



OPERATIONAL



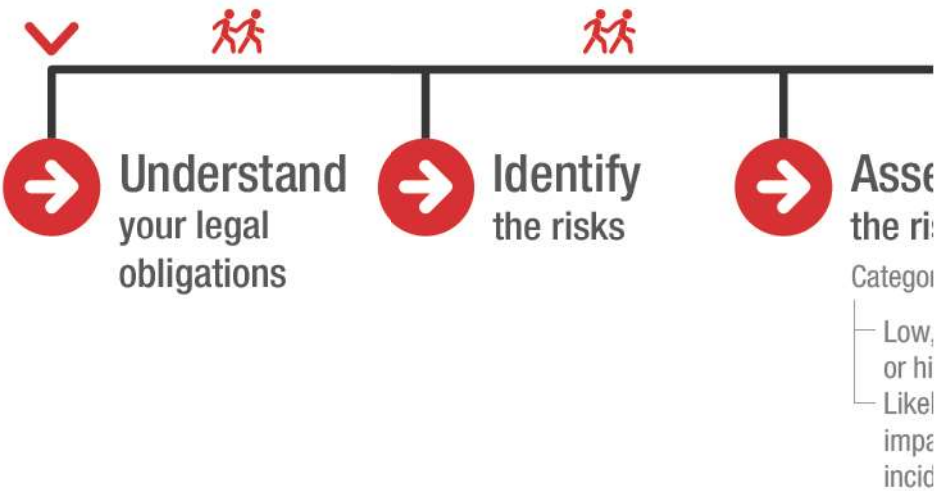
STEP BY STEP GUIDE

TO MANAGING THE
RISK OF **SLIPS,
TRIPS AND FALLS**

REPUBLIC OF IRELAND



**YOUR QUICK REFERENCE GUIDE TO THE PROCESS
MANAGING THE RISK OF SLIPS, TRIPS AND FALLS**



OF



OUR MISSION

As a mutual, our purpose is to safeguard and protect the insurable interests of our Members. We commit to being our Members' trusted insurance partner providing peace of mind through tailored insurance products, effective risk management supports, Member-focused solutions and equitable claims settlements.

Our long-term sustainability will be assured through continued financial strength while focusing on excellence and continuously providing Members with value for money.

CONTENTS

Introduction

- Statistics P/06
- Causes of slips, trips and falls P/07
- Hazards that may give rise to slips, trips and falls P/07
- Legislation P/07
- Floor R ratings (R9-R13) P/08

Risk assessment

- Step 1: Identify the risks P/11
- Step 2: Assess the risks P/12
- Step 3: Manage the risks P/15
- Step 4: Monitor and review the risks P/19

Other issues to consider

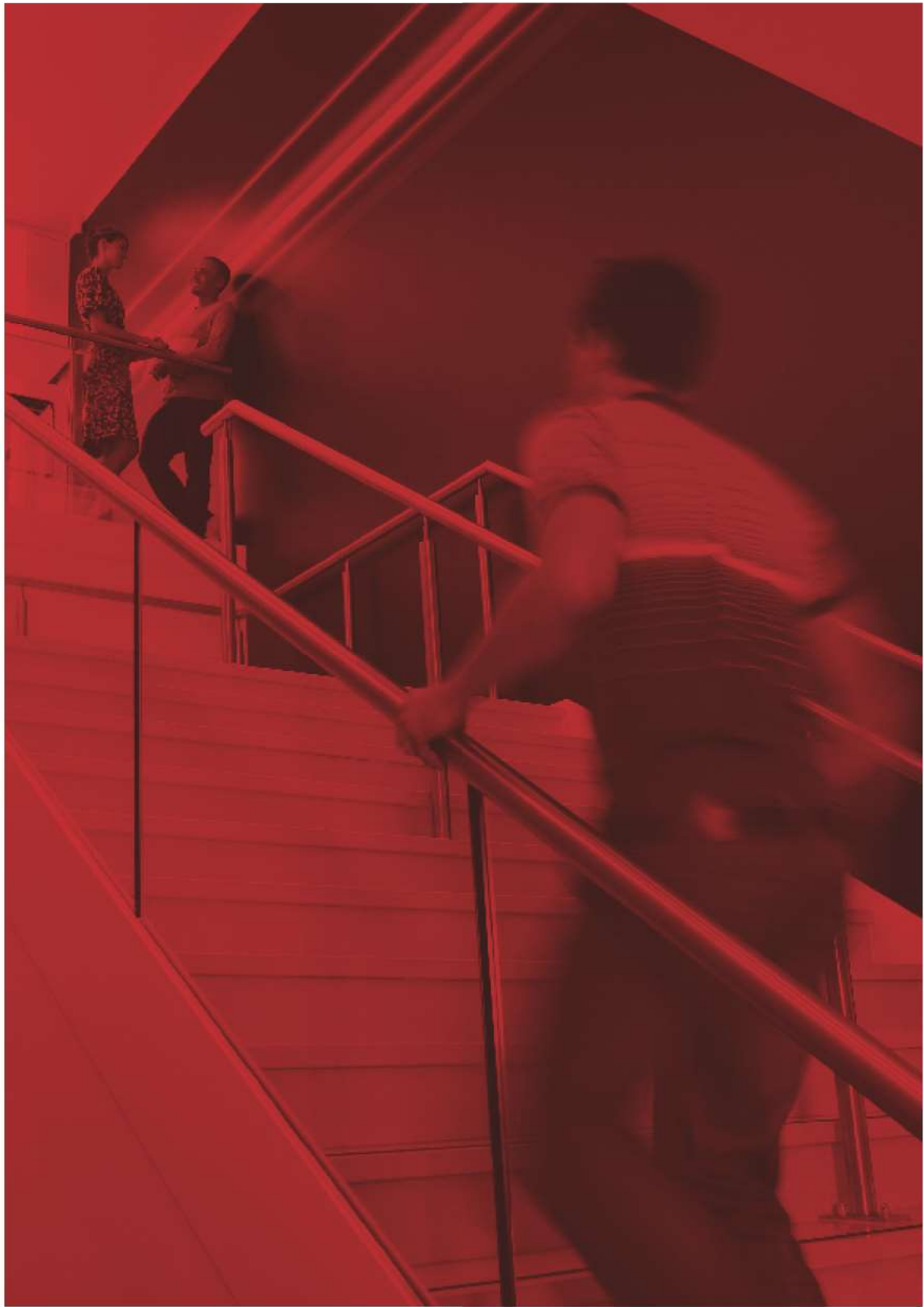
- Asset management, routine inspections P/21
- Design and refurbishment of facilities P/21
- Lighting P/21
- Maintenance P/22
- Incidents, including near misses P/22
- Personal protective equipment P/22

CONTENTS

– Spills	P/22
– Signage	P/25
– Slip resistance testing	P/25
Recording and documentation	P/26
Insurance	P/27
Claims	P/27
References	P/28
Appendix	
– Safety Inspection Checklist	P/30

Disseminated content in this guide is of a general nature and provided for interpretation by our Members and Member representatives only and solely to inform discussion within the parameters of the purposes for which it is disseminated whilst IPB Insurance CLG does not accept liability for access and any ensuing action by any parties other than intended recipients.

It should be noted that any and all references to insurance cover in the within content are for illustrative purposes only, as insurance cover is always effected subject to and strictly on the basis of associated policy provisions.







THIS IS THE START OF YOUR JOURNEY

We will guide you through the process of managing the risk of slips, trips and falls.





INTRODUCTION

Slips, trips and falls (STF) account for the second highest number of workplace injuries and account for close to one-fifth of all injuries reported to the Health and Safety Authority in 2017-2018.

The United States (US) Governors Highway Safety Association (GHSA) published a paper on understanding and addressing pedestrian safety in 2015. It identifies a problem in that walking and texting or talking changes the way we walk. The author references an Australian study of how 26 healthy people walked a short distance using three scenarios – while walking normally, while reading a text and while typing a text. The experiment confirmed that pedestrians walk at a slower pace when handling a mobile phone, especially when texting, and are unable to travel in a straight line. Additionally, a pedestrian using a mobile phone keeps his or her head down, neck immobile and arms locked at the side. Arm swing, vital for balance while moving, also stops. They cited Badger, 2014 saying a distracted pedestrian focuses on typing rather than walking, and on keeping the screen rather than him or herself stable.

This guide has been prepared to assist organisations in the management of the risk of slips, trips and falls (STFs). It is not a definitive guide but is designed to complement the directives, recommendations and advice given in various legislation and publications, some of which are outlined on page 28. IPB Insurance has also produced a Guide to Managing Road and Footpath Risks. A copy of this can be obtained by emailing marketing@ipb.ie.

Statistics

Every working day in Ireland six people are hurt in work-related STFs. Slips account for about half of all slips, trips and falls reported to the Health and Safety Authority (HSA). STFs are reported because they resulted in an absence by the injured party of three days or more from work. A quarter of those incidents led to the injured person missing over a month from work (HSA, 2017).



The data provided by the HSA only relates to employee incidents, whereas many members of the public sustain STF injuries that may be very significant. These incidents occur in buildings and grounds owned and managed by third parties.

The Personal Injuries Assessment Board (PIAB) (2019) reports that the most common type of workplace claim is for STFs. There were 2,305 public liability claim awards in 2017.

The average public liability award made in 2018 was €28,372. The report from PIAB reveals that the number of awards in excess of €100,000 decreased to one in 2017. However, the vast majority of public liability awards (78%) were for less than €38,000. (PIAB, 2019).

Causes of slips, trips and falls

The causes of STFs may be associated with:

- Distraction, e.g. using mobile phones while walking
- Manual handling operations
- Footpaths, corridors, halls
- Floor cleaning
- Vehicles
- Stairs and steps

- Wet surfaces
- Footwear
- Balance problems.

Hazards that may give rise to slips, trips and falls

- Distractions
- Slippery surfaces arising from water, ice, snow, polish, oil or other contaminants
- Unsuitable footwear
- Uneven ground coverings including damaged floor coverings
- Changes in floor level
- Obstructions and protrusions including mats, trailing wires and hoses
- Poor lighting/visibility
- Poor housekeeping.

Legislation

The Safety Health and Welfare at Work Act, 2005 specifies the legislative compliance responsibilities for employers, employees and contractors and the importance of undertaking a documented risk assessment. Regulation 9 of the Safety Health and Welfare at Work (General Application) Regulations 2007 says that floors should be not slippery. The Occupiers' Liability Act, 1995 specifies the legislative responsibility of property



owners to provide a safe environment in respect of visitors, recreational users and trespassers.

Floor R ratings (R9 – R13)

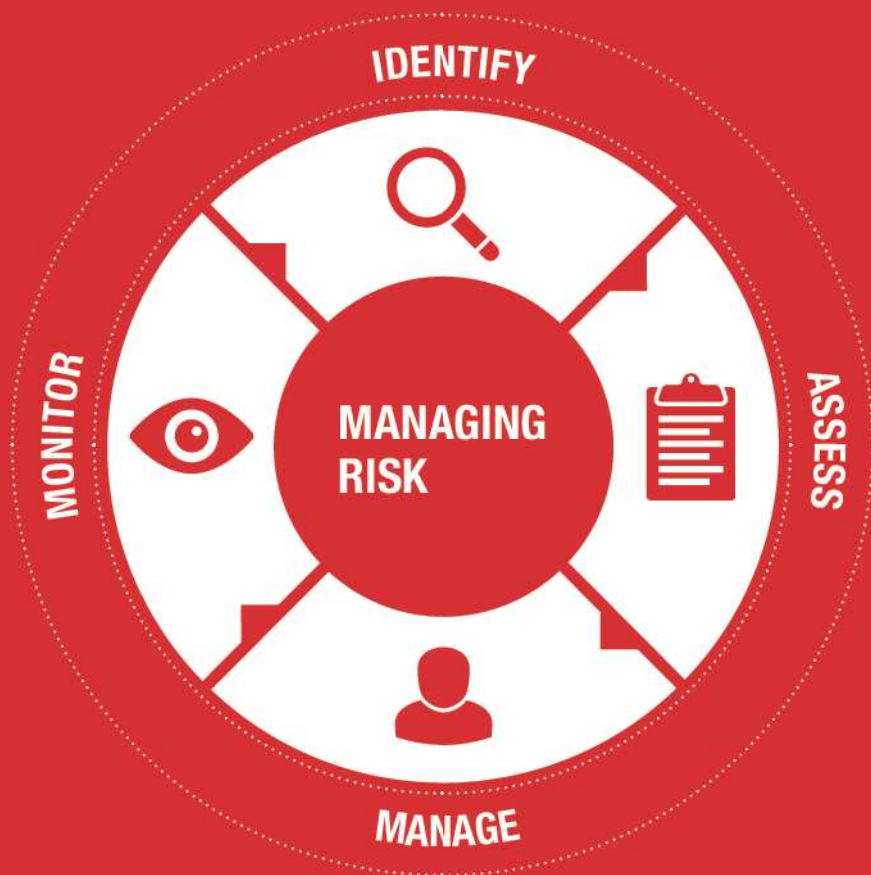
The UK's Health and Safety Executive (2012) states that the R scale runs from R9 to R13, where R9 is slippery when wet and R13 the least slippery.

Floor R ratings explained

R1 to R8 do not exist	R9	R10	R11	R12	R13
	High Slip Risk	Moderate Risk	Low Slip Risk		

The HSE UK, assessing the slip resistance of flooring, advises that floors classified as "R9 (or in some instances R10) will be slippery when used in wet or greasy conditions. Further problems may arise from the wide range of CoF within a given classification: for example, R10 covers a CoF range from 0.18 to 0.34, which represents a very wide range of slip potential."







RISK ASSESSMENT

A risk assessment should be undertaken when a building/infrastructure is occupied for the first time, when any significant change to the infrastructure takes place, or if an incident resulting in a STF occurs.

There are four key steps to the risk assessment process:

Step 1: Identify the risks

Note the STF causes and hazards listed above when identifying risks. Consider the risks to employees, contractors and visitors to the building. Be aware of the age groups of people using the building, including people with a disability, people with young children and those who may not be able to read signs. The risk of an STF when it materialises may be an adverse impact on a person's dignity from slipping on a wet floor and no serious injury may be sustained. However, in some instances serious injury may be sustained, such as fractures or even quadriplegia or death from tripping, for example on a staircase resulting in a fall from a height.



Step 2: Assess the risks

Taking account of the risk and the existing management controls, the organisation should assess the likelihood of the risk occurring and the impact of the risk if it does occur. The assessment can be performed using the model overleaf. The risk assessment records a qualitative assessment of risk but assigns a risk rating score that is the result of multiplying likelihood by impact, i.e. $L \times I = R$ (risk rating).

When assessing the likelihood of an STF occurring, consider physical factors that include the environment, floor surface, footfall, same level/split level etc. that may affect the probability of the incident occurring. When assessing the impact of an STF, consider the worst-case scenario that could arise, such as a fatality or quadriplegia.

Each identified risk should be recorded in the appropriate box in the diagram. Risks located in the red boxes will require immediate attention, amber will require monitoring and green can be reviewed as appropriate.

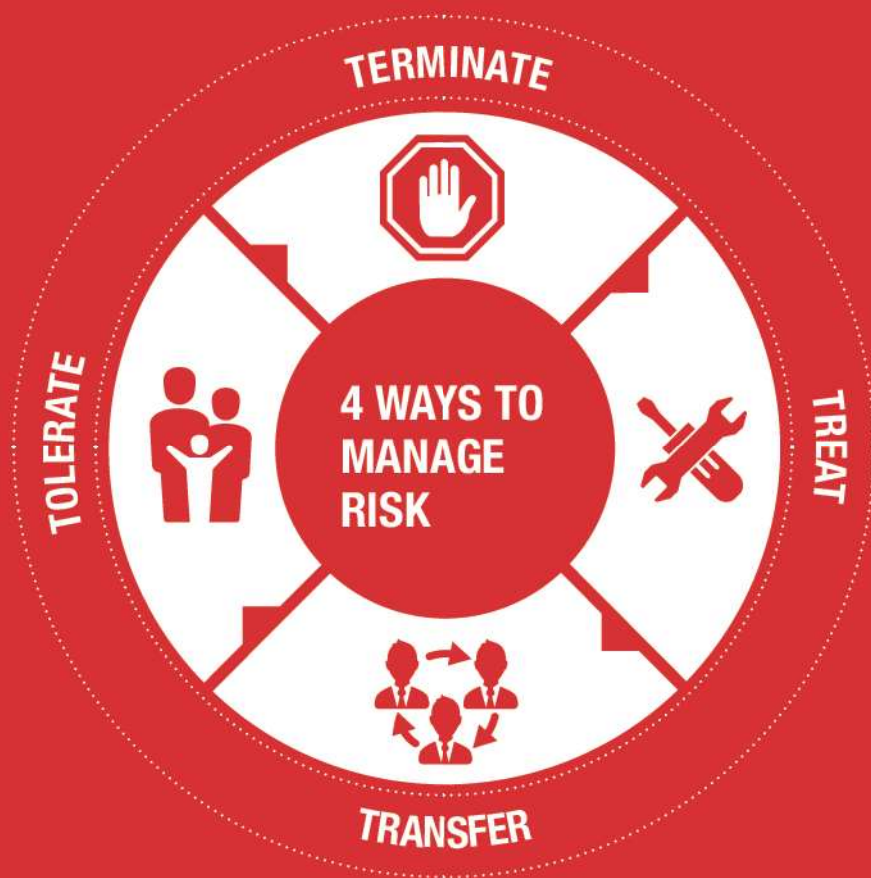


RISK ASSESSMENT MATRIX

LIKELIHOOD	ALMOST CERTAIN: 4	4	8	12	16
	LIKELY: 3	3	6	9	12
	UNLIKELY: 2	2	4	6	8
	RARE: 1	1	2	3	4
		MINOR: 1	MODERATE: 2	MAJOR: 3	SEVERE: 4
		IMPACT			



● LOW: 1-3
 ● MEDIUM: 4-8
 ● HIGH: 9-16





Step 3: Manage the risks

There are four main ways to manage risk:

1 Terminate the risk

This should always be the first option. Where a defect is identified that could give rise to an STF incident, then every effort should be made to eliminate the risk either at the design stage of a building or ground, or as soon as practicable after the incident has been identified. The use of non-slip surfaces or floor coverings to eliminate slips is one such method; however, the floor covering must be maintained to ensure it does not deteriorate and result in a slip and fall incident.

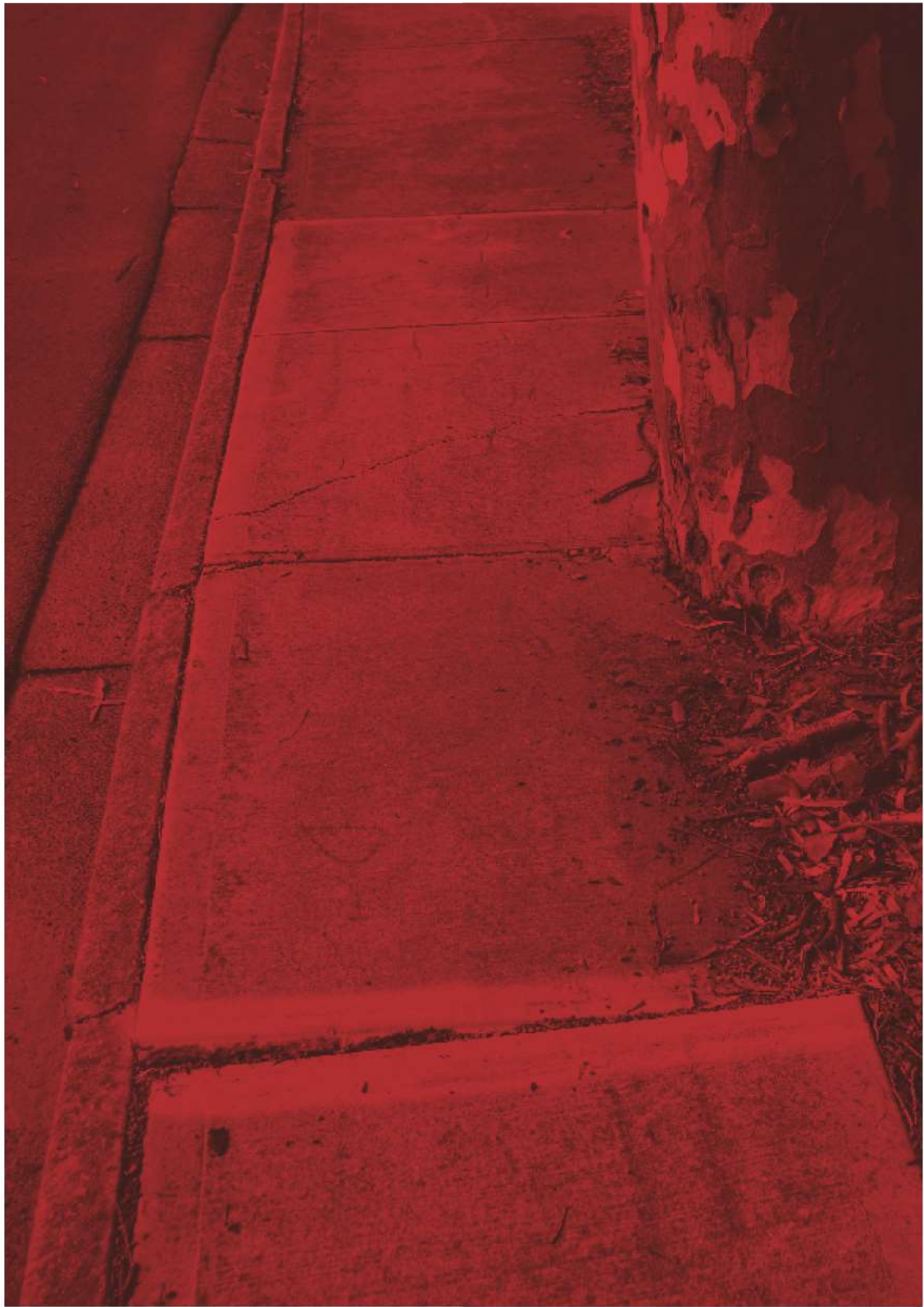
2 Treat the risk

If it is not possible to eliminate the risk, then implement appropriate controls to treat the risk and to reduce the risk to the lowest level possible. This may involve:

- Providing education and/or warnings regarding the increased risk of walking while distracted by mobile devices
- Using mats at doorways in wet weather
- Providing measures to protect from environmental elements, such as an external canopy, revolving doors, recessed mat wells, umbrella stands, umbrella covers at entrances, etc
- Choosing a slip resistance surface which has been shown to provide a low risk of slip in normal conditions, in locations such as dry areas (entrance areas, meeting rooms, public areas) and wet areas (such as swimming pool surround areas)
- Clearing pathways and steps during snow or ice
- Using signage to warn people of the risk of an STF. It should be noted that the display of a warning sign does not remove the liability from a property owner if a person sustains an injury (HSE V Ikram, High Court, February 2014)
- Regular sweeping/hovering up of water, e.g. at swimming pools and the vicinity of the pool such as dressing and rest room areas, or where large collections of water form during very heavy rain, such as in underground car parks



- Providing clear information to employees, visitors and contractors, such as:
 - Using pictograms for those who may not understand English, e.g. a person holding a child's hand and 'no phone' signs when using an escalator or using the stairs, both on the ascent and descent sides
 - Providing information to employees and others on appropriate footwear can assist in eliminating incidents
- Implementing an inspection regime for buildings and surrounding areas, such as pathways and car parks, and access routes to buildings. An inspection regime is a very useful method to identify deterioration in the fabric of a building or the surrounding area, or to identify poor housekeeping, all of which may contribute to an STF for any person. An inspection regime should be implemented during inclement weather where damage to footpaths, car parks and roadways may occur. It may be necessary to undertake walked monitoring exercises on an hourly basis during peaks in pedestrian traffic or in areas where water spillages occur on a regular basis, e.g. entrance foyers, reception areas, kitchens, swimming pools, etc
- Communicating the importance of cleaning to all cleaning staff, whether employed by the building owner or contracted, as improper cleaning can be a significant contributing factor to STF incidents. Improper cleaning and the incorrect use of chemicals can frequently be responsible for floors losing their slip resistance and thus contributing to STF incidents. When cleaning corridors, staff should be advised to divide the corridor into two lanes and clean one lane at a time
- Extending training to contracted staff, e.g. security personnel to whom spillages may be reported. They may be advised to stand over a spillage to prevent an STF until the area has been appropriately cleaned dry.





3 Transfer the risk

This entails taking measures to transfer the risk or responsibility for a risk to a third party, for example by arranging appropriate insurance cover.

4 Tolerate the risk

Generally, the impact of a risk may be tolerable and therefore it may not require any further action to be taken. This decision can only be taken when underpinned by a rigorous risk assessment.





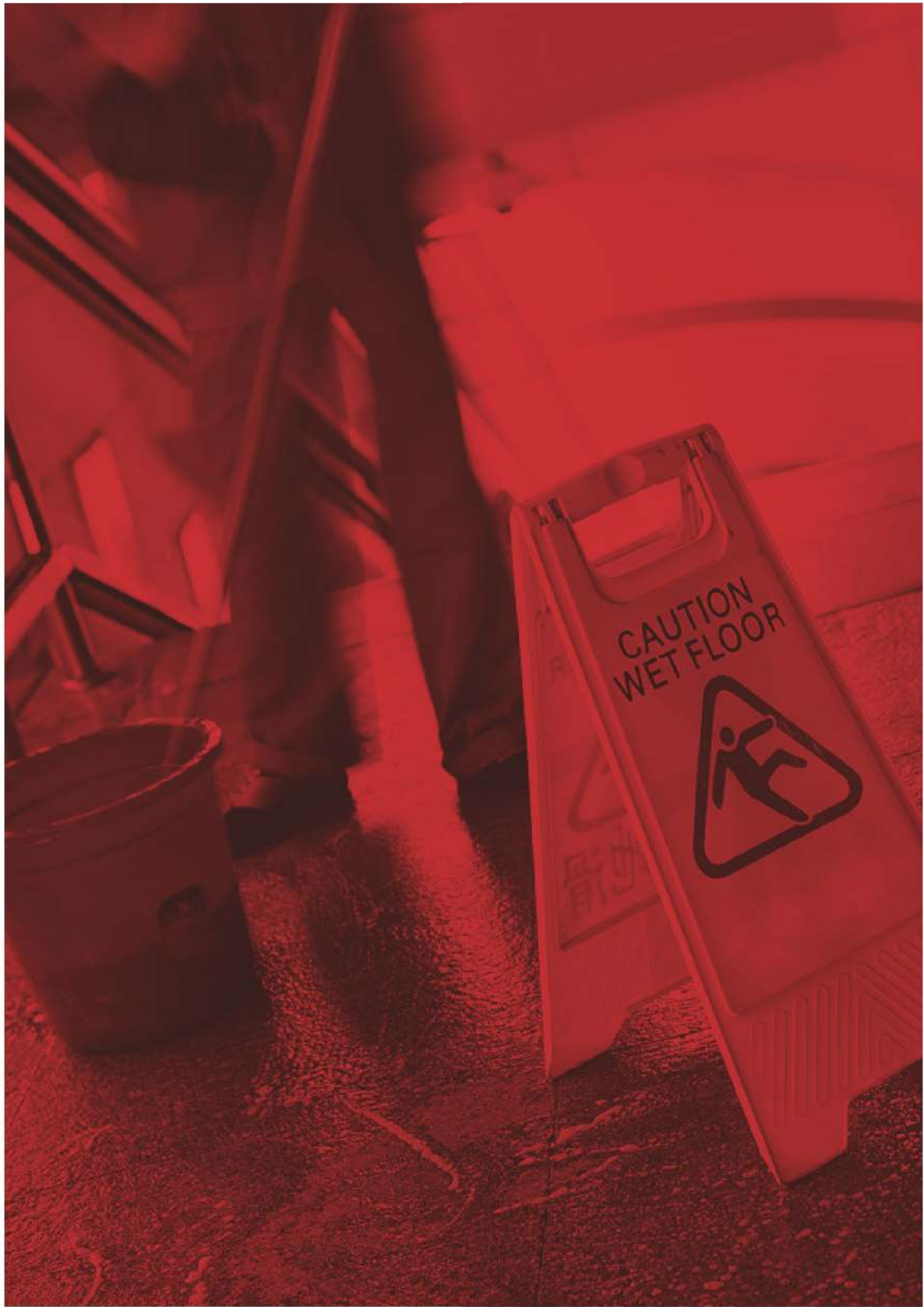
Step 4: Monitor and review the risks

Although a risk may have been eliminated, it is important to continue to monitor the risk as changes in weather conditions, deterioration in floor coverings, an increase in pedestrian traffic, or contractors working on site may contribute to an STF risk materialising.

An audit of the safety management system should include seeking out evidence of best practice to eliminate STF risks, while also identifying risks that may not have been observed by those using the building.

During the reporting back on audits and inspections (see Appendix 1), utilise the opportunity, where relevant, to compliment and congratulate employees on how they are managing to eliminate STF incidents, and demonstrate improvement with the use of graphics to show reductions in the number of incidents and near misses.

Seek reports of incidents and near misses and inquire into the circumstances of the incidents so that improvement can take place. This approach can provide a useful learning exercise to enhance safety and to eliminate STF incidents in the future.





OTHER ISSUES TO CONSIDER

Asset management, routine inspections

As slips trips and falls account for a high percentage of accidents, the site-specific risk assessment should specifically address this exposure.

Walk the site periodically to view things from a visitor's perspective; that of someone not familiar with the site.

Watch how patrons use the facility, those taking short cuts across grass, drink spillages in certain areas and near misses.

Design and refurbishment of facilities

Ensure that all work designed and undertaken complies with building control legislation and safety, health and welfare at work legislation. It is important that stairs/steps (the going and riser) and hand-rails comply.

Lighting

Lighting at work is very important to the health and safety of everyone using the workplace. The quicker and easier it is to see a hazard, the more easily it is avoided. The types of hazard present

at work therefore determine the lighting requirements for safe operation (HSE UK, 2019).

It is important that lighting in the workplace:

- Allows people to notice hazards and assess risks
- Is suitable for the environment and the type of work (for example, it is not located against surfaces or materials that may be flammable)
- Provides sufficient light (illuminance on the task)
- Allows people to see properly and distinguish between colours in order to facilitate safe access/egress
- Does not cause glare, flicker or stroboscopic effects
- Avoids the effects of veiling reflections
- Does not result in excessive differences in illuminance within an area or between adjacent areas
- Is suitable to meet the special needs of individuals
- Does not pose a health and safety risk itself
- Is suitably positioned so that it may be properly maintained or replaced and disposed of to ensure safety



- Includes, when necessary, suitable and safe emergency lighting (HSE UK, 2019).

Maintenance

All access/egress routes should be unobstructed by items left on corridors that reduce the effective width of passageways. When a defect is identified, record it immediately, photograph it and notify the requirements to the person in charge of facilities for it to be repaired. Isolate the area to prevent an STF incident occurring. When the repair is completed, record the date, time and identity of the person who undertook the repair work, and photograph the location following the repair. Records are important to demonstrate a proactive approach that aids in the defence of public liability claims.

Incidents, including near-misses

Record the incident, including any near misses. Ensure that photographs and/or video recordings are taken of the scene (ensure compliance with the data protection legislation). Obtain written statements from the injured party(ies) and any witnesses. Forward all incident reports, investigation reports and photographs/video recordings to the health and safety officer. Where

corrective action has been identified, ensure that it is implemented and sustained over the long term to eliminate the risk in the future.

Be aware that any incident that results in serious injury, hospitalisation or a fatality may result in a criminal investigation by An Garda Síochána or the Health and Safety Authority.

Personal protective equipment

Ensure that employees utilise personal protective equipment (PPE) when provided, such as safety shoes/boots/harnesses, etc. Advise employees of the importance of wearing appropriate footwear in the workplace to avoid STFs. In respect of slip resistant footwear, SATRA (www.satra.co.uk) has produced a very useful guide on slip resistance footwear (2010).

Spills

Ensure that employees are aware of their responsibility to keep all walking surfaces dry and clean. When spillages occur, utilise appropriate techniques to clear the spillage as rapidly as possible; for example, paper towels for very small spills or hand-held squeegee vacuums for medium-sized spills (not useful for viscous fluids), while







sweeping large pools of water into a drain may be more appropriate for outside areas and hoovering up water at swimming pools should be considered. Remember, the objective within indoor areas is to provide a dry, safe surface for walking so as to prevent STF.

Signage

Remember that signage should only be used when an STF hazard cannot be avoided or adequately reduced. It may be necessary to cordon off spills and to display signage to enable an employee to clean up the spillage and until the floor has adequately dried. Remember to remove signage once the hazard has been removed.

Slip resistance testing

Testing for slip resistance can be undertaken to determine the level of risk of an STF arising from a floor surface. The testing is referred to as the pendulum test. This test mimics the way a heel makes contact with a floor and measures the dynamic coefficient of friction (CoF).

It can test slip potential on clean and dry or contaminated floors. If information is required for specification or enforcement action, a robust test such as the pendulum test should be used.

The HSA refers to the most common Coefficient of Friction (CoF) tests being the pendulum test (UK Health and Safety Executive's preferred test method) and the slip alert. Both measure the dynamic coefficient of friction. They highlight the importance of having a wet Pendulum Test Value (PTV) of 36+ in final use conditions.

The Design Manual for Urban Roads and Streets (DMURS) Advice Note 2 (Materials and Specifications, 2019) states that it can be argued that where natural stone surfaces are used it is foreseeable the slip resistance parameters (PSV) may change over time and that slip incidents may become an issue. It recommends that all hard-landscaping paving material should achieve a PTV (wet) unpolished slip resistance of 55+ in final use conditions.



RECORDING AND DOCUMENTATION

Good practices should be implemented in all organisations to prevent STF incidents. If a claim arises, it is important that the organisation has documented evidence of best practice being implemented in order to defend a STF claim.

- 1** Maintain an up-to-date documented STF risk assessment for the facility; the level of detail should be reflective of the level of risk.
- 2** Identify management control measures.
- 3** Maintain documented procedures for:
 - Cleaning – document the time(s) cleaning is to be undertaken and the actual time(s) the cleaning took place.
 - Spillage clean-up – document the type of spillage and the time of clean-up.
 - Spillage monitoring – document the walked monitoring exercises and observations noted.
 - Staff training – document the training provided, the staff attendance records and the updated training provided.
 - Times for cleaning, e.g. document when buildings are closed and there is reduced traffic for minimising the risk of STFs.
- 4** Ensure that all employees read and comply with the procedure for preventing STFs and provide documentary evidence of this on file for future reference.



INSURANCE

Liability insurance (employer and public liability insurance) provides indemnity to the insured to cover payments for which you may be held legally liable.

Organisations of all kinds need liability insurance in case employees, members of the public or other third parties suffer injury and/or property damage arising from incidents. There are several ways in which to prove liability. Liability could arise through negligence, recklessness, ignorance,

nuisance, or failure to exercise duty to care or failure to exercise ability to control the activities of employees. You should request advice on the insurance cover that is most relevant to your organisation's needs.

CLAIMS

If you receive notification of a claim, please forward it to your insurance advisor or
IPB Insurance: claims@ipb.ie



REFERENCES

Safety, Health and Welfare at Work Act, 2005

Safety, Health and Welfare at Work (General Application) Regulations, 2007

Summary of Workplace Injury, Illness and Fatality Statistics 2012-2013, Health and Safety Authority

Slip Resistance Guide: SATRA Technology Centre 2010

Assessment of Floor Slip Resistance: UK Slip Resistance Group Guidelines: 2011 (www.ukslipresistance.org.uk/publication/meeting-standard-requirements)

Fall Prevention Programme: Occupational Safety and Health Administration

Fall Prevention Fact Sheet: Occupational Health and Safety Administration

PIAB reports slips, trips and falls the main cause of PL claims: Health and Safety Review July 2014

PIAB (2018) Statistics available at www.piab.ie/eng/about-piab/statistics

PIAB – Insights into the Personal Injury Environment, presentation by Stephen Watkins, Director of Corporate Services, PIAB (Dated 10/04/2019). Available at www.piab.ie/eng/news-publications/news/PIAB%20Conference%20Stephen%20Watkins.pdf

HSA (2017) Watch your Step: Preventing Slips, Trips and Falls at Work. Information Sheet available at www.hsa.ie

Health and Safety Executive (HSE, 2012): Assessing the slip resistance of flooring: A technical information sheet.

www.hsa.ie/eng/Topics/Slips_Trips_Falls and www.hsa.ie/eng/Topics/Slips_Trips_Falls/Slips_Trips_Falls_Info

www.osha.gov



Managing Road and Footpath Risks. IPB Insurance 2014.

PIAB (2019); statistics. Available at www.piab.ie/eng/about-piab/statistics

Governors Highway Safety Association (GHSA), Everyone Walks: Understanding & Addressing Pedestrian Safety. Dated 10 August 2015. Available at www.ghsa.org/resources/publications. Page 17.



APPENDIX

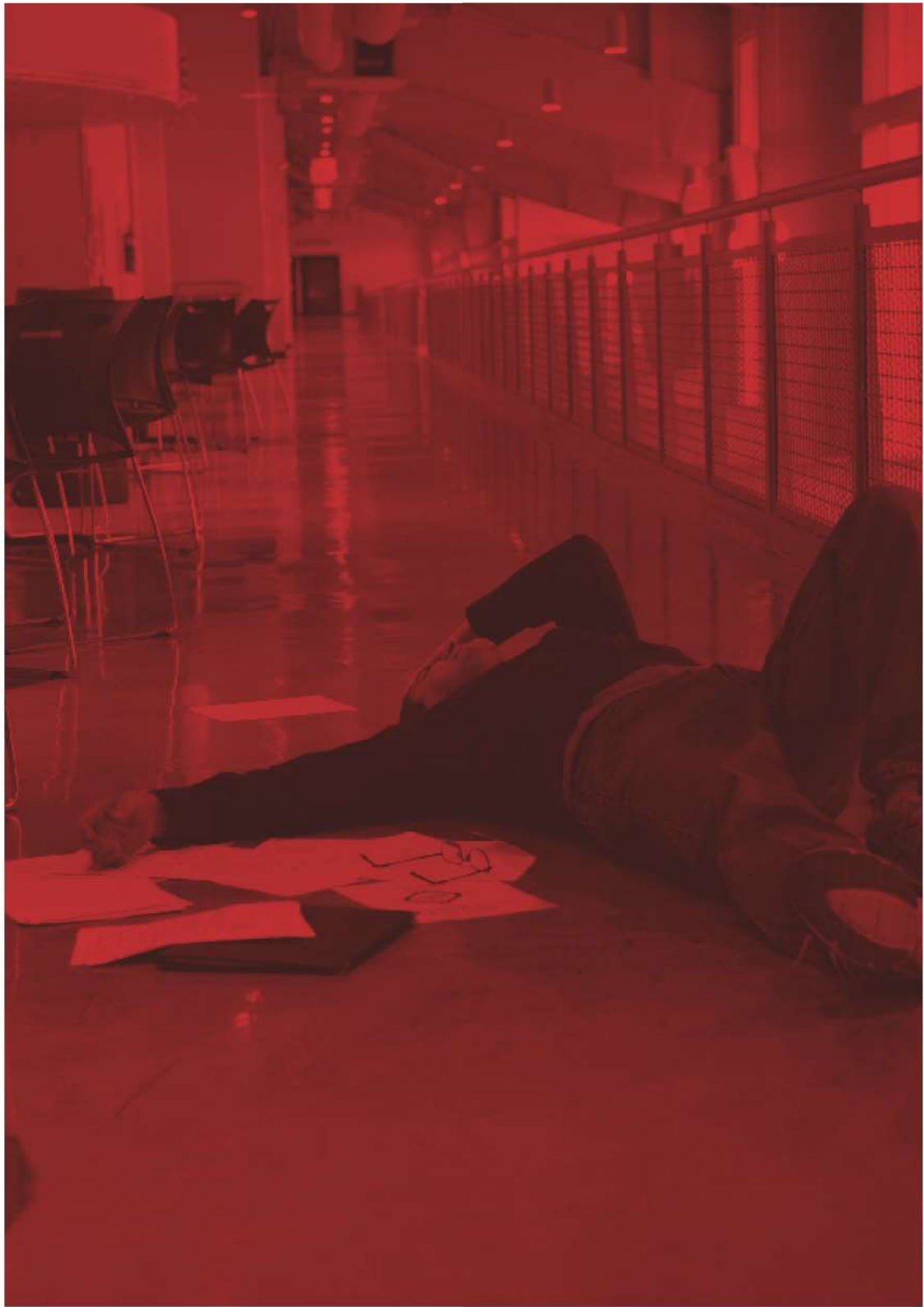
Safety Inspection Checklist

	Red	Amber	Green	N/A
Is the area maintained in a clean and tidy manner?				
Are there any slip, trip or fall hazards present (uneven surfaces, wet surfaces, worn surfaces, loose manholes, weather-damaged footpaths)?				
Are all routes free from obstruction?				
Are materials stacked and stored safely?				
Have all employees been instructed to ensure that all walking surfaces are dry and clean and free of debris?				
Are the weather effects on underfoot conditions monitored in car parks, on footpaths, on external stairs and on external ladders?				
Are the grounds, car parks, footpaths, external stairs and external ladders well maintained?				
Is there a sign prohibiting walking on specific surfaces either internally or externally?				
Is there adequate lighting for personnel to carry out their work safely?				
Is there adequate lighting in car parks and footpaths?				
Is waste stored properly and disposed of in a timely manner so that it does not present a hazard for slip/trip/falls?				
Are handrails and access ladders (where required) in place and in good condition?				
Is there fly/rogue tipping of used construction materials?				



	Red	Amber	Green	N/A
In order to protect against legionella, are showers run weekly and are these runs logged?				
Are toilet facilities, changing rooms, shower areas etc. checked at defined intervals to include floor surfaces? Are the checks documented? Are the checks up to date?				
Are routes marked and signs erected where appropriate?				
Are floor coverings non-slip under wet conditions?				
Is there an incident register for the location?				

Work stopped due to serious & imminent danger?	
Number of Red flagged items	
Number of Amber flagged items	
Number of Green flagged items	





Actions required

Action	Persons responsible	Due date

General observations and comments

**Inspection carried out by****Date**

Print name:

Signature:

Line manager in charge of the workplace inspected**Date**

Print name:

Signature:

DateFinal date for corrective action for all **Red** flagged items to be in placeFinal date for corrective action for all **Amber** flagged items to be in place**Yes****No**

Actions inputted to safety management audit system?





Sent a copy of the safety inspection to	
Health and safety (H&S) Officer	
Relevant Line Manager	
Head of Function	
Safety Representative	
Chief Fire Officer	
Others	



IPB Insurance

1 Grand Canal Square
Grand Canal Harbour
Dublin D02 P820
Ireland

Tel: +353 1 639 5500
Email: info@ipb.ie
www.[ipb.ie](http://www.ipb.ie)