands on the floor to retrieve a paper towel.

Floor drains should be installed away from walkways.

Best Practices by Area

Thrift Stores, Gift Shops and Bookstores

The high traffic aisles and display areas of stores present slip, trip and fall exposures that need to be controlled. The following are best practices to manage these exposures:

Lighting

Provide proper lighting in all areas, indoors and outdoors, to reduce shadows, dark areas and glare so that trip hazards or surface irregularities are clearly visible. Indoors, a minimum of 500 lumens is recommended, although the best guideline is that employees and visitors can see clearly.

Outdoor lighting at night should be fully shielded. Shielding directs light onto the pavement, and reduces glare, which can contribute to an accident. A minimum of 50 lumens is recommended, although areas that present trip and fall hazards such as steps may require more illumination so that the hazard is clearly visible.

Floor Surface

- If possible, engineer out slip, trip and fall exposures at entrances. To "engineer out" means to eliminate a hazard through a permanent structural change instead of a temporary fix. For example, a one-step change in elevation is hazardous because many people may miss the step and trip on it. Consider changing the step to a gradual ramp to eliminate the possibility of tripping on the step.
- Ensure floor is smooth with no holes, cracks, tears, bumps or depressions that could contribute to a slip, trip or fall.
- Minimize "patch" repair as these present inconsistent walking surfaces and may lead to a fall. Repair with material having similar walking surface characteristics as the adjacent surface.
- Provide transitional clues such as carpet trim when floor surfaces change. Carpet trim should be flush with the surfaces upon which it is used, so it does not present a trip hazard.

Aisles and Walkways

- Mark and protect walkways with striping, carpet trim or other means.
- Ensure that aisles and passageways are free of clutter and other tripping hazards.
- Utilize umbrella bags at store entrances to prevent dripping water onto the floor.
- Provide transport assistance (e.g., carts) where appropriate. This will minimize employees or customers carrying items that block their view of the walking surface.
- If electrical cords are used on a regular basis, install outlets so that cords do not cross walkways.
- Avoid furnishings or display fixtures that might slip, roll or give way when leaned upon.
- Review chairs and other seating provided for associates and customers. Chairs with arms assist in transitioning from a seated to a standing position.
- Prohibit chairs on raised displays in which the customer could fall and be seriously injured.
- Use barricades and re-direct traffic for major hazards, such as a walkway being repaired.
- Ensure fixture displays and products do not jut out into the aisle as to cause a trip hazard or cause one's clothing to get snagged on, resulting in loss of balance.

Stairs, Ramps and Elevators

- Use color contrasts or lighting to make steps or level changes more visible. For example, painting steps yellow.
- When possible, install alternate means to transition elevation change. For example, a nearby ramp can be constructed as an alternate to stairs.
- Install handrails where appropriate, such as stairs or ramps.
- Provide handrails for all stairs, particularly for those with three or more steps.

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Thrift Stores, Gift Shops and Bookstores

- Ensure handrails are sturdy, graspable and of the appropriate height. Handrails should be 34" to 38" high. They should extend 12" beyond the top and bottom of the staircase, parallel to the floor. Handrails should also have a rounded end that turns into the wall or is designed wide enough to prevent a bag or purse shoulder strap from getting caught while going down or up the stairs.
- Rounded handrails are easier to grasp than ones with corners. The diameter should be between 1 ¼ inch to 2 inches.
- Ensure handrails are continuous around corners to prevent falls.
- Post "Please Use Handrail" signs where handrails are present.
- Install slip-resistant nosing/treads on stairs.
- Provide visual cues such as painting nose of stair treads yellow.
- Ensure elevator thresholds are even with the elevator carriage.
- Ensure elevator thresholds are slip-resistant.

Housekeeping/Maintenance

- Regularly clean the floor so it remains free of water, contaminants and foreign objects.
- Follow manufacturer's instructions on use of floor cleaning products.
- Provide clean up supplies (paper towels, absorbent material, "wet floor" signs, etc.) at convenient locations in the facility so spills can be cleaned up immediately.
- Wet floor signs should be at least 36 inches high so they are easily seen and do not create a trip hazard.
- Replace burnt out light bulbs promptly.
- Use no-skid waxes in slippery areas, and use soap that does not leave slippery residue.

Safe Procedures

- Train employees to not carry items in such a way as to obstruct vision.
- Ensure that the walkway is unobstructed before transporting large or heavy materials.
- Provide carts to transport bulky or heavy items. Push (rather than pull) carts to allow a better line of sight.
- Walk with caution and make wide turns at corners.

Mats

Mats are used to provide slip-resistant walking surfaces by absorbing liquid and removing dirt, debris and liquid from shoes. Provide water-absorbent mats near entrances and other areas where water, ice or snow may drip or be tracked onto the floor. Mats should be large enough so that upon entrance, several footsteps fall on the mat and clean contaminants off the shoes before the shoes contact the flooring beyond the mat.

A good standard is to provide at least 15 feet of quality entrance matting inside the building.

If there is water around or beyond the mat, it means that the mat may not be large enough, or it may be saturated and needs to be replaced.

Mats should be stored in a manner in which they lay flat and are ready for use. To prevent curling, they should not be rolled or stored on end.

Curled edges may need to be cut off or properly secured to the floor to prevent curling. Mats with incurably curling edges should be replaced.

Permanent Grid and Matting Systems

One of the best ways to remove moisture and dirt from shoes at entrances is to install permanent matting or gridded systems.

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Thrift Stores, Gift Shops and Bookstores

A grid system consists of a metal grid installed over a recessed area in the floor. The grid removes and catches dirt and foreign objects from shoes as customers walk over them. The grid acts as a scraper/wiper application on shoes, meaning that the water, slush, etc., are removed considerably from the bottom of footwear. A grid system may require the services of the manufacturer or distributor for proper installation. The system should also be reviewed to ensure they offer the desired slip-resistant qualities.

At entrances, an effective matting system uses both an outdoor and indoor mat. Scraper mats with raised rubber cleats outside entranceways remove heavy dirt and moisture first. Inside, carpet-topped walk-off mats trap any residual dirt and moisture. Walk-off mats may also be positioned in all heavy traffic areas inside to help contain soiling and moisture even further.

Walk-off matting is suggested for just inside the vestibule area. Matting that extends at least 15 feet into the facility is recommended. The mats should lay flat, be free of warped or curled edges, have a slip resistant backing, be beveled to prevent trips, be durable and easily cleaned.

Entrance mats should be placed tight against interior door thresholds. Ensure the height of the entrance mat is appropriate for the height of the door thresholds before purchase or consult with a qualified vendor. Mats too high off the floor will restrict entrance doors from opening or closing.

Cleaning protocols provided by the vendor should be followed for permanent grid and matting systems to ensure they function properly and extend the life of the products.

Floor Safety Maintenance Program

Introduction

Proper cleaning and floor maintenance practices are fundamental to preventing slip, trip and fall accidents. The components of the floor maintenance program should review:

- The type of floor finish products used, including slip-resistant finishes, strippers, degreasers and general cleaners. Establish a floor maintenance procedure that specifies the appropriate cleaning chemicals and methods for various types of floors.
- Proper application methods for products, including proper dilution and time schedules for each component or process. Maintain surfaces according to the manufacturer's guidelines. Not following manufacturer's guidelines may result in a slip or trip hazard. For example, application of wax to slip-resistant flooring will alter the slip-resistance. Improper dilution or inadequate drying time may increase the slipperiness of a floor.
- 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 specifications regarding the slip-resistance level of the product. Maintain a documented floor care maintenance log that outlines the date, floor location, type of care provided, and by whom.
- Periodic review of maintenance program, especially after a report of an employee "near miss" or actual accident.
- Ongoing education for responsible staff about proper floor care and maintenance procedures.
- Employees should be trained to place warning signs and mop half of the hallway floor. After that half dries, the other half of the hallway floor can be mopped.

Schedule

A regular schedule for cleaning should be established. Daily cleanings should be scheduled to minimize the risk of creating a potential hazard for other employees. The best time for these cleanings is usually the evening or night shift as opposed to the day shift, since there are fewer people in the building and less chance people will need to walk on the floor while it is still wet. Monthly or quarterly deep cleanings can be conducted in addition to the daily or weekly regular cleanings.

Other Items

Slip and fall hazards should be checked for frequently. A walking surface hazard inspection should be conducted at least annually. Night audits will allow checking of walking surface visibility and lighting levels. (Please see ***Inspection Checklists*** on pages 36-47.)

Surfaces that are painted should have abrasives added to prevent creating a slippery walking surface when wet.

Wood Flooring

Wood

Manufacturer's recommendations should be followed for cleaning and maintaining wood floors, if they are known. In order to reduce slips, wood floors should have non-slip finishes. If wood floors are waxed, non-skid waxes should be used.

Sheet vinyl or tile floor care products should not be used on wood floors. Self-polishing acrylic waxes should never be used on wood floors, as these waxes cause wood to become slippery, as well as dull.

Damp mops should not be used on wood floors. Excessive moisture will cause damage. Standing water can dull the finish, damage the wood and leave a discoloring residue. If water spills on a wood floor, it should be immediately wiped up with a clean cloth or squeegee.

Polyurethane Finish

Surface finishes like polyurethane are easy to care for. The floor should be dust mopped, swept or vacuumed. When cleaning no longer restores shine, the floor may be recoated with a surface finish. The frequency of recoating depends on the amount of traffic to which the floor is subjected.

In general, wax should not be applied on a polyurethane-finished floor.

Wax and Stain Finish

Wood floors that are waxed or stained should be dust mopped or vacuumed regularly. A buffer machine may be used to maintain the shine.

Depending on traffic, a properly maintained wood floor should need waxing once or twice a year. It is important not to over-wax a wood floor. If the floor dulls, buffing should be done instead. Wax buildup under furniture and other low-traffic areas can be avoided by applying wax half as often as in higher-traffic areas.

Preventing Scratches

Scratches on wood floors can be minimized by placing mats at doorways to help protect wood floors from grit, dirt and sand, and vacuuming or dusting regularly. Also, felt pads may be placed under furniture legs to prevent scratching the floor surface.

Stone and Tile Flooring

It is important to repair or replace worn, missing or broken tiles as soon as possible.

Floors should have non-slip finishes. Because of the hard surface of this type of floor, any moisture left on the floor will make it slippery. Spills should be cleaned up immediately. This is important so the floor does not become stained.

Floors should be swept or vacuumed regularly. This removes loose dirt, food crumbs and other debris that can accumulate on tile floors. If left to sit on the tile and grout, these can stick and embed into the floor and become more difficult to remove and clean.

These floors should also be swept or vacuumed to pick up any loose dirt prior to wet cleaning procedures. When cleaning floors with cleaners, such as bleach, it is important to have adequate ventilation, and to wear appropriate personal protective equipment such as safety goggles and gloves.

The following are recommended methods for cleaning:

Stone and Stone Tile

Most stone surfaces are very easy to clean with warm water and a mild liquid soap. However, some stone floors may require more care, so the floor manufacturer's recommendations should be followed. For example, a marble or other fragile stone surface may require a special pH balanced cleaner.

Acid cleaners such as vinegar or abrasive chemicals should not be used on stone. They can leave marks and "gouge" the stone.

Natural stone such as granite or marble should be sealed after installation and every one to two years thereafter, depending on its application.

Ceramic Tile

Ceramic tile should be swept or vacuumed regularly to prevent it from getting dull. Sand and grit can dull glazed surfaces. Ceramic tiles are easily cleaned with mild detergent diluted in water. A rag or chamois-type mop is recommended instead of a sponge mop. The latter pushes dirty water into grout lines, making them harder to clean. The water should be changed frequently while mopping, otherwise a cloudy floor will result.

The grout is often the more difficult part of a ceramic tile floor to clean. A spray bottle filled with a slightly stronger concentration of cleaner can be used as necessary on problem areas.

Vinyl and Vinyl Tile

Vinyl flooring is easily cleaned with a mop and a mild detergent diluted in water. Vinegar with water solution (1 cup vinegar, 1 gallon water) will also work.

To clean scuffs on the floor, WD-40 lubricant can be sprayed on a towel and rubbed on the problem area until the scuffs disappear. The cleaned area should then be cleaned thoroughly with the detergent and water solution to remove any traces of lubrication.

Strong abrasive cleaners and stiff brushes should be avoided when cleaning vinyl, as these may remove the shine and scratch the floor.

The vinyl floor should not be made too wet. Soaking the floor with water may damage the glue that keeps the vinyl adhered to the floor underneath.

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Stone and Tile Flooring

The water will get into the cracks between the tiles and get trapped under the tiles. Only as much water as necessary to clean the floor should be used, and the floor should be dried at the end of the job.

Another tool that can be used to minimize scuffs on vinyl floors is to apply felt tips on the leg ends of chairs and tables.

Grout

Grout often becomes a repository for dirt and contaminants, so it is often the part of the floor that needs the most cleaning, while also being the most difficult to clean.

Over-the-counter grout cleaners are available. Ensure the cleaner used is appropriate for the floor, and the cleaner's instructions are followed. Another method of cleaning grout is to use sandpaper. Sandpaper can be folded into a crease, and then worked back and forth along the grout line. This method can also be applied using a pencil eraser instead of sandpaper.

Waxing Tile Floors

If floors are waxed, non-skid waxes should be used. Also, the floor should be cleaned before any wax is applied. The floor should be mopped with clean water to remove any cleaner residue, and completely dry before waxing. The wax directions should be followed, applying only as thin a layer as possible.

Removing Wax Build-Up

Because there is more traffic on some parts of the floor than others, wax builds up on the less-trafficked areas. This shows up as a yellowing or discoloration of the floor.

There are special cleaners/strippers to remove wax build-up, but it is important to use the right cleaner for the type of floor, and follow the cleaner's directions.

After stripping off the wax, the floor should be cleaned with water to remove the remaining residue. The floor should then be allowed to rest a day or so before cleaning and applying more wax. As strippers are usually harsh solutions, they are not recommended to be used more than once a year.

Carpet Flooring

Worn-out or frayed carpet should be repaired or replaced immediately to prevent it from becoming a trip hazard. Scissors should be used to clip sprouts and snags. Individual fibers shouldn't be pulled at, as this might damage the carpet.

All carpet should lie flat on the floor. Bumps or waves should be stretched out and secured so they do not present a tripping exposure.

Carpet trim should be used when carpet abuts onto another type of surface to ease the transition. Slips and falls often result because of floor surface changes.

Cleaning

The carpet manufacturer's recommendations for care and cleaning should be followed, if they are known.

Dirt on carpet can be minimized by placing mats at entrances and changing air filters to reduce airborne dust particles.

Carpet should be vacuumed regularly to prevent soil from embedding itself in the pile. Vacuuming frequency will be higher for heavy traffic areas such as hallways, stairs and exterior entryways.

In general, a vacuum with a beater bar or rotating brush and with a strong enough air flow to penetrate to the carpet backing works best. Carpet with thick loop pile construction, particularly wool and wool blend styles, may be sensitive to brushing or rubbing of the pile surface and may become fuzzy. For these carpets a suction-only vacuum is recommended.

Spills on carpets should be treated immediately. The longer the spill sits, the more difficult it will be to remove the stain. For a food spill, gently remove as much solid material as possible with a spoon or dull knife. Add water and blot, using detergent sparingly, if needed. Then, using the highest suction function, vacuum the area back and forth, adding more water to the stain as necessary until completely clean.

Keeping traffic and other use factors in mind, consider professional cleaning every 12 to 18 months. If deep cleaning will be done in-house, follow the cleaning equipment manufacturer's recommendations and instructions.

Heavy furniture dents in carpet may become tripping hazards. These dents can be removed by stroking the dented area with a brush until the fibers flow together in the same direction.

Floor Safety Maintenance Program

Mats

Mats are useful in removing water, dirt and other contaminants from shoes that could contribute to slip, trip and fall accidents.

Implement a mat safety program and define which types of mats are used when and where. Perform regular mat inspection and replace worn or damaged mats. This is especially important during heavy rain or snow when the mats collect moisture and become water-logged.

Characteristics of good mats include:

- 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.
- Antibacterial treatment or similar design to help prevent the growth of mold and mildew.
- Industrial-grade mats specifically constructed to lie flat and stay put should be used. Look for "high traction" mats such as those certified by the National Floor Safety Institute (NFSI).
- At entrances, an effective mat system uses both an outdoor and indoor mat. Scraper mats with raised rubber cleats outside entranceways remove heavy dirt and moisture first. Inside, carpet-topped walk-off mats trap any residual dirt and moisture. Walk-off mats may also be positioned in all interior heavy traffic areas to help contain soiling and moisture even further.

For wet areas such as under sinks and drinking fountains, specialty mats that funnel spilled liquids beneath their surfaces are recommended.

Other areas where slippery conditions warrant mats are:

- Areas adjacent to food counters and food preparation areas
- Cooking areas
- Dishwashing areas
- Frying stations

Floor mats should not be installed and used in a way where the mat itself becomes a slip or trip hazard. The surface under the mat should be cleaned regularly; otherwise, it will trap dirt and dust and lose its traction on the floor surface. The mat itself then becomes a slip and fall hazard.

Storage and Replacement

Mats should be stored in a manner in which they lay flat and are ready for use. To prevent curling, they should not be rolled or stored on end.

Mats should be regularly inspected and replaced before they deteriorate and become slip hazards themselves.

Stairs and Ramps

Managing and Maintaining

Extra coordination and balance is necessary to successfully navigate up or down a flight of stairs. A fall down a flight of stairs can result in severe and painful injury. The National Safety Council reports 12,000 stair deaths per year. Accidents involving stairs are second only to automobile accidents as the major cause of unintended injuries in the United States.

Because of the hazards related to stairs, the many aspects of a stairway system should be managed and maintained so that the stairs can be used without incident. Stair design and construction should comply with current local building and life safety codes. The following are recommended guidelines:

Condition and Design

Stairs need to be maintained in good condition. This is particularly true for steep or irregular stairs. Steps and framework should be secure and sturdy. There should be no loose boards, cracked steps or shaky handrails. Nothing should be sticking out on stair surfaces, handrails or bannisters (e.g., nails or splinters) that could cause a fall. Spills, wet spots or any debris should be cleaned up immediately.

Stair nosings can become loose on carpeted stairs. They can become chipped or broken on cement stairs. Any damage should be repaired as soon as possible.

The stair riser should be no less than 4 inches and no more than 7 inches; stair tread depth should be no less than 11 inches. The riser height and tread depth should be uniform throughout the flight of stairs. Stairs should be no less than 22 inches wide.

Landings should be provided at the top and bottom of the stairs, and points of turning. The stairway landing should be at least 36 inches wide and 36 inches long in the direction of travel. If a door wider than 36 inches is present, the landing length and width should be sufficiently greater than the swing of the door.

Stair steps should have slip-resistant surfaces or treads. Anti-slip tape or strips can be used to increase slip-resistance.

No items or objects should be placed on the stairs. They should not be used for temporary storage.

Artwork, signs or posters along the stairwell or in close proximity are distractions. They can contribute to an accident and should be avoided.

Lighting and Visibility

While good lighting is important in any area, it is especially important for stairways so people can plant their foot firmly on that first stair. Users should be able to see clearly along the entire stairway. A minimum 200 lux at the top and bottom of the stair and minimum 50 lux along the length of the stairway is recommended. Lighting should be positioned so no glare is reflected off the steps. Patterned carpeting should be avoided as they make depth perception and step identification more difficult.

The front nose of stairs may be painted a bright yellow paint or highlighted with reflective tape in order to contrast it with the rest of the stair. It is especially important to highlight the presence of stairs when there are only one or two steps present.

Stairways should be lit at all times.

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Stairs and Ramps

Managing and Maintaining

Handrails

- Handrails should be in good condition. Splinters, paint chips and dirt will discourage their use.
- Provide handrails at all stairs with three or more steps.
- Handrails should be 34 to 38 inches high.
- If the stairway is less than 44 inches wide and is enclosed on both sides, only one handrail is required. If one side of the stairway is open (e.g., no wall), only a railing on the open side is required. If both sides are open, railings are required on both sides.
- If the stairway is between 44 and 88 inches in width, a handrail is required on each enclosed side and a standard railing is required on each open side.
- Any stairway over 88 inches wide should also have an intermediate railing halfway across its width.
- Handrails installed on staircases with a fall hazard of 24 inches or greater from the ground should have a middle railing installed. This is to prevent children from falling through the railing. The middle railing should be installed between 17 and 19 inches in height (approx. half the height of the full handrail).
- Handrails should be securely attached to the wall and no more than 2 inches in diameter for easy grasping.
- Handrails should extend 12 inches beyond the top and bottom of the staircase, parallel to the floor. Handrails that end too soon cue the mind that stairs have also ended, creating the potential for a fall.
- Handrails should have a rounded end that turns into the wall or is wide enough to prevent a bag or purse shoulder strap from getting caught while going up or down the stairs.

Proper Use of Stairs

- Grasp the handrail while ascending or descending stairs.
- Avoid carrying objects with both hands. Keep one hand on the handrail.
- Do not carry bulky objects that block vision.

Ramps

- Ramps should be free of irregularities like holes, cracks or bumps.
- Ramp surfaces should be slip-resistant. Surface can be roughened, grooved or covered with gritty non-slip materials to improve slip-resistance.
- Ramps with slopes greater than 1/15 (e.g., there is greater than a one foot rise to every 15 feet of horizontal run) should be provided with handrails. Ramps wider than 44 inches should have handrails on both sides. Ramps wider than 88 inches should have handrails in the center as well as both sides.
- Ramps that rise more than 30 inches above the adjacent ground or floor should be provided guardrails.
- Ramps that serve any exit way, provide handicap access or are in the path of travel should not have a slope that exceeds 1-foot rise to 12 feet of horizontal run.
- Ramps may be painted “safety yellow” to highlight their presence and change of elevation.
- Landings should be provided at points of turning, entrances and exits.

Sidewalks and Walkways

Managing and Maintaining

Sidewalks and walkways should be smooth, clean and even surfaces. They should be inspected regularly and cracks, tree roots, holes or other tripping hazards removed and repaired as quickly as possible. The hazards (cracks, raised corners, etc.) should be painted or barricaded until repairs can be made.

Maintenance

Walkways should be smooth but not slippery. Cracks or bumps that measure ¼ inch or greater should be repaired and made level. Damage from growing tree roots can be minimized by not planting trees too close to the sidewalk.

Ensure landscaping is maintained and kept clear of walking paths. Repair settling issues, root growth or other dips and elevations.

Ensure water does not accumulate on walkways. Repair drainage systems that direct water onto walkways. Review and reroute drainage systems to prevent puddle or ice accumulation.

Utility access panels and drainage grates should be set even with the walking surface. Often these items settle, creating a trip hazard. Paint the panel or grate to alert pedestrians.

Ensure bike racks are set so that the rack itself or the bikes in the rack will not impede the walkway.

Snow and Ice Removal

Prioritize snow removal according to traffic, slip hazards, ramps, etc. Primary sidewalks, main and ADA entrances are first priority. Make arrangements for snow removal on weekends and evenings.

Snow removal should occur when one inch or more of snow has fallen. Sand and/or salt should be applied when the streets and parking lots become a safety hazard (slick) to cars and pedestrians. Salt should be applied on shaded areas where the sun cannot melt the ice. If snow or ice falls overnight, it should be removed prior to people's arrival at the facility.

Snow and ice will melt and water can accumulate inside the building entrances due to foot traffic. These areas should be monitored closely for wet conditions. Make sure mats are in place and replaced if they become waterlogged.

Document snow and ice removal in ***Snow and Ice Removal Log***.

Parking Lots

Snow and Ice Removal

The winter months tend to have the highest frequency of slip, trip and falls because of rain, ice and snow. There is also decreased light when employees arrive and leave, making identification of hazards more difficult.

Inclement weather procedures that address who will be responsible for clearing snow and ice from sidewalks, steps and pathways should be developed. In the late fall, snow removal equipment should be made ready and appropriate supplies, like de-ice, for inclement weather should be made available.

Guidelines for Snow Removal

- Remove snow before majority of workforce arrives. Consider having extra personnel on call for snow removal when severe weather is forecasted.
- For 24-hour operations, sections of the parking lot should be blocked from parking so that effective snow removal can take place.
- If snow accumulation is four inches or greater, mechanical means such as a snow blower or skid-steer loader should be used, if available.
- Apply ice melt, salt or sand before majority of workforce arrives.
- When ice cannot be promptly removed, sand may be applied in parking areas and walkways. It is important to promptly sweep up the sand and gravel once warmer weather arrives, and the snow or ice melts. Sand and small rocks on dry sidewalks can increase the risk of a slip and fall injury.
- Strategically place sand, salt or ice melt near entrances and walkways.
- Encourage "self-service" use of sand, salt or ice melt by employees, clients and guests. Strategically place small containers of material near entrances and walkways. Or fill reusable plastic bottles with sand, salt or ice melt and provide each employee a bottle to shake their way to safety. Ensure the bottle is adequately labeled. Provide convenient areas to refill the bottles so that they can be used over and over during the winter months.
- Document snow and ice removal in the ***Snow and Ice Removal Log***.

Because icy conditions can be difficult to see before a person starts walking on a parking lot, a warning sign such as "Ice Alert" may be used. Typically installed at the entrance of a parking lot, the device starts turning blue when the temperature gets below 33 degrees and is completely blue at 30 degrees. The device warns people of the possibility of ice on the parking lot.

Snow Pile Accumulations

Identify a location for the snow to be plowed and stored:

- Choose an area where runoff does not flow into pedestrian walkways.
- Ensure the snow pile does not obstruct views of traffic.
- Keep fire protection equipment such as hydrants and control valves accessible.

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Parking Lots

Snow and Ice Removal / Maintenance

Establish a Snow Route

Create a map to show employees the safest cleared routes to get from the parking lot to the building. This map should be posted near all entrances. Create traction in the walking areas through the use of sand or other material designed for ice. Close long or steep walkways from use until the snow and ice are gone.

Contractors

If a contractor is used for snow removal, the following guidelines should apply:

- Ensure the contractor does not have other jobs that would interfere with completing their responsibilities at the facility.
- The contractor should have the appropriate equipment required to adequately provide snow and ice removal.
- The contractor should provide a certificate of insurance that names the facility as an additional insured under the contractor's insurance policy. This should also be stated in the contract.
- A written contract should be used with a hold harmless/indemnification clause included.
- The areas of the facility the contractor is responsible for should be documented (that is, front and rear entrances, parking lots, sidewalks, etc.).
- There should be established guidelines as to when to begin the snow removal. For example, after one inch of snow has accumulated; or two hours after the snow has fallen. The contract should state that the contractor should have snow removed before the majority of people arrive at the facility. The parking lot is the easiest to clear when it is free of vehicles.

Maintenance

Safe parking areas should be provided for employees, clients and guests. Parking lots should present a smooth but not slippery walking surface, free from holes, cracks, depressions or bumps that would present slip, trip and fall hazards. Cracks or bumps that measure ¼ inch or greater should be repaired. Leaves should be regularly removed in the fall, as they can be slipped on, particularly when they are wet.

The parking lot should be inspected on a regular basis for slip, trip and fall hazards. Forms should be completed and work orders generated for items needing repair or attention. Inspections should occur more frequently in the winter time, due to the use of snow plows which can create potholes. A thorough inspection should also be completed after any earthquake.

Regular maintenance items such as re-sealing should be placed on a preventative maintenance schedule.

Roof drain outlets should be kept clear so that water can easily escape when it needs to. Outlets should flow into proper drains, and not direct water across pedestrian walkways.

Lighting

Outdoor lighting at night should be fully shielded. Shielding directs light onto the pavement, and reduces glare, which can contribute to an accident. A minimum of 50 lumens is recommended, although areas that present trip and fall hazards, such as steps, may require more illumination so the hazard is clearly visible.

Tire Bumpers, Curbs and Speed Bumps

Paint parking bumpers, curbs and speed bumps with a bright color so they are easily distinguished from the parking lot. Parking bumpers should not be wider than the average car, with the standard width being six (6) feet.

Sometimes parking bumpers may not be necessary and can be removed. A low curb might be enough to prevent drivers from driving their vehicle too far forward onto a walkway. In most parking lots, parking bumpers are not needed in a parking space where two cars will be parked facing each other.

Parking Lots

Daily Snow and Ice Removal Log

Reviewed by Supervisor _____ Date _____

X = Snow Removed
S = Salt Applied

Date	Building or Location	Employee	Time Started/ Completed	Parking Lot	Sidewalk(s)	Entrances	Steps	Comments
1/1/15	Thrift Store	J.B.	6:11 a.m./ 6:42 a.m.	X	X, S	X, S	N/A	No problem areas indentified

Ladders

Proper Use and Maintenance

In addition to slip and trip accidents that occur on the ground, falling accidents can also happen while a person is at elevation. Properly using and maintaining ladders can help prevent such accidents. To that end, the following guidelines should be adhered to:

Use a Ladder

It is important to use a ladder when it is needed. Chairs, tables, boxes, etc., are not designed to support a person. They may collapse due to overloading or instability. A ladder is specifically designed to support a person at elevation. The simple rule to follow is: "If assistance is needed to reach something, get a ladder." Supervisors who observe employees using inappropriate means such as chairs, tables or boxes should correct the behavior immediately.

Right Ladder

Use the right ladder for the job. A ladder should always be tall enough to do the job safely. In order to change a light bulb on the ceiling in an office, a six-foot step ladder should be used and not a step stool. On the other hand, an extension ladder would be better for cleaning a clogged gutter than a stepladder.

A clean fiberglass ladder and not an aluminum ladder should be used if working in proximity of live electrical wiring. Conductive metal ladders should never be used near exposed, energized equipment. Such ladders should be permanently, legibly marked with the words, "WARNING -- Do Not Use Around Energized Electrical Equipment."

A medium-duty, four-legged stepladder is designed for use on firm, level footing. If this ladder is used frequently on soft, uneven ground, it will eventually twist and not properly support a load. It may then contribute to the most common ladder accident -- a ladder that tips over.

Sometimes ladders are not the best equipment for the job. If using a ladder to work at an elevated work area is common, consider constructing elevated work platforms around the area. Or, it may be better to provide and use portable stairs instead of a ladder if employees have the need to carry items to/from an elevated area.

Ladder Use

When using a ladder,

NEVER:

- Plant the feet of a ladder on boxes, tables, trucks or moveable objects.
- Stand or sit on the top two steps of a stepladder. Never stand or sit on the top three rungs of a straight or extension ladder.
- Use a ladder without visually inspecting it first.
- Load a ladder beyond its maximum load capacity.
- Place a ladder in front of an unlocked, unguarded door.
- Work on ladders in exposed areas during a severe storm or strong wind.
- Work on ladders covered with ice or snow.
- Slide down the ladder.
- Climb the ladder when your hands or shoes are slippery.
- Use your hands for carrying items. Never carry awkward loads when ascending or descending a ladder.
- Place tools or materials on a ladder if they could fall off.
- Paint ladders. Paint conceals defects.
- Use ladders with broken, patched, oily or cracked rails, rungs or steps.
- Reach out over the side rails, lean or turn excessively on a ladder.
- Use a ladder as guy, brace or skid.

Continued on page 34

Ladders

Proper Use and Maintenance

- Use a self-supporting ladder without first opening it up and securing the metal spreader or locking device.
- Raise or lower power tools by the cord or while they are plugged into an electrical outlet.
- Move, shift or extend ladders while in use.

ALWAYS:

- Place the ladder on stable base prior to use.
- Face the ladder when ascending or descending.
- Maintain three points of contact when climbing or descending a ladder: one foot and two hands or two feet and one hand should be in contact with the ladder at all times.
- Keep your belly button inside the ladder side rails. Reaching further can cause the ladder to slide in the opposite direction.
- When possible, while using an extension ladder, tie the ladder to the supporting structure to prevent ladder slippage.
- Remember the 4-to-1 ratio: Set up straight or extension ladders at a 4-to-1 ratio (position the ladder one foot away from the building for every four feet of height of the ladder).
- Use rope transport rather than holding material/equipment in your hands when climbing the ladder. Light, compact tools may be carried in a tool belt.
- Protect the base of a tall, occupied ladder if it can be struck by vehicles or pedestrians.
- Make sure the top of an extension ladder is three feet above the work area before stepping from ladder to the work area.
- Keep the area around the top and bottom of a ladder free of debris.
- Hold the side rails, not the rungs, when climbing or descending.
- Wear shoes with heels when climbing ladders. The rung or step of the ladder should be just in front of the heel, under the arch of the foot. Stepping or standing on a ladder with the front part of the shoe invites a slip and fall.
- Immediately inspect any ladder that has collapsed, tipped over or been exposed to oil or grease. Clean and repair the ladder if necessary.
- Make sure only one person stands on, or works from a standard ladder. Use a scaffold or a second ladder if two or more people are doing the same task.

Storage

Proper storage will help ensure that ladders remain in good condition and can be used safely.

- Establish storage areas that are easily accessible from ground level.
- The ladder storage area should be well-ventilated.
- Ladders should be stored immediately after use. Exposure to moisture and sun will shorten the life of a wood ladder. Don't expose wood ladders to excessive heat for long periods. Avoid storing them near stoves, steam pipes or radiators.
- Store straight or extension ladders in flat racks or on wall brackets. Make sure there are enough brackets to support the ladder so that it doesn't sag.
- Store stepladders and tripod ladders vertically, in a closed position, to reduce the risk of sagging or twisting.
- Secure stored ladders so that they won't tip over if they are struck.

Continued on page 35

Ladders

Proper Use and Maintenance

Maintenance and Repair

Neglected ladders will become unsafe ladders. Proper maintenance includes tightening step bolts and other fastenings. Lower steps on wooden ladders should be replaced when one-fourth of the step surface is worn away. Typically, the center of a step receives the most wear. Wooden ladders can be coated with linseed oil or an oil-based wood preservative to keep them from drying out and cracking.

If significant repair is necessary, it is best to be conducted by the ladder manufacturer or a professional who can ensure the integrity of the repaired ladder.

Ladder Inspection

Ladders should be visually inspected before every use. They should be clean, dry and undamaged. If defects are noted, such as loose steps or damaged feet, the ladder should be tagged and removed from service. In addition, ladders should be inspected thoroughly on an annual basis by a qualified maintenance person. Ladders with identified defects should be tagged and repaired, or replaced.

The following are items to be reviewed in an inspection:

- No cracked, broken, split, dented or badly worn rungs, cleats or side rails.
- No loose or missing rungs, cleats or bracing.
- No loose or missing nails, bolts or screws.
- No cracks, slivers and sharp edges.
- Ladder feet should be slip-resistant. Foot pads on metal and fiberglass ladders in good condition.
- Rolling ladders should have automatic brakes that work when weight is applied.
- For straight and extension ladders, the lower ends of the side rails should be equipped with slip-resistant pads, particularly if the ladder is to be used on hard surfaces. The same is true for the upper ends of the side rails if they are to rest against a surface.
- Joints between steps and side rails are tight.
- All hardware and fittings are securely attached.
- Movable parts operate freely without binding or excessive play.
- Ladder rungs and steps are dry and free of grease, oil and mud.
- No corrosion of metal ladders or metal parts.
- The bottoms of the four rails of a step ladder should be supplied with insulating non-slip material.

Immediately inspect any ladder that has collapsed, tipped over or been exposed to oil or grease.

Ladder Types

There are three main types of ladders: stepladders, straight (single) ladders and extension ladders. Stepladders are non-adjustable in length and should be used at low and medium heights. Single ladders are also non-adjustable and can reach higher heights. Extension ladders are adjustable and should be used for the highest elevations, such as windows or roofs.

All ladders are rated according to the maximum weight they can support. It is important to make sure that the appropriate type of ladder is being used for the task being performed. If a rating on a ladder is not found, the ladder should be replaced.

Ladder Type	Weight Rating (in pounds)	Duty Rating
Type IAA	375	Super Heavy Duty
Type IA	300	Extra Heavy Duty
Type I	250	Heavy Duty Industrial
Type II	225	Medium Duty Commercial
Type III	200	Light Duty Household

Fall Prevention Safety Checklist (Inside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Resident Rooms				
Is lighting adequate to see and all light fixtures operable?				
No tripping hazards such as cords, rugs, deteriorated carpet or loose and broken tiles?				
Handrails and grab bars are secure.				
Non-slip mats inside and outside shower/ bathtub.				
Bed and furniture brakes locked and functioning properly.				
Furniture does not obstruct walkways.				
Furniture is solid and does not give way when leaned on for support.				
Call lights are working and within easy reach of residents.				
Hallways				
Is lighting adequate to see and all light fixtures operable?				
Are thresholds, transitions and expansion joints level and free of cracks or buckling?				
Are carpets in good condition? (i.e., no excessive wear, holes, fraying, stretched tight, seams tight)				
Are floor coverings other than carpet in good condition? (ceramic tile/linoleum, etc.) (i.e., tile buckled, missing, loose, poor condition, cracked, etc.)				
Are mats serviceable and in good condition? (i.e., curled, lying flat, stable or staying in place or placed in the correct position)				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Are computer cords, power cables, vacuum cords, etc. managed so they do not present tripping hazards? (i.e., objects close to the outlet, cord covers used where needed)				
Is furniture in hallways kept to a minimum and limited to one side only? (includes wheelchairs, walkers and scooters)				
Are displays out of the way and away from doorways and walking areas? (includes Christmas trees)				
Is equipment stored out of walkways or in designated places to avoid tripping hazards?				
Are decorations managed so they do not present tripping hazards?				

Fall Prevention Safety Checklist (Inside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Stairs				
Is lighting adequate to see and all light fixtures operable?				
Is the condition of treads and coverings good?				
Are handrails provided for three or more stairs?				
Are all riser height and tread depth uniform?				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Is the landing adequate and in good condition?				
Are all stairs and landings clear of debris, clutter or stored material?				
Ramps				
Is lighting adequate to see and all light fixtures operable?				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Does the ramp have the proper rise (maximum rise is 1:12 = 1 inch of rise for each 12 inches of length)				
Is the walking surface in good condition?				
Is the ramp and surrounding area free of clutter and stored material?				
Is the ramp in a location where it does not present a tripping hazard to others?				
Doorways				
Is the threshold in good condition and fastened tightly?				
Are temporary door stops removed and are permanent door stops located close to walls so they do not present tripping hazards?				
Are doorways clear of clutter or furniture so they are not blocked?				

Fall Prevention Safety Checklist (Outside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Parking Lots				
Is the surface of the parking lot in good condition, free of potholes, depressions, bumps and cracks greater than ¼ inch?				
Are manhole covers placed correctly and are edges free of debris and intact?				
Are parking bumpers correctly placed and in good condition?				
Are parking bumpers painted yellow to highlight visibility?				
Is all lighting in the parking lot in working order and functioning at proper times?				
Are curbs in good condition?				
Are there any trees overhanging the parking lot that need to be trimmed/pruned?				
Are garbage containers placed in their proper place? Are there leaks/spills from the containers that need to be cleaned?				
Are there any spots in the parking lot that have vehicle fluids (oil/antifreeze/brake fluid) pooled on the surface that could cause a slip?				
Sidewalks				
Is the sidewalk surface in good condition, free of cracks greater than ¼ inch, depressions, bumps, etc.?				
Are fallen leaves, seeds, berries, acorns, rocks and mulch cleared off sidewalks?				
Is lighting adequate both to see and for security?				
Do roof and building drainage systems direct water away from walkways? Is there any pooling of water that could cause people to slip?				
Are stairs and balconies sturdy, lighted and with good footing?				
Are stairs with three or more steps provided with a handrail?				
Are handrails on stairs, ramps and balconies secure?				
Are there any sidewalk expansion joints wider than ¼ inch?				
Are there any tree roots cracking and uplifting sidewalks that could create a trip hazard?				
Are sidewalk curbs/edges in good condition?				

Fall Prevention Safety Checklist (Outside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Sidewalks (continued)				
Are trees evaluated regularly and trimmed when needed to protect roofs and sidewalks?				
Are there gaps or elevation differences between the sidewalk and adjoining grass/ ground that could trap a foot or twist an ankle?				
Snow Removal				
Have parking lots and sidewalks been cleared of snow and ice?				
Has salt or ice melt been applied to walkways?				
Have areas that have not been cleared or present hazards been closed off and marked with warning signs?				
Are records kept for all snow removal and salting activities?				
Is there frozen black ice near snow piles that are being unattended with ice melt?				
Are designated snow removal areas being utilized?				
Other				

Fall Prevention Safety Checklist (Inside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Classrooms and Offices				
Is lighting adequate to see and all light fixtures operable?				
Floor surface transitions highlighted.				
No tripping hazards such as cords, rugs, deteriorated carpet or loose and broken tiles.				
Waste baskets, low tables, and office equipment positioned so they do not present trip hazards.				
Furniture does not obstruct walkways.				
Furniture is solid and does not give way when leaned on for support.				
Chairs are of proper type with minimum five pedestal points.				
Desk and cabinet drawers are closed.				
Hallways				
Is lighting adequate to see and all light fixtures operable?				
Are thresholds, transitions and expansion joints level and free of cracks or buckling?				
Are carpets in good condition? (i.e., no excessive wear, holes, fraying, stretched tight, seams tight)				
Are floor coverings other than carpet in good condition? (ceramic tile/linoleum, etc.) (i.e., tile buckled, missing, loose, poor condition, cracked, etc.)				
Are mats serviceable and in good condition? (i.e., curled, lying flat, stable or staying in place, or placed in the correct position)				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Are computer cords, power cables, vacuum cords, etc. managed so they do not present tripping hazards? (i.e., objects close to the outlet, cord covers used where needed)				
Is furniture in hallways kept to a minimum and limited to one side only? (includes wheelchairs, walkers and scooters)				
Are displays out of the way and away from doorways and walking areas? (includes Christmas trees)				
Is equipment stored out of walkways or in designated places to avoid tripping hazards?				
Are decorations managed so they do not present tripping hazards?				

Fall Prevention Safety Checklist (Inside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Restrooms				
Floor is clean and dry.				
Is lighting adequate to see and all light fixtures operable?				
Housekeeping log is current.				
Stairs				
Is lighting adequate to see and all light fixtures operable?				
Is the condition of treads and coverings good?				
Are handrails provided for three or more stairs?				
Are all riser height and tread depth uniform?				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Is the landing adequate and in good condition?				
Are all stairs and landings clear of debris, clutter or stored material?				
Ramps				
Is lighting adequate to see and all light fixtures operable?				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Does the ramp have the proper rise (maximum rise is 1:12 = 1 inch of rise for each 12 inches of length)				
Is the walking surface in good condition?				
Is the ramp and surrounding area free of clutter and stored material?				
Is the ramp in a location where it does not present a tripping hazard to others?				
Doorways				
Is the threshold in good condition and fastened tightly?				
Are temporary door stops removed and are permanent door stops located close to walls so they do not present tripping hazards?				
Are doorways clear of clutter or furniture so they are not blocked?				

Fall Prevention Safety Checklist (Outside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Parking Lots				
Is the surface of the parking lot in good condition, free of potholes, depressions, bumps and cracks greater than ¼ inch?				
Are manhole covers placed correctly and are edges free of debris and intact?				
Are parking bumpers correctly placed and in good condition?				
Are parking bumpers painted yellow to highlight visibility?				
Is all lighting in the parking lot in working order and functioning at proper times?				
Are curbs in good condition?				
Are there any trees overhanging the parking lot that need to be trimmed/pruned?				
Are garbage containers placed in their proper place? Are there leaks/spills from the containers that need to be cleaned?				
Are there any spots in the parking lot that have vehicle fluids (oil/antifreeze/brake fluid) pooled on the surface that could cause a slip?				
Sidewalks				
Is the sidewalk surface in good condition, free of cracks greater than ¼ inch, depressions, bumps, etc.?				
Are fallen leaves, seeds, berries, acorns, rocks and mulch cleared off sidewalks?				
Is lighting adequate both to see and for security?				
Do roof and building drainage systems direct water away from walkways? Is there any pooling of water that could cause people to slip?				
Are stairs and balconies sturdy, lighted and with good footing?				
Are stairs with three or more steps provided with a handrail?				
Are handrails on stairs, ramps and balconies secure?				
Are there any sidewalk expansion joints wider than ¼ inch?				
Are there any tree roots cracking and uplifting sidewalks that could create a trip hazard?				
Are sidewalk curbs/edges in good condition?				

Fall Prevention Safety Checklist (Outside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Sidewalks (continued)				
Are trees evaluated regularly and trimmed when needed to protect roofs and sidewalks?				
Are there gaps or elevation differences between the sidewalk and adjoining grass/ ground that could trap a foot or twist an ankle?				
Snow Removal				
Have parking lots and sidewalks been cleared of snow and ice?				
Has salt or ice melt been applied to walkways?				
Have areas that have not been cleared or present hazards been closed off and marked with warning signs?				
Are records kept for all snow removal and salting activities?				
Is there frozen black ice near snow piles that are being unattended with ice melt?				
Are designated snow removal areas being utilized?				
Other				

Fall Prevention Safety Checklist (Inside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Door threshold is in good condition and fastened tightly.				
Mats are present, in good condition, dry and flat.				
Mats are positioned flush against the door threshold.				
Are temporary door stops removed and are permanent door stops located close to walls so they do not present tripping hazards?				
Are doorways clear of clutter or furniture so they are not blocked?				
Display Areas				
Is lighting adequate to see and all light fixtures operable?				
Elevation changes are highlighted by a change in color.				
No tripping hazards such as cords, rugs, deteriorated carpet or loose and broken tiles.				
Waste baskets, low tables and office equipment positioned so they do not present trip hazards.				
Drink containers covered.				
Displays do not obstruct walkways.				
Displays are solid and do not give way when leaned on for support.				
Hallways				
Is lighting adequate to see and all light fixtures operable?				
Are thresholds, transitions and expansion joints level and free of cracks or buckling?				
Are carpets in good condition? (i.e., no excessive wear, holes, fraying, stretched tight and seams tight)				
Are floor coverings other than carpet (ceramic tile/linoleum, etc.) in good condition? (i.e., tile buckled, missing, loose, poor condition, cracked, etc.)				
Are mats serviceable and in good condition? (i.e., curled, lying flat, stable or staying in place, or placed in the correct position)				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				

Fall Prevention Safety Checklist (Inside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Hallways (Continued)				
Are computer cords, power cables, vacuum cords, etc., managed so they do not present tripping hazards? (i.e., objects close to the outlet, cord covers used where needed)				
Is furniture in hallways kept to a minimum and limited to one side only? (includes wheelchairs, walkers and scooters)				
Are displays out of the way and away from doorways and walking areas? (includes Christmas trees)				
Is equipment stored out of walkways or in designated places to avoid tripping hazards?				
Are decorations managed so they do not present tripping hazards?				
Restrooms				
Floor is clean and dry.				
Is lighting adequate to see and all light fixtures operable?				
Housekeeping log is current.				
Stairs				
Is lighting adequate to see and all light fixtures operable?				
Is the condition of treads and coverings good?				
Are handrails provided for three or more stairs?				
Are all riser height and tread depth uniform?				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Is the landing adequate and in good condition?				
Are all stairs and landings clear of debris, clutter or stored material?				
Ramps				
Is lighting adequate to see and all light fixtures operable?				
Are handrails, if applicable, in good condition? (i.e., ends turned in, tightly attached to the wall, free of splinters or cracks)				
Does the ramp have the proper rise (maximum rise is 1:12 = 1 inch of rise for each 12 inches of length)				
Is the walking surface in good condition?				
Is the ramp and surrounding area free of clutter and stored material?				
Is the ramp in a location where it does not present a tripping hazard to others?				

Fall Prevention Safety Checklist (Outside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Parking Lots				
Is the surface of the parking lot in good condition, free of potholes, depressions, bumps and cracks greater than ¼ inch?				
Are manhole covers placed correctly and are edges free of debris and intact?				
Are parking bumpers correctly placed and in good condition?				
Are parking bumpers painted yellow to highlight visibility?				
Is all lighting in the parking lot in working order and functioning at proper times?				
Are curbs in good condition?				
Are there any trees overhanging the parking lot that need to be trimmed/pruned?				
Are garbage containers placed in their proper place? Are there leaks/spills from the containers that need to be cleaned?				
Are there any spots in the parking lot that have vehicle fluids (oil/antifreeze/brake fluid) pooled on the surface that could cause a slip?				
Sidewalks				
Is the sidewalk surface in good condition, free of cracks greater than ¼ inch, depressions, bumps, etc.?				
Are fallen leaves, seeds, berries, acorns, rocks and mulch cleared off sidewalks?				
Is lighting adequate both to see and for security?				
Do roof and building drainage systems direct water away from walkways? Is there any pooling of water that could cause people to slip?				
Are stairs and balconies sturdy, lighted and with good footing?				
Are stairs with three or more steps provided with a handrail?				
Are handrails on stairs, ramps and balconies secure?				
Are there any sidewalk expansion joints wider than ¼ inch?				
Are there any tree roots cracking and uplifting sidewalks that could create a trip hazard?				
Are sidewalk curbs/edges in good condition?				

Fall Prevention Safety Checklist (Outside)

Location: _____ Inspector: _____ Date: _____

S = Satisfactory, **NI** = Needs Improvement, **NA** = Not Applicable

Items to be Inspected	S, NI or NA	Comments	Person Responsible for Correction	Date Corrected
Sidewalks (continued)				
Are trees evaluated regularly and trimmed when needed to protect roofs and sidewalks?				
Are there gaps or elevation differences between the sidewalk and adjoining grass/ ground that could trap a foot or twist an ankle?				
Snow Removal				
Have parking lots and sidewalks been cleared of snow and ice?				
Has salt or ice melt been applied to walkways?				
Have areas that have not been cleared or present hazards been closed off and marked with warning signs?				
Are records kept for all snow removal and salting activities?				
Is there frozen black ice near snow piles that are being unattended with ice melt?				
Are designated snow removal areas being utilized?				
Other				

Accident Investigations

The goal of a slip, trip or fall incident investigation is to identify the corrective action that will lead to prevention of a similar occurrence. The investigation should not serve as a mechanism to find fault or carelessness. It is important to investigate near-misses and falls that do not lead to injury since the clues these incidents offer may help eliminate the causes of accidents leading to injury.

Fact Finding

It is important to investigate the incident as soon as possible after it occurs, preferably within 24 hours. Failure to do so may result in the person involved and witnesses' loss of memory of the incident, change in conditions and/or loss of evidence from the incident, such as frayed mats. Taking photographs of the location of the incident and using a notebook to accurately record information will be helpful for later analysis.

Items to record include:

- Date and time of accident
- Pre-accident conditions
- Accident sequence
- Post-accident conditions
- Location
- Persons involved, including witnesses
- Contributing factors such as wet floor, bad mat, etc.
- Mental condition of person involved
- Any other items of note

Interviews

When conducting the investigation, an interview of the person involved in the incident should be completed:

- Gather details from the accident scene as soon as possible.
- Allow appropriate time for the interview process.
- Interview in a neutral area - the accident site is best.
- Prepare an introduction to establish a comfortable atmosphere.
- Discuss the purpose of the investigation and emphasize that you are gathering facts, not looking for fault.
- Prepare simple, direct and open-ended questions.
- Ask for the involved party's advice on prevention.
- Express your appreciation for the person's cooperation.
- Document findings

Accident Investigation

DO List

- Separate witnesses
- Get written statements
- Ask open-ended questions
- Provide diagrams
- Encourage details
- Show concern
- Visit the scene

DO NOT List

- Suggest answers
- Interrogate
- Dismiss details
- Focus blame
- Insinuate bad behavior
- Make judgment
- Recreate the accident – it may lead to another accident!

Identify Trends

Over time, attempt to identify trends, such as location, time of day, footwear, rushing, whether moisture was involved, etc. It may be helpful to create a slip, trip and fall map of the facility to identify where incidents are occurring.

Using the Accident Investigation Form

The ***Accident Investigation Form*** (page 51) should be used to investigate accidents and incidents, regardless of whether they result in injury. The purpose of the form is to gather information with the goal of identifying a corrective action that will prevent similar occurrences.

The ***Accident Investigation Form*** lists possible "Root Causes of Incident." The root cause is what the investigation ultimately tries to identify. For example, in conducting the accident investigation, it might be determined that water was on the tile floor, and that was the contributing factor to the accident. The unsafe condition identified would be "slippery/wet" walking surface. A simple, but inadequate, corrective action may be "keep floor dry." But a deeper investigation would attempt to identify a root cause such as "inadequate mat replacement policy during times of rain or snow."

Another example, a slip and fall occurs, and it is determined that the person that fell was wearing open toed sandals with a non-slip-resistant sole. The unsafe act identified would be "wearing improper footwear." A simple, but inadequate, corrective action would be "wear proper footwear." A deeper investigation would attempt to identify a root cause such as "inadequate enforcement of the footwear policy."

Root cause analysis attempts to identify a management program flaw or inadequacy that allows the accident to occur. By correcting the management program deficiency, a greater number of accidents are prevented than could be done by a simpler, but inadequate, corrective action.

Slip, Trip and Fall Investigation Report

The unsafe acts of persons and the unsafe conditions that cause slips, trips and falls can be corrected only when they are known specifically. It is your responsibility to find, name and state the remedy for these unsafe conditions in this report.

	Report Number
Name of person involved in incident	Job or position or non-employee
Location of incident: (interior/exterior location.)	Date and hour of accident / /2015 : am pm

Describe the injury ("N/A" if near-miss):

Unsafe Conditions Contributing to the Slip/Trip/Fall or Near-Miss		
Weather	**Walking Surface**	**Elevated Walkway**
☐ Ice ☐ Snow ☐ Rain ☐ Other	☐ Uneven ☐ Curb/pothole ☐ Slippery/wet ☐ Carpeting/mats ☐ Storage on aisles/steps ☐ Poor housekeeping ☐ Cords/hoses ☐ Other	☐ Stairs ☐ Ladders ☐ Other
Illumination	**Personal Factors**	**Specific Task**
☐ Poor lighting ☐ Glare ☐ Night ☐ Other	☐ Unsafe speed ☐ Short cuts ☐ Unfamiliar with area ☐ Unfocused ☐ Other	☐ Carrying load ☐ Working near water ☐ Entering/exiting vehicle ☐ Improper footwear ☐ Other

Slip, Trip and Fall Investigation Report

Describe the incident (State what the person was doing and the circumstances leading to the incident.)

_____

_____

_____

_____

Unsafe act--Unsafe work procedure _____

_____

Possible Root Cause(s) of Incident (Management Causes):

☐ Inadequate training
☐ Inadequate maintenance
☐ Inadequate enforcement
☐ Not following established procedure
☐ Inadequate inspection program
☐ Inadequate housekeeping
☐ Mental stress
☐ Inadequate policy or standards
☐ Other: _____

Witnesses (Name(s) of those who observed the accident) _____

_____

Witness Statement (Description of the accident; unsafe conditions observed; suggestion(s) for corrective action.)

_____

_____

_____

Corrective Action (Actions taken or proposed to prevent a repeat accident. Address root cause of accident.)

_____

_____

_____

_____

Additional Information: _____

_____

_____

_____	_____	_____
Investigator:	Reviewed and approved by:	Date report prepared: