

Watch Your Step in education

Stop slip and trip accidents: A bulletin for schools, colleges and universities

Slips and trips affect you

We often hear statements like, 'It won't happen to me' or, 'But what about the students?' when talking to people in the education sector about slips and trips. But the reality is, slips and trips affect everyone, including you.

Need convincing? An administrator slipped on a mat and fractured an ankle - a month later she was dead. A blood clot, linked to the slip accident, had entered her lungs. A 58-year old PE teacher, supervising an after-school activity, slipped on a vinyl floor, still wet from mopping. She broke her leg and may never work again. The head teacher was unable to find a suitable supply teacher and the full girls' PE curriculum was never taught.

Extreme examples perhaps, but last year 1962 serious slip and trip accidents occurred in education and 571 of those accidents were to employees, a 5% rise on the previous year. Did you know that 55% of all health and safety-related accidents in education are caused by a slip or a trip and 90% of those accidents resulted in a broken bone. Consider the personal pain and work disruption this caused.

It probably won't come as a surprise to learn where slip and trip accidents happen. Top of the list are corridors and outside areas followed closely by stairs. Other main areas are teaching rooms and laboratories, car parks, building entrances, the canteen and food preparation areas and the gym.

Unfortunately, many regard slips and trips as being outside their control, inevitable or the employee's fault. But these perceptions are misplaced. The solutions to slip and trip hazards are often simple and cost-effective. One college has experienced a year-by-year decrease in the number of slip and trip incidents after taking a number of actions, some of which include: providing lids for take-away drinks' containers to reduce the risk of spillages in walkways; fitting anti-slip and hi-visibility treads to stairs; providing good quality entrance matting to remove water from footwear; carpeting main corridors; providing anti-slip flooring in workshop areas most vulnerable to unavoidable contamination.



Everyone has a part to play when it comes to preventing slips and trips and the simple tips on the following pages should help you.

Case studies

Icy conditions cause rise in accidents

A university in the North of England was hit by a cold snap, with lots of frost and some snow, something it was quite used to dealing with. But for some reason this particular year, there was notable rise in serious slip accidents.

They scrutinized every accident to discover the cause of these slips and falls. The time of day, cause, description of what happened and the environmental conditions at the time of the accident were all noted. It became quickly apparent that the staff most affected were those who arrived on site early in the morning, such as

the cleaning and catering staff and academics. At the time they arrived, the paths had yet to be cleared of ice and snow.

In previous years, the grounds' staff had begun to de-ice and salt the campus much earlier in the morning, but as they were paid overtime rates, cost became an issue, so the ground staff now started later in the day. Initially, the new start time was thought to be sufficient to prevent any problems with ice, but the accidents indicated that it was not. The university decided to bring in the ground staff an hour earlier, then monitor the result.

The changes worked. Despite several more icy spells, slip and fall accidents on ice have stopped. ▶

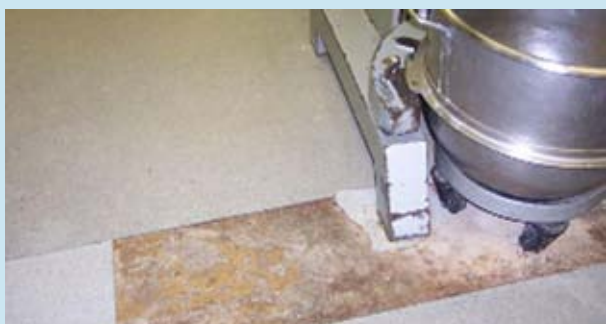
▶ **Damaged floor ends in a trip to court**

A chef working in an independent school kitchen suffered a head injury and became unconscious after tripping on defective flooring and hitting her head on a steel table.

The kitchen floor was mainly covered with vinyl sheet flooring, but at the place where the accident happened there was a gully drain that had been converted from an open drain to a closed drain with grille. This modification meant part of the sheet vinyl had been removed and replaced with a fill-in that was glued down. Over time the glue had begun to fail, allowing the edges of the fill-in to lift and peel back around the drain cover, creating a hygiene and tripping hazard.



The floor had been this way for a number of months, despite being reported several times by the catering manager. Although promises had been made to repair it, nothing had been done. The catering contractors were not authorised to undertake the repairs themselves, although the kitchen staff had been trying to manage the risk by making minor, temporary repairs.



On the day of the incident, the catering staff had returned to work after a school holiday and found the flooring infill unrepaired and its edge quite curled up. The chef was crossing the kitchen carrying a small tray of oven-hot food when her foot caught under the lifted edge of the flooring and she tripped. She fell forward and hit her forehead against the corner edge of a stainless steel food preparation table. She was unconscious on the floor for a few minutes. A colleague arrived as she began to recover, gave assistance and she then went to hospital. Since the incident, she has reported suffering debilitating headaches, fatigue, neck pain and other symptoms and has been unable to work or participate in her normal social life.

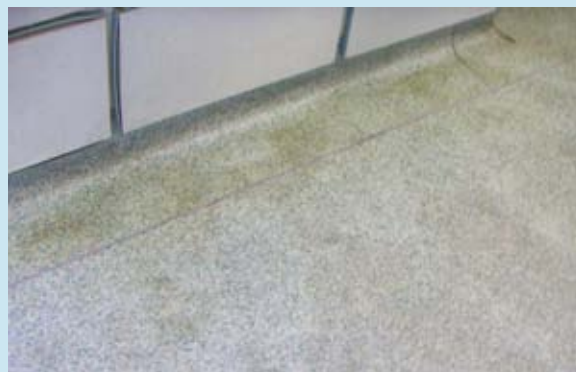
The local HSE inspector took the matter to court, a fine of £5000 was imposed and they were asked to pay costs of almost £3000.

Bathroom floor proved a challenge to clean

Staff at a college were unhappy with the appearance of the safety vinyl flooring fitted in the bathroom areas, as it looked dirty even after cleaning. The HSL (Health and Safety Laboratory) pedestrian safety unit were called in to have a look at it and examine the cleaning regime to see what the problems were.

They discovered that the floor was cleaned with a mop and bucket filled with cleaning solution diluted in water. This was not in itself a problem but the cleaning process left the dirt impregnated in the floor which could be clearly seen floating in the diluted cleaning solution.

Unfortunately, the floor was left to dry in this state, so the dirt was not actually removed once lifted. The worst areas were the lowest parts of the floor, where the water accumulated as the floor dried. HSL suggested a secondary step be introduced to remove this dirty water, either by mopping a second time or by suction. Although this had been tried occasionally in the past with limited success, it was felt that a sustained change in the regime might show better results. HSL suggested using this altered cleaning regime in one particular toilet room for at least two weeks, then deciding how effective the decision was.



£55 000 for teacher who slipped on a chip

A schoolteacher who slipped on a chip outside the canteen has been awarded £55 000 compensation.

The teacher had been at the school for 20 years before the accident in December 1998. She had been carrying jotters when she slipped and fell on a ramp and strained knee ligaments. Following the accident she was on crutches for five months and underwent intensive physiotherapy.

The judge ruled that the Council should have realised that the ramp posed a risk. On the day of the accident, the ramp had been slippery and exposed and had not been maintained in an efficient state. He added that non-slip flooring should have been installed and priority given to cleaning it. He also stated that it would have been difficult to spot the chip on the ramp due to the colour and pattern of the tiled flooring.

Where do you start with an initiative like 'Watch Your Step in education'?

Accident statistics can only tell you so much. So here are some real examples the HSE slips and trips team discovered when visiting premises.

Would you believe it!

An area of wooden decking had been installed near the front entrance of a building, but was unusable, as it had been become very slippery; a common problem with wood exposed to wet British weather. The only options would be coating it with non-slip paint or changing it. In the meantime, ugly orange barriers stopped anyone from using it.



A bit of a slip-up

Shiny smooth vinyl covered a long corridor. If kept dry, this did not pose a slip risk, but this one ran past two well-used doorways leading outdoors to a playground. With no internal mats and no canopy on the outside of the building, students were bringing in water from the outside on their shoes, creating a high potential for a slip.



Hazard warning cone highlights problem

In the centre of the changing room, a lone hazard-warning cone stood as a warning to rushing students and teaching staff of a slip risk. The problem was a leak in the ceiling creating a puddle of water on the floor; the leak had been an issue for some time. But what does the cone achieve? It doesn't mop up the spill, it doesn't catch the spill and it is ignored, as it is always there. This leak required immediate attention.

Dress code reduces risk of slipping

A head was keen on students following school dress code and insisted students wear sensible black shoes. If they arrived unsuitably attired they would be given a pair of black gym pumps to wear for the day, not the trendiest of footwear and an effective way of enforcing the rules. As a result all students wore sensible footwear, suitable for their environment and as a result had a good chance of staying on their feet. Unfortunately, the teaching staff were not subject to the same rules.

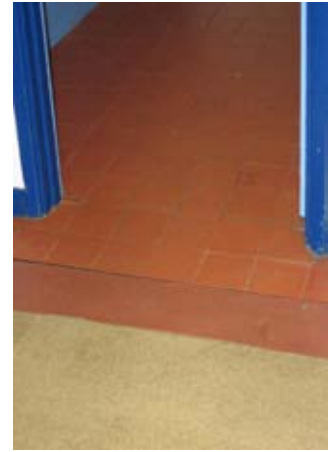
Who needs a mat, when you can have a carpet?

The visitor entrance at a new PFI build was impressive as the whole of the area was covered in a large expanse of fixed carpet, rather than the usual token mat. Nobody walking on this carpet was ever going to walk water onto the adjoining vinyl floor. The puzzle was why there was a hessian mat outside the doorway? Its only role appeared to be soaking up rainwater, to ensure visitors thoroughly wet their feet before entering the building.

Right materials, wrong location

The question was, did someone make a mistake? It was an old building and when it was built, someone had decided to put anti-slip vinyl along the corridor and quarry tile in the toilets and at the entrance.

Unfortunately the quarry tiles were found to be non-slip when dry but slippery when wet. So the right materials, but the wrong way round.



Don't use if there is a fire!

Metal durbar had been used for the ramped walkways leading from the main doorways and fire exits of the external portakabins. A strong, sturdy material, but unfortunately slippery when wet. Perhaps not the best choice for an outside area likely to be rained on.

Fortunately, it is possible to purchase non-slip epoxy sheets, which can be bolted on to make them slip-resistant.



Standards vary at two new PFI builds

A visit to a combined infants and junior school found the PFI provider to be responsible for health and safety issues created by the design of the building, while the employer of the caretaker took care of day-to-day issues. The good news was, the caretaker spoke directly to the teaching staff and quickly took care of spills and other slip and trip issues. Unfortunately, the County Council's health and safety team had not been asked to contribute at the design stage and several slip design problems were apparent.

The second visit was to a secondary school. Here, there had been a lot of consultation with the school during the design stage and as a result the design was good. Unfortunately, for a spill to be cleaned up, the school needed to ring the PFI helpline, who decided on urgency and then informed the caretaker when he should attend to it.

Same material, different cleaning, different result

A smooth vinyl floor was seen in a dining area and in the kitchen corridors. The dining room was cleaned by the building cleaning staff and the corridor by the kitchen staff. The dining room was mopped with detergent and regularly buffed, the corridor mopped with a solution that included a degreaser

and never buffed. The result was that the dining room vinyl was found to be highly slippery when wet and the corridor found to be moderately slippery when wet.



Support for you: Events and promotional materials

We want you to take action to stop slip and trip accidents happening to you and your colleagues. To spur you into action, we are running an initiative over the next year. As part of that initiative, we have produced a range of materials on how to identify and tackle the problem and promotional aids to help you.

Free one-day events are also being held across the UK between March 2007 and March 2008. The aim of the day is to equip delegates with the skills needed to assess the risks of slipping and tripping and to take action to control them. They are primarily intended for further and higher education, but will be of use to you if you are a facilities or estates manager, a health and safety manager, a County Council school health and safety advisor, in charge of cleaning and catering, or a union health and safety representative.

To download promotional materials and find out if there is an event being hosted near you, check the initiative website: www.hse.gov.uk/slips/education/.

Can you host an event?

We need easy-to-reach venues, around the country, to hold the events in. If you are able to help, please contact Mark Thomas via e-mail (mark.thomas@hse.gsi.gov.uk).

Stop slips and trips: Checklist

The following short checklist can be used as an aide-memoire during slip and trip assessments. A more comprehensive checklist can be found on the Education Information Sheet *Preventing slip and trip incidents in the education sector* (see 'Further information').

- Outside areas (car parks, entrances, defined walkways etc) level, free from holes and obstructions and controls in place to reduce slips due to ice, leaves etc.
- Classrooms, lecture rooms, laboratories kept free from obstructions, trip hazards and slip hazards.
- Control of slip and trip risks on stairs - good handrails at right level, easily visible nosings on steps, steps of equal height and length.
- Slips reduced/prevented at building entrances through – effective canopies stop rain-entering buildings; mat systems effectively soak up water from shoe soles, no water is found on floors beyond mats.
- Stop access to wet floors.
- Good spillage control systems, especially in canteens, food preparation areas and teaching rooms.
- Effective cleaning regimes are properly carried out by staff.
- Fit for purpose, anti-slip floors in new builds and refurbished premises in areas prone to water and oils (shower rooms, entrances to buildings, canteens, kitchens etc).
- See it, sort it mentality amongst all staff.

What can you do?

Slips and trips can be tackled successfully in most workplaces and everyone has a part to play.

Facilities managers, procurers, PFI providers, business managers and head teachers

- 1 Get the design right
 - Designated walkways in the right place, canopies over doorways, sufficient storage facilities
- 2 Fit the right floor and keep it maintained
- 3 Put in the right floor cleaning system
- 4 Provide the right cleaning equipment in the right place
- 5 Check cleaning and maintenance procedures are being followed
- 6 Supply enough rubbish bins
- 7 Attend workshop to gain a fuller understanding of problem

Health and safety managers and representatives

- 1 Assess slip and trip risks inside and outside of the building and take action
 - Look at the slips website for causes and prevention of slips and trips and guidance (www.hse.gov.uk/slips)
 - Checklist
- 2 Educate others in how to prevent slips and trips
 - Use the initiative materials, eg case studies, presentations, this bulletin
- 3 Attend workshop to gain a fuller understanding of problem

Teachers, teaching assistants, lecturers, office staff and school secretaries

- 1 Take responsibility
 - Small spills on smooth floors are a slip hazard, eg if you spill coffee on the floor/in the corridor don't just leave it, clean it up
- 2 Report problems straight away to the right person
 - eg leaks, spills, food debris, bad lighting, obstacles in walkways, uneven flooring and potholes
 - Put out cones on visible hazards
- 3 Wear the right shoes
 - You are less likely to have a slip or trip accident if you wear sensible shoes
- 4 Use designated walkways, don't use shortcuts
 - Don't block walkways
 - Store bags and work equipment safely
 - Avoid trailing wires
- 5 Encourage students to follow the same procedures

Catering and kitchen staff

- 1 Prevent contamination from getting onto the floor
- 2 Clean up spills
- 3 Deep clean at the end of each day
- 4 Wear the right shoes
- 5 Report flooring problems

Cleaners and caretakers

- 1 Follow floor cleaning instructions
- 2 Use the right cleaning product in the right quantity
- 3 Use equipment
- 4 Clean up spills
- 5 Deep clean at the end of each day
- 6 Don't create new hazards
- 7 Report maintenance issues

Assessing the risk of slipping: A tool to help



A frequently asked question when faced with the task of completing a risk assessment is 'Where do I start?' For slip risks there is now an answer. HSE and HSL have developed a tool designed to help users risk-assess slip hazards in their workplace. The SAT (Slip Assessment Tool) is made up of two parts: a computer programme - which can be downloaded from the HSE slips and trips website free of charge - and a roughness meter. When used together, they will allow you to produce an estimate of the slip risk on different types of floor, in particular circumstances.

To use the tool, you will need to collect detailed information about the working area to be assessed, ie what material the floor is made from and what type of cleaning system is used. You will also need data such as type and amount of floor contaminants. For a true estimate, you will also need to take a series of measurements of floor micro-roughness at a test location using a small hand-held roughness meter.

You can either record the data on a proforma and transfer it to a computer or, if you have a laptop, you can preload it with SAT software and input the data directly for an immediate result. The end product is an estimate of what the slip risk is at that particular location.

Further information

Slip and trip resource centre: www.hse.gov.uk/slips/information.htm

Slips and trips 'Watch Your Step in education' for electronic versions of the PowerPoint presentations, this bulletin and leaflets:

www.hse.gov.uk/slips/education

Slips and trips: The importance of floor cleaning Slips and trips2 HSE 2005

Web version: www.hse.gov.uk/pubns/web/slips02.pdf

Assessing the slip resistance of flooring: A technical information sheet Slips and trips1 (rev1) HSE 2007 Web only: www.hse.gov.uk/slips01.pdf

Preventing slips and trips at work INDG225 (rev1) HSE Books 2005 (single copy free or priced packs of 15 ISBN 0 978 0 7176 2760 8)

Web version: hse.gov.uk/pubns/indg225.pdf

Preventing slips and trips in kitchens and food service Catering Information Sheet CAIS6 (rev1) HSE Books 2005 Web version: www.hse.gov.uk/pubns/cais6.pdf

Preventing slip and trip incidents in the education sector

Education Information Sheet EDIS2 (rev1) HSE Books 2006 Web version: www.hse.gov.uk/pubns/edis2.pdf



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