"Watch Your Step"

Preventing Slips, Trips and Falls at Work

Information Sheet

December 2017

Case Stud

Every working day in Ireland six people are hurt in work-related Slips, Trips and Falls (STF). STF are the second greatest single cause of workplace injuries. Over the years, many STF have tragically been fatal. A greater percentage of STF (than all other accidents) result in absences from work of one month or more. This information sheet will help you understand how to control work-related STF.

What does the law require?

The Safety, Health and Welfare at Work Act requires:

- safe access,
- safe systems of work,
- training,
- risk assessment, and
- a safety statement.

General Application Regulations require pedestrian surfaces to be:

- · clean,
- fixed, stable,
- not slippery, and
- without dangerous bumps, holes or slopes.

Butcher Slip Case Study

A butcher slipped on blood and accidentally started a machine with one hand. His other hand was caught in the closing blade. The machine operated because a critical safeguard did not work. Two fingers were amputated and another partially amputated on his dominant right hand.

Factors in work-related slips, trips and falls

Slips account for about half of all slips, trips and falls. Factors in work-related slips, trips and falls include:-



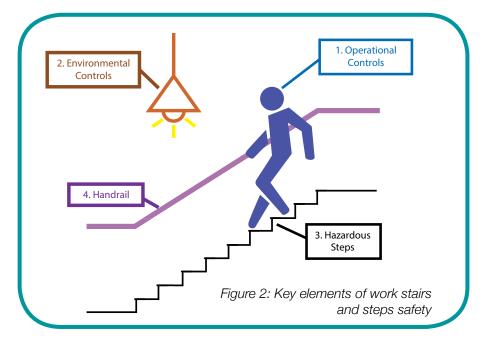
Figure 1: Factors in Work Slips, Trips and Falls



Stairs and steps

Every working day one person in Ireland is hurt in a STF on <u>stairs and steps</u> at work. Descending stairs and steps is a significant factor in accidents. A slip on stairs or steps can be caused by inadequate support for the ball of the foot, as well as a slippery wet surface.

Four interdependent key elements of work stairs and steps safety are discussed in the Safer Work Stairs and Steps webpage and detailed in our <u>Safer Work Stairs and Steps</u> Information Sheet at www.hsa.ie/stairs



- **1. Operational Controls** use rules and policies to prevent accidents, for example, by prohibiting hazardous activities. Implement good practices, for example, by showing the location of lifts, the use of handrails. Control problem steps or stairs, for example, by highlighting short or irregular steps.
- **2. Environmental Controls** remove distractions like posters. Provide visual cues, such as lighting and provide contrasting step edges or nosings and contrasting handrails.
- **3. Hazardous Steps** identify hazardous steps (with workplace checks). Eliminate where possible, or control, slippery, surprise, short and irregular steps.
- **4. Handrail(s)** provide properly sited, contrasting handrail(s) that permit a power grip.

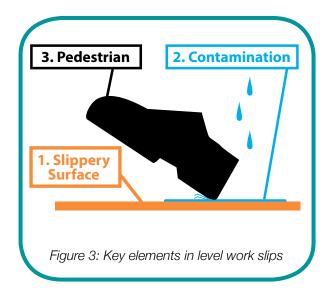
Slippery surfaces

Slips account for almost half of all STF. The other half are trips, falls and other STF accidents such as missteps. People generally slip on level surfaces when these surfaces are wet or contaminated.

For **new surfaces**, you should consult our advice at the <u>Selecting Surfaces</u> webpage at <u>www.hsa.ie/slips</u> before selecting/installing new surfaces.

For **existing surfaces**, you must check the condition of the surface and rectify slippery surfaces. See the advice in our <u>Slippery Surfaces</u> webpage.

- **1. Identification** map and identify areas where a slip risk exists. If in doubt, arrange for a measurement of actual slipperiness.
- **2. Operational Controls** deep clean to attempt to restore slip resistance. Control spills and try to prevent them. Use mats to prevent slips. Use slip-resistant footwear if needed. Communicate risks, including warnings and properly used signs.
- **3. Structural Changes** change the surface to a slip-resistant one. It may be possible to treat the surface to make it slip-resistant (using abrasive treatments, coatings, acid etching, strips, films). The risk of slips can be reduced by improving drainage.



Vehicles

Vehicle-related slips, trips and falls are important across all work sectors, not just the transport sector. Exiting vehicles was a factor in almost half of all vehicle STF work injuries.

Vehicle Accident Case Study



A 34 year-old father-of-two jumped from the lowest step of his HGV cab, landed on a rock and blew out his knee. He wore a cast from thigh to ankle for six months and had a chronic limp afterwards.

Significant factors and important controls are mentioned below, listed on our <u>Vehicles STF webpage</u> and detailed in our <u>Vehicle Slips, Trips and Falls Information Sheet.</u>



Figure 4: Three points of contact/ control on vehicle steps

- **1. Entering and exiting vehicles** find a safe parking space and check ground conditions. Remember, "Open the door, check the floor".
- **2. Vehicle steps** maintain slip-resistant vehicle steps in good condition and use three points of contact or control.
- **3. Slip-resistant footwear** provide, wear, and maintain slip-resistant footwear.
- **4. Vehicle walk-on surfaces** provide slip-resistant walk-on surfaces and keep them clean and tidy. Advice on Metal and Profiled Surfaces is available at www.hsa.ie/slips.
- **5. Risk areas** implement controls at risk areas including uneven ground, vehicle cabs, platforms and load areas, 5th wheel areas of HGVs, vehicle steps and ladders, tail lifts and tanker platforms.

Icy Conditions

<u>Cold icy weather</u> can double the number of slips, trips and falls. December and January are high risk periods.

You should plan and implement the "WALCS" control system detailed in our Ice Slips and Falls web section at www.hsa.ie/slips.

- Weather monitor weather conditions using resources such as Met Éireann "snow or ice" or "low temperature" warnings.
- 2. Activities take great care if walking on ice and wear the correct footwear (spikes or studs). Be aware of the advice for driving (such as avoiding unnecessary trips) and for clearing snow and ice.
- **3. Locations** consider high-risk locations such as third-party premises, car parks, external pedestrian areas and entrances.
- **4. Communication** ensure two-way communication to advise staff of hazards and allow them to notify changing conditions.
- **5. Sample Dynamic Risk Assessment** continually assess the working conditions and activities and ensure that your control measures are appropriate.

Floor cleaning

Wet floor cleaning causes slips. The people who slip are generally not "Cleaners and Helpers" but other persons at the workplace. Signs alone are not an effective control. Employers should use the risk assessment approach in our Floor Wet Cleaning web section at www.hsa.ie/slips.



Figure 5: Cordon System for wet floor cleaning

- **1. Identify Risks** floors that have not dried fully may be very slippery but the risk cannot be seen.
- **2. Communicate** communicate the risk of slipping and provide training.
- **3. Replace** where possible, replace floor wet cleaning with dry cleaning.
- **4. Reschedule** schedule floor cleaning for low traffic times. Clean last thing before the workplace closes, to allow to dry while there are no pedestrians.
- **5. Equip** ensure the right equipment, for example, cordon systems, measuring or dosing equipment.
- 6. Segregate segregate cleaned floors until fully dry.

Entrances, exits

Almost one in five entrance/exit slip, trip or fall victims are non-workers. Many entrance slips, trips and falls occur from 8am to 10am



Figure 6: Wet footprints inside entrance matting

In wet conditions, wet footprints inside an entrance indicate that moisture is entering the building, posing a slip risk if the flooring is not slip-resistant. The safest approach may be to ensure the floor areas inside and outside the entrance are slip-resistant when wet.

Find advice in our Entrances web section at www.hsa.ie/slips.

Over-used Signs



Figure 7: Sign alone failing to prevent a slip

Use signs only where hazards cannot be avoided or reduced. **Remove** signs when the situation to which they refer ceases to exist. For more information, see our Over-used Signs webpage at www.hsa.ie/slips.

Slip-resistant Footwear

Proper <u>slip-resistant footwear</u> can be vital in preventing slips where all other precautions cannot completely remove the risk.

Use Safety Footwear that:

 for fluids, typically has a close-packed well-defined tread pattern in softer material with deep cleats on a flexible flat sole;



Figure 8: Slip-resistant footwear sign

- for loose solids, typically has

 a more open well-defined tread pattern with wider channels, deep cleats and a flexible sole;
- for ice, typically has spikes or studs that will "bite" into the ice (but may be slippery on other hard surfaces);
- wherever possible, has been tested in the actual workplace for slip-resistance;
- · is comfortable and fits well;
- staff have agreed to and will wear;
- is reasonably easy to clean, maintain and will last a reasonable time, and
- is routinely checked and replaced.

Find advice in our Shoes and Footwear web section at www.hsa.ie/slips.

Further information

Further information is available in the following publications.

All are available for free download from the Health and Safety Authority at www.hsa.ie/slips.

- 1. "Safer Work Stairs and Steps Information Sheet"
- 2. "Preventing Vehicles Slips, Trips and Falls Information Sheet"
- 3. "Choosing Slip-resistant Footwear Information Sheet"

Contact the Health and Safety Authority at wcu@hsa.ie or LoCall 1890 289 389 Use www.besmart.ie, our free online risk assessment tool

