# AN EMPLOYER'S GUIDE TO SLIPS, TRIPS AND FALLS

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# **INTRODUCTION**



Is gravity costing you? It costs many employers in Montana, and sadly, it costs employees too.

As a workers' compensation provider in the state, Montana State Fund sees a fair share of slips, trips and falls that occur while employees are at work. The costs incurred as a result of slips, trips and falls affect workers' compensation rates in the state of Montana, overall insurance premiums, and an organization's ability to maintain a profit or invest in its future.

Many slips, trips or falls are minor, causing "only" scrapes, bruises or embarrassment. However, some incidents result in severe injury – that can include temporary disability, permanent disability or even death. The costs are immeasurable when anyone loses their livelihood or the ability to provide for their loved ones.

The equation in physics for acceleration of a falling object from gravity is this:

$$g = 9.8 \text{ m/s}^2$$

But, in business the formula looks more like this!

$$9.8 \, \text{m/s}^2 = \$\$\$\$$$

# PROTECT YOUR PEOPLE PROTECT YOUR BUSINESS



Use this guide to assist you in protecting your assets. Here you will find invaluable tools and ideas to maintain a slip-, trip- and fall-free operation. Put these ideas in action using your management team, maintenance staff and safety committee.

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# FIVE COMMON CONTRIBUTING FACTORS TO SLIPS, TIPS AND FALLS



### I. Surface Design

Often flooring design is chosen for aesthetics, cost and durability. The choice of design may impact a human's ability to stay upright. Slip resistance can vary from surface to surface, surface conditions and type of footwear.

A static "coefficient of friction" or COF can measure slip resistance. This measurement is most commonly taken with a tribometer. Studies and regulations differ in COF requirements. The Occupational Safety and Health Act recommends (through a proposed nonmandatory appendix that has not been adopted yet) that walking surfaces have a COF of 0.5, and the American Disability Act recommends a COF of 0.6. Higher COF may be necessary for specific tasks such as walking on ramps, pushing, pulling or carrying objects.

### 2. Surface Conditions

Conditions can vary depending upon the environment and surface maintenance. Walkways that are likely to be wet or spilled upon present risk for slips or falls. Loose or torn carpeting, broken tiles or curled matt edges create tripping hazards.

### 3. Surface and Level Changes

Each time a surface changes, a person needs to adjust his or her gait to work with that surface. Surface changes, such as carpet to tile, should be minimized as much as possible to control slips, trips and falls.

Curbs, ramps, sloped areas, joints, or ridges that are greater than 1/4 inch in height are all examples of level changes. Level changes can pose a trip hazard, especially if an individual is not expecting it. Color contrast often is used to alert people of the level change.

#### 4. Obstructions

Extension cords, furniture, scrap materials and pallets are a few of many examples that can be obstructions in walking areas. Housekeeping and organization can quickly eliminate obstruction-related falls that occur every day.

### 5. Human Factors

Human interaction within the respective workplace plays a significant role in slip and fall prevention, and that human factor depends upon good work surface design, maintenance and housekeeping. Employers should focus upon those items as they are so much easier to control than human factors. Humans each have different physiological, cognitive, physical and psychosocial abilities. Age, impairments, gait and choice of footwear may also be contributing factors toward slips, trips and falls. Employers should provide safety training, establish a good safety culture and actively promote wellness to prevent injury. However, removing or controlling hazards is the best means of preventing injury.

# **GROUNDS MAINTENANCE**



### **Parking**

Safe parking should be provided for customers and employees alike. To achieve safe parking:

- Remove snow before majority of workforce arrives.
- Apply ice melt or sand before majority of workforce arrives.
- Sand and/or gravel is removed following winter months.
- Remove leaves from parking lot and walkways in the fall wet leaves can be very slippery.
- Mark and repair potholes, broken pavement or uneven areas in parking areas.
- Paint parking bumpers or speed bumps with bright colors.
- Provide well-illuminated parking and walking routes.
- Design and designate a walking route for employees.

### Walkways

- Address points mentioned in parking section above.
- Walkways should be smooth but not slippery.
- Ensure landscaping is maintained and kept clear of walking paths.
- Repair settling issues, root growth, or other dips and elevations.
- Paint elevation changes until repairs can be made.
- Ensure water does not accumulate on 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 and any bikes in the rack do not impede the walkway.

# **SNOW REMOVAL PLAN**



Winter's snow and ice can wreak havoc on Montana's businesses. Developing and implementing a plan for snow removal will minimize risk of customer and employee injury. Whether you contract snow removal services, remove snow with internal resources or do a little of both, it is essential to consider the following:

#### Who and When?

Contracted snow removal is an excellent service provided the contractor is removing snow when you need it most. Plow service should have snow removed before most employees arrive to work. The snow on the parking lot can be removed in its entirety since the lot is cleared of vehicles. For 24-hour operations, sections of the parking lot should be blocked from parking so that effective snow removal can take place. Set clear expectations with your contractor to ensure the service that you need can be provided.

Internal snow removal services must also arrive and have snow removed prior to most employees arriving for work. Often employers have two to three personnel who remain on call when snowstorms are forecasted.

Removing snow after employees arrive does not minimize the hazard, and you are dependent only upon human factors. If this is your plan, you can expect injuries.

If your business is not responsible for snow removal at your facility, ensure that the landlord, city or whomever is responsible is providing competent services. Typically, the facility manager is responsible for arranging snow removal when accumulations are more than one inch or when sleet or ice is accumulating. But sometimes alternative snow removal plans must be considered at your expense to protect your customers and employees.

### **Guidelines for Snow Removal**

The following are guidelines for effective snow removal practices:

- For dry snowfalls less than four inches, brooms can be used to clean walkways.
- If snow accumulation is four inches or greater, mechanical means such as a snow blower or skid steer loader should be employed.
- When ice cannot be promptly removed, sanding should be done in parking areas and walkways.
- Strategically place sand, salt or ice melt and encourage "self-service" treatment for your employees.

• Snow removal should be documented. See the snow removal report sample in the appendix.

### **Snow Pile Accumulations**

Identify a location for the snow to be plowed to and stored. Below are a few things to consider when determining where the snow piles can accumulate:

- Choose an area where runoff from melting snow is away from pedestrian traffic.
- Ensure that the snow pile is not obstructing views to traffic.
- Verify that roof drain outlets remain clear so that water can easily escape when it needs to.
- Keep all fire protection equipment, hydrants and control valves accessible.

#### **Establish a Snow Route**

Create a map to show employees the safest ways to get from the parking lot to the building. Ensure employees abide by the snow route, for their safety. Create traction in the walking areas using sand or other material designed for ice. Close long or steep walkways from use until the snow and ice are gone.

# **INSIDE**



Each business is vastly different in design and layout. Consideration of the points below will help in making your operations a safe one:

### **Entryways and Foyers**

- Consider canopy systems constructed over the entry way to lessen material buildup, such as snow, water and leaves.
- Ideally, a grate system will be installed for high-traffic entrances.
- Use mats to prevent tracking of moisture, dirt, mud and other materials into your facility.
- Establish an effective mat strategy to cover expected pedestrian travel. Ideally a three-component approach:
  - 1. A scraper mat placed outdoors at each entrance but undercover removes heavy debris from footwear.
  - 2. A wiper / scraper mat placed just inside the entrance to scrape and wipe off the remaining debris.
  - 3. A wiper mat then dries the bottom of the foot thoroughly for a safe transition to the nonmatted surface.
- Ensure the mat backing is appropriate for the surface on which it is placed. You do not want the mat to move while being walked upon.
- Ensure mats are well maintained and the edges do not create a trip hazard.
- The surface under the mat will need to be cleaned occasionally, otherwise the mat will become a moving object when dirt and dust accumulate underneath.

### Floors and Surfaces That Get Wet or Greasy

- Break rooms, lunchrooms, coffee pot locations are all areas for potential spills. Store clean-up materials and wet floor signage so that it is easily accessible. Expect immediate use of materials following a spill.
- Dishwashing and other areas where large amounts of liquid are present should have an anti-slip mat in place. Choose mats with beveled edges to prevent trip hazards. Mats should also have drainage ability to prevent soaked footwear.

- Kitchens or other areas where oils and grease are present should have anti-slip coating maintained on the floor surface. Proper floor maintenance is essential in these areas.
- Mechanical shops should have oil absorbent easily accessible should a spill occur.
   Absorbent should be applied and cleaned up as soon as possible.
- Leaks on equipment should be repaired to prevent drips and/or accumulations on the floor.

#### **Floor Care and Maintenance**

Understanding and utilizing proper cleaning and floor maintenance practices together is not only good for slip and fall prevention but it maintains the desired appearance and maximizes the life of the floor. Below are tips to consider within your floor care and maintenance program:

- Maintain surfaces according to the manufacturer's guidelines.
- Frayed carpet or missing tiles should be an unacceptable condition.
- Ensure cleaning products do not create a hazard. For example, applying several coats of wax to slip-resistant flooring will alter the slip resistance.
- Use the right cleaning product for the floor contaminants. Oily surfaces cannot be adequately cleaned with mild detergent and water. See the basic types of floor cleaners below.
- If the existing surface is slippery when wet, consider applying specialized treatment:
  - Professionally applied surface modifiers work well on floors that contain minerals, such as marble, ceramic tile or stone. Surface modifiers alter the physical properties of the floor's surface without changing the aesthetics. The process creates micropores or tread patterns that increase the COF and render them safer to walk on.
  - ◆ Mop-on cleaners / treatments can be applied routinely by internal staff to raise the COF of finished floors.
  - Investigate new products that claim to improve slip-resistance of floors.
- Consider having your floors tested with a slip meter to identify the existing COF.
- Provide your staff responsible for floor care with ongoing education on proper floor maintenance procedures.
- Use general safety measures when cleaning floors, such as "wet floor" signs or barricades.
- Maintain a documented floor care maintenance log that outlines the date, floor location, type of care provided and by whom. See the sample floor maintenance log in the appendix.

Basic Types of Floor Cleaners							
Cleaner	Effective for	Process					
Alkaline cleaner	Fats and oils	Converts fat and oil into soapy slippery residue. The floor must be thoroughly rinsed with clean hot water and dried or polymerization can occur.					
Acidic cleaner	Fats and oils	Uses oxide reduction instead of soapy solution.					
	Mineral buildup	Reduces chance of polymerization.					
Neutral cleaner	Glossy finish	Applied with typically no need for rinsing. Good for daily maintenance.					

#### **Stairs**

- Stair design should comply with current building and life safety codes.
- Provide adequate lighting in stairwells and landings.
- Consider making treads more visible by adding color contrast to the nosing. The
  contrast promotes safe descending as it allows better judgment on the vertical
  foot descent.
- Place and maintain handrails so that they are effectively used. A spherical railing style is more user-friendly than a square railing. Splinters, paint chips and grime reduce handrail use.
- Handrails should extend at least 12 inches past the end of the stair. Handrails that
  end too soon cue the mind that stairs have also ended, creating the potential for
  fall.
- Prevent distractions such as artwork, signs or posters near the stairs.
- Establish safe use expectations.

### **Elevated Storage and Ladder Use**

- Establish storage areas that are accessible from ground level.
- Strategically place appropriate ladders so that they are easily accessible, which prevents employees from climbing on desks, chairs or cabinets to gain access.
- Inspect and maintain ladders through a documented process.
- Tagout or fully remove ladders from the work area if they are damaged and need repair.
- Design work platforms into areas and at equipment where elevated operations are necessary.
- Consider the use of portable stairs if employees need to carry items from an elevated storage place.

# **HUMAN FACTORS**



Human locomotion is actually quite complex. There is a constant threat of falls when traversing walkways, ramps and stairs. The human body must control shifts in body weight at the exact time a foot is placed, all the while reacting to balance, postural sway and visual perception.

### **Walking Cycle**

Understanding the basics of the walking cycle can assist in a full understanding of why falls occur and what countermeasures can be implemented to prevent them. The walking cycle is described as this:

- The body leans forward.
- The lead foot swings into a heel strike and at about the same time ...
- The rear foot begins a rolling push-off and then swings forward for a new heel strike.

Both the heal strike and push-off are the points in the walking cycle when a person is most likely to slip. The heal strike force is about 15% of body weight. The push-off force is about 20% of body weight. The force corresponds to the resistive force necessary to maintain stability during the walking cycle.

Tripping is most likely to occur when the leg is swung forward, and there is insufficient ground clearance for the foot. The minimum ground clearance can range by a person's gait. One study observed a range between 3/8" and 1.5" as necessary clearance during the swinging forward phase of the walking cycle.

Each person has a different gait, vision, balance and recovery ability. Therefore, it is best to design and maintain safe walking / working surfaces throughout your facilities rather than to depend upon each individual.

# **FOOTWEAR**



Although your company may not have influence over the footwear chosen by customers and visitors, you do have the ability to control the type of footwear that employees wear while at work. Study after study of organizations implementing footwear policies for their employees has proven a great reduction in slip- and fall-related incidents.

#### **Footwear Considerations**

- Choose footwear to fit the activities performed by your employees. For example:
   Do they need ankle support, are they exposed to petroleum or food-based oils, will
   they be working in a wet environment, do they need thermal or electrical
   protection?
  - Avoid footwear with hard plastic or leather soles and heals:
    - Plastic or PVC soles such as in high-heeled shoes or boots provide little slip resistance on a hard walkway surface.
    - Leather is an inconsistent material and changes over time. It can wear out and/or become saturated with water, oil or grease.
- Choose footwear with an adequate tread pattern and avoid smooth soles:
  - Tread patterns should be random patterns perpendicular to the direction of travel.
  - Tread patterns that run in the direction of travel tend to accentuate forward motion like a skate or ski would.
  - Avoid tread patterns that can trap liquid rather than disperse it, as this can create a hydroplaning effect.
- Softer soles are generally more slip-resistant than harder materials because they "grab" the surface more effectively.

Just like vehicle tires, the tread, along with other features on footwear, wears down. Footwear should be inspected, maintained, cleaned, alternated and replaced.

### **Footwear for Icy Conditions**

Good tread and soft soles grip the surface and helps prevent slips and falls. However, when ice is present, the tread and sole properties only "float" on top of the ice surface. Caution can be exercised while traversing ice, but the risk of slipping and falling is still present. Traction devices can be built into shoes or placed over the shoes to reduce the risk. The traction devices "dig" into the surface and help improve the coefficient of friction. Traction devices become dangerous on non-icy surfaces such as concrete or tile, as they only sit on top of the surface rather than "dig" into it. Traction devices on footwear should be removed just outside or immediately upon entering the building.

# **FOOTWEAR PROGRAMS**



Various options can be considered in establishing a footwear program. Most employers are concerned about purchase options, so a few of the many options are outlined below to assist with the decision-making process:

Provision	Pros		Cons	
Company purchase	•	Consistent protection	•	Purchase price
	•	Consistent look or style	•	Employee turnover
	•	Easy to ensure daily use	•	Administration of program
	•	Age of shoe can be tracked; consistent change out schedule		
Employee purchase	•	No investment by company Shoe purchase can be made through payroll deduction	•	Need to ensure correct shoe purchased More difficult to enforce Employees are less likely to buy a new pair of shoes when their shoes show signs of wear
			•	Unaffordable to employee
Shared cost	•	Vested interest from both parties	•	Cost burden to employees
Loaners	٠	Cost savings with employee turnover	•	Multiple sizes Sanitation concerns Storage Lost or left at home

Footwear policies can be set up as a mandate, a strong recommendation, or voluntary. Mandated policies should be carefully written and consistently enforced. Footwear vendors and/or legal counsel may be able to assist you with your policies.

# **INSPECT FACILITY**



Facility inspections focusing solely on slip, trip and fall hazards should be conducted proactively on a scheduled basis. Personnel who do not have assigned maintenance responsibilities should be involved in performing the inspections. The inspection's goal is to record facility conditions, improve the condition, and continue monitoring the improved condition.

Inspections following an incident should also be conducted. See the investigation process (p. 30) for more information.

A sample slip, trip, fall inspection checklist is in the appendix. Your checklist should be customized to meet the needs of your facility.

# **INVESTIGATE INCIDENTS**



A proper investigation of a slip, trip or fall incident will help the office, company or facility accurately and effectively implement countermeasures.

There are two types of investigations to be conducted when it comes to slips, trips, and falls:

- 1. Customer-related incident investigations
- 2. Employee-related incident investigations

This guide focuses mostly on employee incidents – although prevention tactics applied can benefit both customers and employees. Consult with your general liability insurance provider to identify the steps and documentation necessary in handling a customer slip, trip or fall on your company's property.

Completion of a First Report of Injury is not necessarily an investigation as it is more a required report to your workers' compensation carrier that an employee was injured in the course and scope of employment. Often your workers' compensation carrier will investigate to identify

compensability of the claim. As an employer, you should conduct an internal investigation to determine the details of the incident and implement measures for future prevention. Investigations have multiple benefits, including:

- Establishes a caring culture.
- Identifies unsafe areas to eliminate accidents.
- Allows for improvement of the physical environment as well as improvement of work practices, policies and procedures.
- Prevents lost revenue.
- Deters fraudulent claims.

Investigations should *not* serve as a mechanism to find fault or carelessness. Below are some basic principles to be used during an investigation:

- 1. Gather details from the accident scene as soon as possible. Do not attempt to recreate the accident.
- 2. Allow appropriate time for the interview process.
- 3. Interview in a neutral area, accident site is best.
- 4. Prepare an introduction to establish a comfortable atmosphere.
- 5. Discuss the purpose of the investigation and emphasize that you are gathering facts not looking for fault.
- 6. Prepare simple and direct questions.
- 7. Don't ask questions that insinuate bad behavior.
- 8. Ask for the injured employee's advice on prevention.
- 9. Express your appreciation for each person's cooperation.
- 10. Interview each witness separately, and apart from the injured party.

Do's and Do Nots of an Investigation						
Do	Do Not					
Separate Witnesses	Suggest answers					
Get written statements	Interrogate					
Ask open-ended ?s	Dismiss details					
Provide diagrams	Focus blame					
Encourage details	Insinuate bad behavior					
Show concern	Make judgment					
Visit the scene	Recreate the accident					

Suspicions that a claimed slip, trip, fall did not occur or did not occur while the employee was at work may arise. Be courteous and hold your thoughts and beliefs for discussion with your workers' compensation carrier.

You may have an internal accident investigation form that you are already accustomed to using. Consider utilizing a specific form for slip, trip or fall incidents. The slip, trip, fall detail report provided in the appendix gathers thorough information on the details of the incident. The details can be trended over time to identify problem areas within your organization or facility, allowing you to implement safety improvements. You may consider developing your own form specific to your operations.

# **TREND & ANALYZE**



Analyzing the details of slips, trips and falls can help you address problem areas within an operation. An in-depth analysis often points out physical and environmental hazards but may also reveal operational difficulties and cultural norms that can be improved upon. Over time, trends may identify necessary improvements in:

#### **Hiring Practices**

- Interview process
- Preemployment physicals
- Drug free
- Character check
- Team fit

#### **New-Employee Training**

- Job understanding
- Clear expectations
- Safety rules and procedures
- · Task-specific safety
- Avoid assumptions of knowledge or skill
- Established footwear requirements

#### **Employee Health and Fitness**

- Vision correction
- Flexibility
- · Physical strength
- Preventative health care
- Need for medical benefits
- Effects of prescribed medicine
- Lifestyle habits
- Mental wellness
- Seasonal hobbies
- Dealing with personal problems

#### **Job Dissatisfaction**

- Personality conflicts
- Despises certain tasks
- Poor attendance
- Repetitive work
- Boredom
- Needs challenged

#### **Sick Time and Vacation Policies**

- Paid time off
- Enough days

#### **Work Schedules**

- Prefers different shift
- Needs consecutive days off
- Managing home life
- Set hours or task completion
- Breaks

#### Workloads

- Filling in for others
- Too many tasks for a day
- Piecework or production incentives
- Effects morale
- Fatigue

#### Floor Maintenance Practices

- Correct cleaners
- Correct application technique
- Adequate cleaning schedule
- Signage
- Safe work practices
- Housekeeping practices

### **Footwear Needs**

- Slip resistance
- Traction
- Traction devices
- No or low heel
- Closed toe and heel

### **Near-Miss or Close-Call Reporting**

- Noninjuries / incidents reported
- Time taken to get details
- Encouragement or rewards for reporting

# **BUILD A DATABASE**



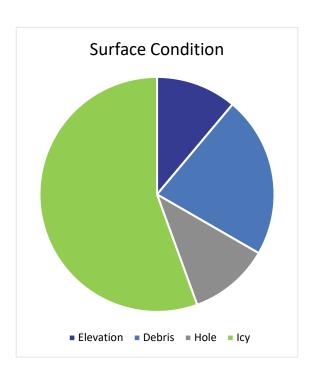
Details gathered from each incident or investigation will eventually start identifying visible trends. Consider tracking:

- Injured employee
- Date of hire
- Age
- Occupation
- Day
- Time of day

- Location
- Footwear details
- Body part
- Cost of injury
- Activity
- Surface and condition

Start with existing information: Review OSHA 300 logs, workers' compensation reports and near misses. Maintain the database and add new incident details as they are reported and investigated. Below are examples of trending details:





A database can be generated to collect details from the Slip, Trip and Fall Detail Report located in the appendix.

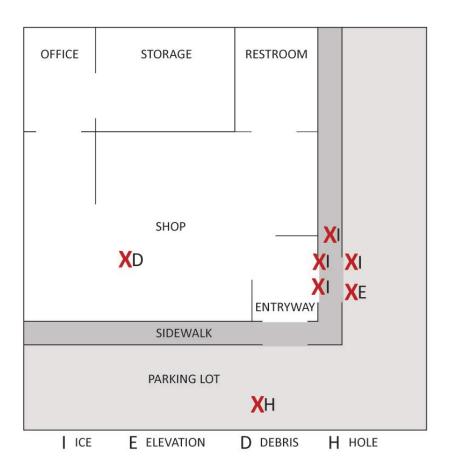
# TRACK WITH A MAP



Utilize existing facility maps or create a facility map to track:

- Where slip, trip, fall incidents are occurring or almost occurring.
- Where hazards are identified.

The map should be detailed for pinpointing problem areas. An **X** could mark the location of a slip, trip or fall. A corresponding letter could identify the contributing hazard if there was one.



### **Mapping Case Study:**

An organization continued to experience slips and falls at its facility by both customers and employees. The organization knew that ice was often a contributing factor and put a heavy focus on sanding outdoor pedestrian areas, but the trend continued.

The safety committee decided to begin mapping incidents to identify if certain areas needed more sanding than others.

Over a two-year analysis, the map identified that many of the related ice falls were occurring at the entryway.

The maintenance staff was positive that much of their focus was already placed at this location.

Upon further inquiry, the committee revealed that the roof's drainage outlet was at the entryway. The moisture and meltwater off the roof would freeze – leaving an icy area at the entryway that the sanding simply couldn't keep up with.

As a short-term solution the committee recommended the installation of an electric-heated mat to prevent ice buildup in the area. The maintenance staff researched heated mats and found the most durable and cost-effective for their need. After an investment of around \$2,000 the slips and falls, which had cost the organization well over \$30,000, have ceased.

Long-term solutions are planned for. The roof will be redone at which time the slope and drain outlet will be redesigned.

# **CREATE A SAFETY PLAN**



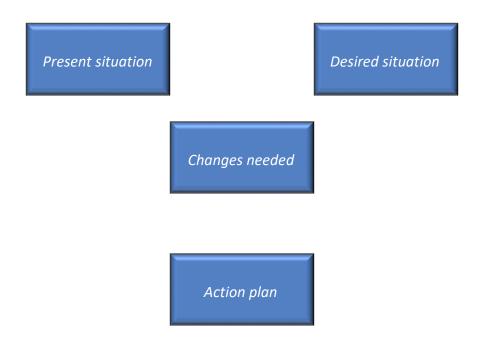
All elements of safety should be fully integrated into business operations. When safety management is separated from overall operations, it is often difficult to have success.

Strategic safety planning can be approached in a simplified manner on the premise that:

- 1. Current status is known.
- 2. Future status is desired.

Between the current and future status: obstacles and barriers. The obstacles and barriers need to be identified, worked around, changed or removed in order to have a successful plan.

There are many planning models available and all can be used effectively. Below is an example of a Y model that can be successfully used to create your plan.



#### I. Describe current situation:

The current situation could be multifaceted. Describe current behaviors, conditions, policies, etc. that are contributing negatively toward injury prevention and/or contributing to injury. A comprehensive assessment may be necessary to understand the current situation fully.

#### 2. Describe the desired situation:

Describe what the vision is for future behaviors, conditions, policies, etc. that would contribute positively toward injury prevention. A measurable goal, if possible, should be stated so that it is clear when the desired situation is attained.

### 3. Identify the changes needed:

Spell out the barriers to the desired situation. If the barriers are not identified and addressed, it is almost certain that the desired situation will never be reached, creating disappointment. Barriers could also be multifaceted: cost of improvements, unidentified responsibilities, lack of understanding. Barriers need to be described in terms of what can be controlled or impacted.

### 4. Develop an action plan:

Action plans must state specific steps necessary to address the needed change. Action plans must outline responsibilities and timelines. A Gantt chart is an excellent model for an action plan. Gannt charts outline specific project timelines and details, as provided in the example below:

Action Item	Champion	When / How Often
Complete cost analysis for equipment	Safety manager	End of first quarter
Inspect problem areas	Maintenance manager	Daily
Establish use policy	Plant manager	End of second quarter
Train employees	Respective supervisor	First month in second quarter

Once action plans are completed for the needed changes, identify the current situation, and measure against the desired situation. The cycle will likely continue, as this is an improvement process.

# **EDUCATE, CAMPAIGN, COMMUNICATE**



Just as with any other element of your safety program, training and communication are essential components of slip, trip and fall prevention.

Clearly communicated expectations will allow your staff to work toward the common goal of remaining injury-free. The following elements should be discussed thoroughly with new employees and addressed with existing staff on a scheduled basis.

- Footwear requirements or recommendations
  - Limits of footwear
- · Housekeeping policies and procedures
- Ladder safety
- Sign usage
- · Floor cleaning and maintenance
- Hazard reporting
- Near-miss and accident reporting
- · Horseplay, running, jumping
- Accountability process

Conducting a loss analysis will allow your organization to identify improvements that can be made. Set SMART (specific, measurable, attainable, realistic, timely) goals and communicate to the staff. Get each employee on board through assigned activities and objective measurements of success.

Use slip, trip and fall campaigns to maintain awareness. Below are a few examples used by other organizations:

**Yaxtraks on Loan:** Purchase an adequate supply in multiple sizes of over-the-shoe traction devices and encourage employee use when conditions are icy. Place devices in a visible area by the employee entrance/exit area. Include seating so that employees can safely don and doff the devices. Heed warnings on the devices so that unnecessary falls do not occur.

\*One company said that a small investment of \$500 for over-the-shoe traction devices annually may return thousands of dollars if even one fall was prevented. Often the traction devices need to be replenished each year, but that means the devices are being used by our employees.

**Walk Like A Duck:** Train employees on how to safely walk on lubricated surfaces. They need to lower their center of gravity by slightly bending their knees; increase their base of support by turning feet outward; take short steps slowly and use their "wings" for balance. Make it fun by putting up pictures of ducks, handing out rubber duckies, or using a duck call to alert employees of outdoor conditions before they leave.

**Penguin Pete:** A similar awareness technique to Walk Like A Duck, but uses penguins as a campaign mascot.

**Shake Your Way to Safety:** Fill reusable bottles with sand or ice melt and give each employee one to "shake their way to safety." Ensure each bottle is properly labeled. Provide convenient areas to refill the bottles so that they can be used over and over during the winter months.

**Wellness Programs:** Implement activity and wellness programs that get employees involved in their physical fitness. Individuals who have more strength and flexibility are more likely to recover their balance before falling. And, recovery from injury if an individual does fall is often much quicker for healthy individuals versus those with ill health.

# **APPENDIX**



# Slip, Trip, Fall Inspection Checklist

Inspector:	Date:
•	

Provide written comments on back for all items checked "No."

Area / Item	Yes	No	N/A
Parking Lots			
Well illuminated			
Free from potholes and/or disturbed asphalt			
Vehicle parking is properly marked			
Curbing and speed bumps are brightly colored			
Drain grates or utility hatches are flush with surface and brightly colored			
Walkway routes are properly marked			
Snow and ice are sufficiently controlled			
Outdoor Walkways			
Surfaces are level, free of cracks, bulges or settling			
Drainage is adequate and does not accumulate on walkway			
Walkways are illuminated well			
Surfaces are free of debris			
Snow and ice are sufficiently removed			
Bike racks or bikes are not intruding into walkway			
Landscaping does not intrude into walkway			
Indoor Walkways			
Surfaces are level, free of cracks, bulges, tears, breaks			
Carpets are flat and firmly fastened			
Surface changes do not have gaps			
Entryway mats are in place as needed			
Materials are stored out of the walkway			
Hoses and cords are stored out of the walkway			
Stairways			
Steps are uniform and in good repair			
Handrails are provided, secure and maintained			
Treads have non-slip material			
Stairwells are well illuminated			
Landings and stairways are free of debris			
Signs and art are not distracting			
Break rooms, Bathrooms, Lunchrooms			
Floor surfaces are not slippery			
Floors are free of water			
Wet floors are barricaded			
Buckets, mops, brooms, etc., kept out of walking area			

Slip, Trip, Fall Detail Report					
Injured or incident employee name:		Date and time of			
			incident:		a.m. /
			p.m.		
Was there injury?	No	Day of Incident:			
What was the injury?			M T W Th F Sa	t Sun	
			Date Reported:		
			Names of Witness(s):		
Did the person fall?	Yes	No	, ,		
Was this result of a slip or trip?	S	Т			
Incident Details					
Explain what happened:					
F					
Where did the incident occur?					
Parking lot Sidewalk Indoor Area I	Ramp	Sta	customer site		
Other:	<u> </u>				
What was the surface of the walkway	?		1.1		
Asphalt Concrete			arble		
Vinyl Dirt / Gravel Wood					
Tile Transitioning Surface		Ca	rpet		
Other:	\/aa	NI.		\	
Were surface hazards present?		No	If yes, describe hazard(s)		
Examples may be crack, hole, lip, nonstationary muddy, slippery, poor color contrast, poor lighti	•				•
indudy, supperly, poor color contrast, poor light	ing, curic	a mat, i	aised carpet, cords or noses in w	raikway, t	
Was the hazard identified through som	ie		Name identification mea	ins:	
form of communication? Yes N	No				
Activity Details					
Walking forward	Yes	No	Walking backward	Yes	No
Changing direction Pushing					
Turning a corner	Carrying				
Talking Listening					
Ascending		Descending			
Rushing		Jumping			

Injury Details					
Complete for Fall		Complete for Slip or Trip			
Did the person fall forv	vard or backward?	Did the person slip forward or backward?			
Which body part did th	e person fall on?	Is there pain as a result	of this slip or trip?		
Is there pain in other a this fall?	reas as a result of Yes No	Where is the pain?			
Were medical personne	el called to the scene?	Yes No			
	tairs, list number of ste dent (count from bottor	ps presentand n)	which step		
Footwear Details (choos	e all that are applicable)				
What type of footwear	was worn?	What was the sole mate	rial?		
Flats	Fashion boot	Hard material	Soft / Rubberized		
Pumps	Cowboy boot	Smooth surface	Treaded		
Slings	Open toe	Other:	Felt		
Oxford / Loafer	Open heel				
Clog	Platform	What was the heel design	gn?		
Flip flop	Tennis shoe	Continuum of sole			
Work boot	Ankle supported	Separate from sole:			
Other:		Squared edges Round edges Pointy			
		Heel height:			
		0-1" 1.1-2" 2.1-3"	+3"		
Was footwear in good incident? (broken strapheel, etc.)		Was footwear damaged (broken straps, loose so			
Yes No:		No Yes:			
Additional information	:				
Completed by:		Date:			

# **Snow Removal Report**

Sleet

Hail

Snow

Date:	Employee Name:
Snow depth:	Temperature:
Weather Conditions:	

Rain

Cloudy

Clear

Area	Direction			n		Treat	Time		
	N	S	Ε	W	Shovel	Blow	Plow	Sand	
Steps, Front									AM PM
Steps, Rear									AM PM
Steps, Right									AM PM
Steps, Left									AM PM
Ramps									AM PM
Sidewalk, Front									AM PM
Sidewalk, Rear									AM PM
Sidewalk, Right									AM PM
Sidewalk, Left									AM PM
Front Lot									AM PM
Side Lots									AM PM
Back Lot									AM PM

# Floor Maintenance Log

Date & Time	Location	Care Provided	Initials
Comments, Obs	ervations, Conce	rns:	



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