



Liability & Property Pool Workers' Compensation Fund

RISK CONTROL SOLUTIONS

A Service of the Michigan Municipal League Liability and Property Pool and
the Michigan Municipal League Workers' Compensation Fund

FALL PROTECTION PROGRAMS

THE PROBLEM

Workplace slips, trips, and falls remain a leading cause of injury to employees across all sectors of the U.S. economy. These injuries lead to medical costs in treating the employee, lost-time costs due to employee recovery, as well as increased administrative costs in managing the process of treating the employee. Members of the MML Workers' Compensation Fund share in this national trend.

Slips, trips, and falls are one of the leading causes of injury for public sector employees. From police officers, firefighters, and public works employees, to administrative office staff, slips, trips, and falls can be one of the most frequent – and most severe – causes of injury in their daily work.

SOLUTIONS

A number of variables contribute to the frequency and severity of slips, trips, and falls. While it is unlikely you can eliminate all slips, trips, and falls, you can take steps to affect some of the variables and reduce the number of incidents and the severity of the injuries that occur.

Inspections

Implement regular, documented inspections of your interior and exterior facilities to identify slip, trip, and fall hazards. These may include defects, deterioration, or other issues with walking surfaces, vehicles, equipment, or employee housekeeping; missing or non-functioning fall protection equipment; and other considerations discussed below.

- If you or staff identify a hazard during an inspection, either correct it immediately or post warning signs and a barricade to reduce the possibility of injuries.
- Document the correction or mitigation of all hazards identified – this can be very important if there is a claim or suit by an employee or member of the public related to either that particular hazard or a similar hazard.

Walking Surfaces

Consider walking surfaces from the start when planning a remodel or new construction. Avoid terrazzo, glazed ceramic tile, marble, and granite. These building materials can be especially slippery when wet. Consult with an architect who is familiar with the coefficient of friction of walking surfaces.

On a regular basis, review the walking surfaces of all municipal buildings and surrounding exterior property. Replace slippery surfaces when possible. If replacement is not feasible, take steps to reduce slipperiness and maintain the area in a manner that will reduce the hazard. A good source of information is a reputable building maintenance supplier. With the proper equipment, materials, maintenance, and employee training, you can significantly reduce the potential for slips, trips, and falls.

Identify and correct significant differentials in surface height or continuity. Falls frequently occur when adjacent walking surfaces are different in a way that requires or causes a person to change their gait and stride abruptly as they move from one surface to the other. A height differential of as little as 1/4” can cause a trip and fall. Similarly, changes in surface traction or a small but unexpected irregularity in an otherwise flat surface can disrupt a person’s equilibrium and cause a trip or fall. As much as possible, eliminate or reduce height and other differences between adjacent walking surfaces, or post signs to warn people of the potential hazard. Examples of such hazards include:

- transitions from carpet to tile;
- transitions from tile to carpet;
- carpets of different thicknesses;
- wrinkles in carpets or rugs;
- the changes in height, surface texture, and angle between a ramp and a flat walking surface;
- the height difference between a parking lot surface and bumper stops, or a street and curb;
- defects in construction;
- areas of broken or raised/sunken pavement;
- deteriorated surfaces such as a torn rubber mat; missing or lifting floor tiles; or an old doorway threshold strip that has come loose.

Make and implement a plan for managing the safety of outdoor walking surfaces during winter weather. In Michigan, icy walking surfaces in the colder months are a fact of life. While an employer may not be able to control the condition of every walking surface its employees encounter while working, any walking surfaces the employer *can* control should be inspected frequently and maintained in as slip-free of a condition as possible. The most common and effective method of limiting winter slips, trips, and falls is by plowing, shoveling, and salting walking surfaces. Yes, salting may lead to unsightly looking lobbies and entryways. But, if you compare this to the negative consequences of a serious employee or citizen fall, the benefits far outweigh considerations of appearances or other costs.

Develop a planned maintenance program for all locations. Determine what maintenance is required to provide clean and safe walking surfaces on a consistent basis. Monitor areas where water frequently collects, such as around drinking fountains and slop sinks. Make sure that you inspect and clear outdoor surfaces frequently, especially during colder months.

Risks associated with walking surfaces can also be reduced by installing and maintaining adequate lighting, gutters and other drainage to deflect water run-off, and appropriate mats and runners.

Fall Hazards (from elevation)

Reduce fall hazards by installing the proper protective equipment. Roof ladders, meter pits and lift stations, as well as any ladders that exceed 20’ in length must have fall protection.

Stairways should have adequate railings, proper riser and tread depth, and proper tread friction to eliminate or reduce slips and falls. Some agencies install aluminum tread edges on their stairways.

Vehicles and Equipment

Do not forget to address hazards in vehicles and equipment. Install anti-slip coatings or tape on the steps of vehicles and equipment. Make sure dump trucks have secure steps and handles welded to the dump box body. The regular vehicle inspection program should include a check of the non-slip vehicle steps and running boards to evaluate whether this equipment has become worn or broken.

Driver training programs should be implemented and should include considerations for winter driving. While a municipal entity typically has control over its own parking lots and garages, less is known when employees are working at a site out in the community. Employees should take care at and approaching these locations. Whenever possible, vehicles should be parked away from snowbanks, steep slopes, and clearly icy walking surfaces.

Employee Housekeeping

Instruct your employees to practice good housekeeping, such as keeping their work areas tidy and not leaving file drawers hanging open, or leaving tools, cords and other hazards lying on the floor. Have employees conduct regular, documented self-inspections. Routine review of employees' documentation by a supervisor can help ensure self-inspections don't fall by the wayside.

Footwear

Review the type of footwear that your employees are wearing. Some communities buy or contribute to the cost of footwear for their employees. Make the appropriate choice for the employee based on indoor or outdoor weather, the type of work or activities, the type and conditions of walking surfaces, and comfort. Discuss the possibility of reducing the hazard with a footwear specialist. Include the employees in this decision process. Consider this item's impact on the potential for reducing back injuries. If a footwear program is in place in your workplace, management should confirm that it is being properly utilized. Breaking in a new pair of work shoes may be an inconvenience to an employee, but the potential injury that can result from a worn shoe sole is far outweighed by a little inconvenience in breaking in a new pair of shoes.

INVESTIGATION OF SLIP, TRIP, AND FALL INCIDENTS

Conduct a thorough investigation of all reported slips, trips, and falls in order to determine the cause or causes of each incident and to develop possible solutions. Investigations are usually the responsibility of a supervisor, but your organization's Safety Committee may assume this responsibility. *Once causes of an incident have been identified, remedy them immediately if possible,* or post warning signs and a barricade to prevent another incident.

EMPLOYEE INVOLVEMENT

Actively involve your employees in the process of reducing injuries. Committees, incentive programs, and open recognitions for safety accomplishments may individually or collectively result in a stronger and more community-wide interest in the problem and its solution.

Review with employees the causes of slip, trip, and fall incidents that have occurred. Focus on mutual goals rather than assigning blame. Raising awareness about what factors contribute to injuries can empower and encourage employees to take steps to reduce those factors or avoid making the riskier choice when faced with a similar situation.


Identify special procedures or attention needed for specific employee positions or work locations and areas. Review prevention techniques with employees whose positions may not always allow for discretion in walking surfaces, such as police officers in foot pursuit of an assailant or a meter reader who must enter privately-owned structures with unknown hazards.

CONCLUSION

At first glance, it may be easy to underestimate the potential benefits of the above recommendations. However, acting on even a few of these preventive measures increases your control over the risks and reduces the likelihood and severity of slip, trip, and fall accidents – along with the resulting employee injuries, claims, lost workdays, lost productivity, and other associated costs.

If you need help or more information about preventing slips, trips, and falls, contact MML Risk Management Services or your Loss Control Consultant.

***Contact MML Risk Management Services Staff/
or your Loss Control Consultant for more information.***

 Important Phone Numbers	
MML Risk Management Services	734.662.3246 or 800.653.2483
Loss Control Services	800.482.0626

Note:

***This document is not intended to be legal advice.
It only identifies some of the issues surrounding this topic.
Public agencies are encouraged to review their procedures with an expert
or a competent attorney who is knowledgeable about the subject.***

PHONE NUMBERS AND MIOSHA WEBSITE

TO REPORT – AS REQUIRED – a fatality or any amputation, loss of an eye, or inpatient hospitalization of employee accident or illness from exposure to a health hazard associated with their employment:

- **To report a fatality**, call: 800-858-0397 (24 hours a day) **within 8 hours** of the fatality.

- **To report an amputation, loss of an eye, or any inpatient hospitalization**, call: 844-464-6742 **within 24 hours** of the injury or illness.

MIOSHA Toll-Free Number
1-800-TO-MIOSH(A) (1-800-866-4674)

Employee Discrimination Section
1-313-456-3109

MIOSHA Fatalities/Catastrophes
1-800-858-0397

Freedom of Information/Standards Requests
1-517-284-7740

Severe Injury Reporting
1-844-4MIOSH(A) (1-844-464-6742)

General Industry Safety & Health Division
1-517-284-7750

Appeals Division
1-517-284-7711

Recordkeeping Section
1-517-284-7788

Construction Safety & Health Division and
Asbestos Licensing
1-517-284-7680

Radiation Safety Section
1-517-284-7820

Consultation Education & Training Division
1- 517-284-7720

Wage & Hour Program
1-517-284-7800

MIOSHA WEBSITE:

<https://www.michigan.gov/leo/bureaus-agencies/MIOSHA/>



SELF ASSESSMENT: FALL PROTECTION PROGRAMS

Employers experience direct and indirect costs when employees are injured due to slips, trips, and falls. Employers share in the cost of medical treatments and wage benefits, but also incur the costs of lost time and lost productivity. Many employers erroneously believe they cannot control these types of “accidents” and resulting injuries. However, instituting even a few precautions can significantly reduce the risk of employee injuries. To evaluate how closely your current practices align with recommended best practices, ask yourself the questions below. To lower your risks, identify and correct any deficiencies as soon as possible.

Organization Name	Completed by	Date
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Does Your Organization:

(A response of “No” may require further analysis and/or an action plan for correction.)

Yes	No	
		1. Identify hazards for slips, trips, and falls related to walking surfaces? Do you:
<input type="checkbox"/>	<input type="checkbox"/>	Have an established program of inspecting, at regular intervals, the interior and exterior walking surfaces of your organization’s buildings and properties?
<input type="checkbox"/>	<input type="checkbox"/>	Inspect and clear outdoor surfaces more frequently during winter weather?
<input type="checkbox"/>	<input type="checkbox"/>	Document all inspections?
		2. Do your regular inspections of walking surfaces include checking for the following hazards:
<input type="checkbox"/>	<input type="checkbox"/>	- obstacles or debris on walkways and in other areas of foot traffic?
<input type="checkbox"/>	<input type="checkbox"/>	- changes in height or other qualities between adjacent surfaces?
<input type="checkbox"/>	<input type="checkbox"/>	- water collecting near/around drinking fountains, kitchen or utility sinks, or other similar areas?
<input type="checkbox"/>	<input type="checkbox"/>	- inadequate lighting installed or fixtures with burned out bulbs?
<input type="checkbox"/>	<input type="checkbox"/>	- gutters, downspouts, or other water diversion elements that are incorrectly positioned or clogged with leaves or other debris?
<input type="checkbox"/>	<input type="checkbox"/>	- failure to post warning signs and barriers around hazards that haven’t been corrected yet or are temporary (such as during construction or cleaning)?
<input type="checkbox"/>	<input type="checkbox"/>	- tools or materials left by employees in places where the items could pose a hazard?
<input type="checkbox"/>	<input type="checkbox"/>	- maintenance procedures and products that are increasing the risk of slips, trips, and falls?
		3. Identify other hazards for slips, trips, and falls? Do you:
<input type="checkbox"/>	<input type="checkbox"/>	Investigate slip, trip and fall incidents and injuries in order to determine their root cause(s)?
<input type="checkbox"/>	<input type="checkbox"/>	Regularly check the presence and functionality of handrails, guardrails, stairway treads, fall protection equipment for ladders and other elevated surfaces, warning signage and similar items?
<input type="checkbox"/>	<input type="checkbox"/>	Have a vehicle inspection program that includes regular review of anti-slip coatings/tape on the steps or running boards of vehicles and equipment?
<input type="checkbox"/>	<input type="checkbox"/>	Have an established employee self-inspection program to encourage and document good housekeeping in work areas?
<input type="checkbox"/>	<input type="checkbox"/>	Encourage employees to report any slip, trip, or fall hazards they observe or encounter?

Self-Assessment: Fall Protection Programs

Yes	No	
		4. Take prompt action to correct or mitigate hazards that are known or discovered? Do you:
<input type="checkbox"/>	<input type="checkbox"/>	Address hazards identified by the above processes and do so as quickly as possible?
<input type="checkbox"/>	<input type="checkbox"/>	Promptly replace walking surfaces that are damaged or deteriorated?
<input type="checkbox"/>	<input type="checkbox"/>	Promptly install or replace missing or damaged signage, hand- and guardrails, stairway treads, fall protection equipment, and other items for improved safety?
<input type="checkbox"/>	<input type="checkbox"/>	Put up barriers and post warning signage if a hazard cannot be corrected immediately?
<input type="checkbox"/>	<input type="checkbox"/>	Change maintenance procedures or products that are inadequate or increasing risks?
<input type="checkbox"/>	<input type="checkbox"/>	5. Document the corrective actions and mitigation of all known and discovered hazards?
		6. Proactively avoid acquiring slip, trip, and fall hazards? Do you:
<input type="checkbox"/>	<input type="checkbox"/>	Avoid selecting and installing surfaces such as terrazzo, ceramic tile, marble, and granite during renovations or new construction?
<input type="checkbox"/>	<input type="checkbox"/>	Evaluate design safety as part of your equipment purchasing process?
<input type="checkbox"/>	<input type="checkbox"/>	Purchase only maintenance supplies that do not increase hazards?
		7. Involve and educate your employees? Do you:
<input type="checkbox"/>	<input type="checkbox"/>	Invite and welcome staff participation in Safety Committee and other safety activities?
<input type="checkbox"/>	<input type="checkbox"/>	Provide recognitions or other incentive programs for safety accomplishments?
<input type="checkbox"/>	<input type="checkbox"/>	Encourage employees to report hazards?
<input type="checkbox"/>	<input type="checkbox"/>	Teach employees the types of issues to watch for, how to report them, and to whom?
<input type="checkbox"/>	<input type="checkbox"/>	When an employee reports a hazard, promptly investigate and address as appropriate?
<input type="checkbox"/>	<input type="checkbox"/>	Train maintenance personnel on properly cleaning and preparing surfaces, and removing trash and debris from walking surfaces?
<input type="checkbox"/>	<input type="checkbox"/>	Assign inspection responsibilities?

CONCLUSIONS



If you can honestly answer “yes” to all applicable questions, your risk management program for preventing slips, trips, and falls is on solid footing (pardon the pun!) – congratulations! Following the recommended practices reduces your organization’s exposure! to future claims in this area. Remain vigilant for new or changing risks and address them promptly.



If you answered “no” to one or more questions, your organization faces increased exposure to employee injuries and claims due to slips, trips, and falls, along with the associated direct and indirect costs. Each “no” response indicates a possible deficiency in your risk management program. You should consider these carefully and take one or more of the actions below:

- Correct any deficiency that may exist;
- Contact the Michigan Department of Labor Safety Education and Training (SET) Division at 517-322-1809.
- Contact MML Risk Management Services or Loss Control Services at the numbers below.

**Contact MML Risk Management Services Staff
or your Loss Control Consultant for more information.**



Important Phone Numbers

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