

Slip and trip workshops for NHS staff

A survey and case study evaluation

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- raise the profile of slips and trips as a health and safety issue;
- impart information about the range of slip and trip improvement measures available to NHS Trusts;
- make known the various sources of support and guidance that NHS Trusts can call on when addressing slip and trip related issues.

Evaluation questionnaires completed by delegates at the end of the workshops showed them to be very well received (see Appendix 6). This study looks at the impact of the Workshops in terms of subsequent slips and trips reduction measures put in place by NHS Trusts

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EXECUTIVE SUMMARY

Background

During the period 2004 - 2007 HSE carried out a targeted initiative to reduce slips and trips accidents in NHS Trusts. A key element of the initiative was a one-day slips and trips workshop, customised for the healthcare sector, and delivered regionally in 23 locations around the UK. The Workshops were targeted specifically at health and safety and other relevant practitioners working in NHS establishments. The aim of the Workshops was to:

- Raise the profile of slips and trips as a health and safety issue;
- Impart information about the range of slip and trip improvement measures available to NHS Trusts;
- Make known the various sources of support and guidance that NHS Trusts can call on when addressing slip and trip related issues.

Evaluation questionnaires completed by delegates at the end of the workshops showed them to be very well received. This study looks at the impact of the Workshops in terms of subsequent slips and trips reduction measures put in place by NHS Trusts

Objectives

- To identify and categorise any slip and trip prevention measures taken after attending a Workshop and their effectiveness.
- To explore any association between taking slip and trip prevention measures and Workshop attendance.
- To ask delegates which aspects of the Workshops were helpful in terms of taking actions to address slip and trip issues.
- To identify any barriers preventing a reduction in slip and trip related accidents

Main Findings

- The vast majority of respondents reported that the Workshops were a helpful influence in terms of promoting slip and trip reduction activities in NHS Trusts and in helping them develop the arguments to support such actions.
- Although only a small proportion of respondents are sure that the measures taken have resulted in a quantifiable reduction in accident rates, the level and variety of activity to prevent slips and trips identified in this study is a good indicator for future accident reduction.
- The Workshop content was well balanced, relevant and helpful although respondents tended to be selective about the Workshop elements that they saw as most useful.
- Some inconsistencies of approach across NHS Trusts have been identified in this study, especially in relation to the hygienic cleaning of safety flooring

In addition to the Workshops, respondents reported a range of other factors (e.g. HSE inspections or enforcement, compensation claims etc) that influence NHS Trusts to take action to reduce slip and trip related accidents.

Conclusions

- The Workshops were effective in terms of influencing delegates to carry out (or influencing the intention to carry out) slip and trip reduction measures in their Trusts and to develop the arguments to support these actions.
- The balance of Workshop content seems about right given the variation in roles and responsibilities of delegates.
- The Workshops complement a range of other factors with regard to influencing respondents and their Trusts
- Some further research (involving Infection Control departments) may be needed to achieve a consistent approach to the hygienic cleaning of safety flooring
- Cost considerations (e.g. of new flooring) are the main reported barrier to Trusts introducing slip and trip reduction measures, although this study identified that slip/trip prevention measures need not be costly

1 INTRODUCTION AND BACKGROUND

During the period 2004 - 2007 HSE carried out a targeted initiative to reduce slips and trips accidents in NHS Trusts. A key element of the initiative was a one-day Slips and Trips Workshop, customised for the healthcare sector, and delivered regionally in 23 locations around the UK.. The Workshops were targeted specifically at health and safety and other relevant practitioners working in NHS establishments. The aim of the Workshops was to:

- Raise the profile of slips and trips as a health and safety issue;
- Impart information about the range of slip and trip improvement measures available to NHS Trusts;
- Make known the various sources of support and guidance that NHS Trusts can call on when addressing slip and trip related issues.

Evaluation questionnaires completed by delegates at the end of the workshops showed them to be very well received (see Appendix 6). This study looks at the impact of the Workshops in terms of subsequent slips and trips reduction measures put in place by NHS Trusts

2 OBJECTIVES OF THE RESEARCH

The overarching aim of the research was to evaluate the impact of the Workshops in terms of subsequent slips and trip reduction measures taken by NHS Trusts. More specifically, the research objectives were to:

- Identify and categorise any slip and trip prevention measures taken after attending a Workshop and their effectiveness.
- Explore any association between taking slip and trip prevention measures and Workshop attendance.
- Ask delegates which aspects of the Workshops were helpful in terms of dealing with relevant slip and trip issues.
- Identify any barriers preventing a reduction in slip and trip related accidents.

3 METHODOLOGY AND SAMPLE SELECTION

Sample Frame and Data Collection

The methodology employed was an on-line survey that was developed and published using SNAP[®] survey software. The SNAP[®] system allows respondents to complete questionnaires on-line, confidentially and in their own time. A paper version of the questionnaire is included as Appendix 5.

At the conclusion of each Workshop, delegates completed an event appraisal form. These forms included an item asking if delegates would, or would not, be prepared to take part in further follow up enquiries at a later, but unspecified time. The 362 delegates who responded positively to this request, and who supplied HSE with an e-mail address, formed the sampling frame for this survey.

These 362 delegates were sent an e-mail inviting them to take part in the survey along with the link to the questionnaire (the text of the e-mail is included as Appendix 6). SNAP[®] was utilised to send out invite e-mails automatically. Of the 362 e-mail invitations sent, 88 returned undelivered messages, reducing the effective number of invitations to 274. Of these, 125 completed questionnaires were returned, resulting in a good response rate of 46 per cent. The dataset was exported from SNAP[®] and analysed in Microsoft Excel.

The Sample

Given the method of deriving the sampling frame, the sample is necessarily restricted to delegates who were willing to participate in future follow-up enquiries. Therefore, the sample says nothing about delegates who did not wish to have further contact with HSE. However, given its characteristics (see Section 4), it seems reasonable to assume that the obtained sample represents a typical range of Workshop participant.

The Case Studies

To augment the quantitative data generated by the survey, additional contextual, qualitative information is presented in the form of five case studies. Fact finding visits were made to five Trusts who, in their answers to the questionnaire, indicated their willingness to provide more detailed information about tackling slip and trip issues. The information provided to the researchers by these Trusts is summarised on a case-by-case basis in Section 6.

4 SAMPLE CHARACTERISTICS

125 completed questionnaires were completed and returned to the HSL Researchers.

Respondents were asked a number of demographic questions about job role, department, time in their job and time with the Trust. 115 respondents volunteered demographic information, which gives a reasonable picture of the characteristics of the sample, which is summarised as follows:

Job Role	Number	%
Health and Safety Manager/Adviser	55	48
Risk Management Manager/Adviser	13	11
Project Manager	8	7
Clinical Role	3	3
Estates Manager	18	16
Housekeeping/Hotel Services/Catering related	7	6
Other	11	10
Total	115	

Table 1 Sample of respondents by job role

Department	Number	%
Health and Safety	19	17
Risk Management	19	17
Estates and/or Facilities	35	30
Occupational Health	6	5
HR	4	3
Governance	12	10
Other	20	17
Total	115	

Table 2 Sample of respondents by department

	Years
Mean Time In Job	9.5
Mean Time Worked In Trust	12.7

Table 3 Sample of respondents by time in job/worked in Trust

Main Sources of Slip and Trip Information	Number	%
HSE (website, workshops etc)	78	63
Others (manufacturers, H&S advisers, training courses etc.)	46	37
Total	124	

Table 4 Sample of respondents by source information

A full breakdown of respondents' stated sources of information is listed in Appendix 4.

5 SURVEY FINDINGS

5.1 SLIP AND TRIP REDUCTION MEASURES

Respondents were presented with a list of 12 slip and trip reduction measures (Question 1) and asked to indicate which, if any, they had carried out, or were planning to carry out, since attending the Workshop.

All 125 respondents provided information for this question. The data are summarised below:

Number of Activities Carried Out	Number of Respondents	%
0	3	2
1	9	7
2	10	8
3	26	21
4	21	17
5	20	16
6	15	12
7	11	8
8	8	6
9	1	0.5
10	3	2
11	1	0.5
Total	125	100

Table 5 Summary of data by respondents to question 1

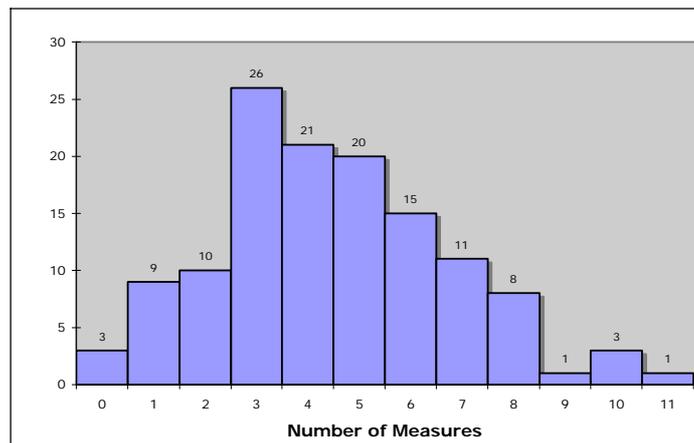


Figure 1 Number of Slip and Trip Improvement Measures Taken by Respondents

It is clear from the previous chart that the majority of the sample (66 per cent) report carrying out (or planning to carry out) between 3 and 6 slip and trip reduction measures. 19 per cent of the sample report carrying out between 7 and 10 slip reduction measures. 122 respondents reported carrying out, or intending to carry out, at least one reduction measure.

The following chart summarises slip and trip reduction activity data broken down by category:

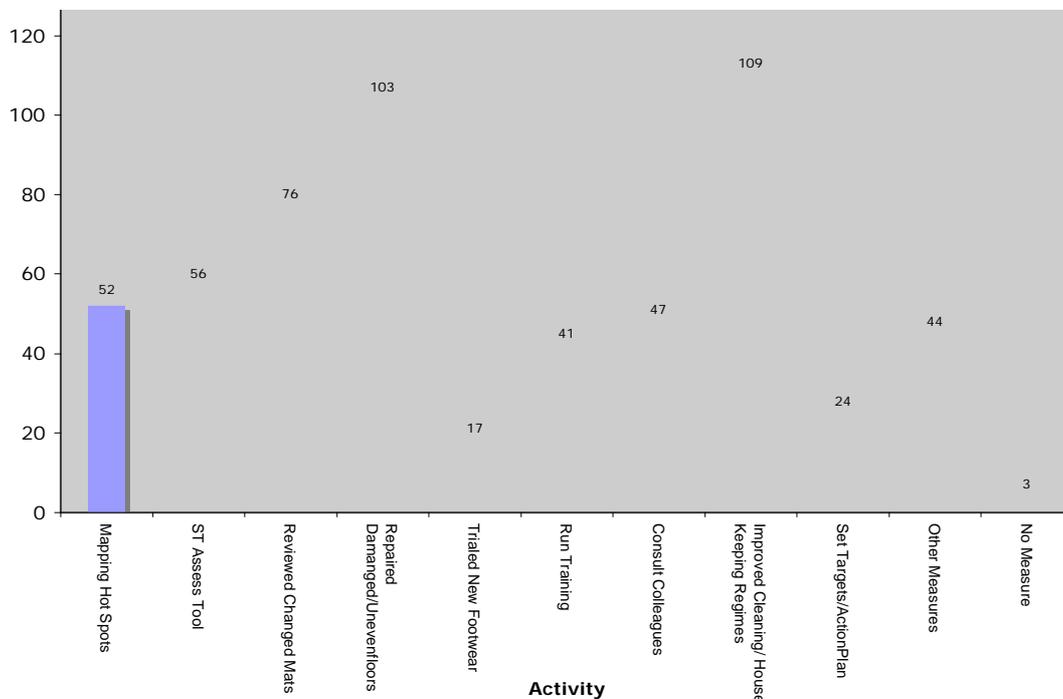


Figure 2 Slip and trip reduction measures broken down by activity

The most popular activities are repairing damaged/uneven floors and improving cleaning and/or housekeeping regimes (as housekeeping and cleaning are linked activities in the NHS, respondents reporting taking either of these measures are combined in one category). In response to a later question concerning barriers to introducing slip and trip reduction measures, a number of respondents reported conflicts between the need for safety flooring and perceived difficulties in keeping it clean.

The least popular measures are trialling new footwear and setting targets or action plans. Encouragingly, only 3 respondents (3 per cent of total) reported taking no measures at all.

5.2 SLIP AND TRIP REDUCION MEASURES AND WORKSHOP ATTENDANCE

Respondents were asked whether the decision to undertake slip and trip reduction activities was influenced by their attendance at the Workshop. 122 respondents answered this question, with the results summarised on the following chart:

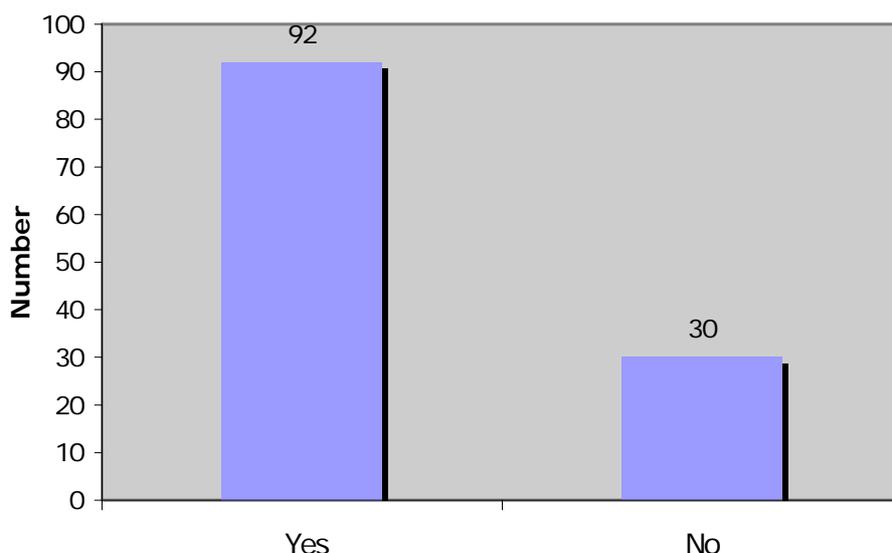


Figure 3 Did workshop attendance influence your decision to take slip and trip reduction measures?

Again, the response to this question is encouraging with 92 (74 per cent) of the sample reporting attendance at a Workshop was influential in further actions being taken. This finding strongly suggests that Workshop attendance encourages delegates to promote and engage in slip and trip reduction activities within their NHS Trust.

Further support for this position is provided by responses to the question asking “*to what extent did you call on lessons learned at the Workshop in developing arguments that led to improvements in the way slip and trip hazards are managed?*”. Responses to this question are summarised in the following table and chart:

	Number	%
A lot	54	59
A little	36	39
Not at all	2	2
Total	92	100

Table 6 Showing summary of responses

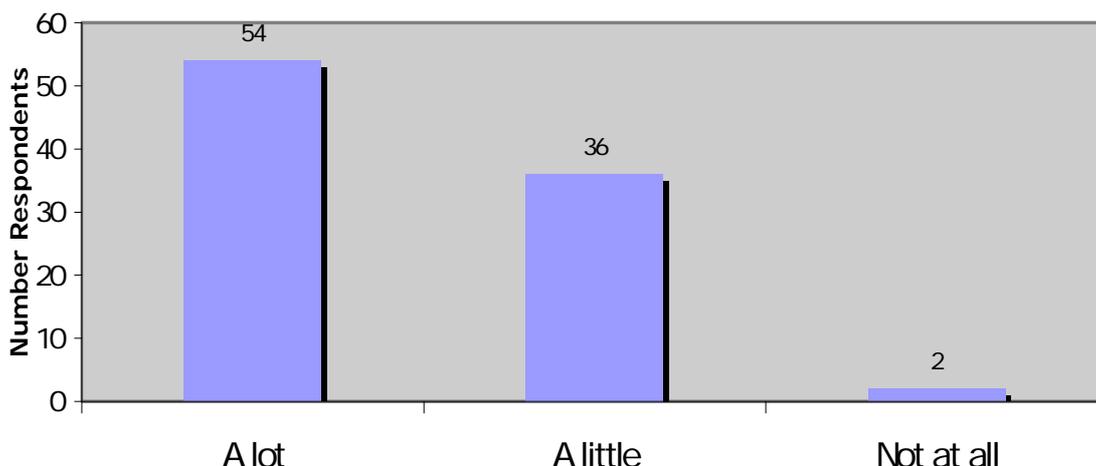


Figure 4 Chart showing summary of responses

Most respondents report that Workshop attendance was influential in developing arguments to promote the case for improving the management of slip and trip hazards.

5.3 ASPECTS OF THE WORKSHOPS CONSIDERED MOST HELPFUL

The 92 respondents who indicated that they had found attendance at the Workshop useful with regard to taking/promoting Slip & Trip reduction activities were asked further questions about which 8 elements “*of the Workshop they considered to be most helpful in identifying the relevant issues and how to approach them with regard to making improvements*” and “*the extent to which they called on lessons learned at the Workshop in developing arguments that led to improvements in the way slip and trip hazards are managed*”.

The data on numbers of respondents finding elements of the Workshops helpful are summarised in the following table and chart:

Number of Workshop Elements	Number of Respondents	%
1	2	2
2	2	2
3	12	13
4	18	20
5	14	15
6	15	16
7	10	11
8	19	21
Total	92	100

Table 7 Data showing summary of number of respondents finding element of the workshops

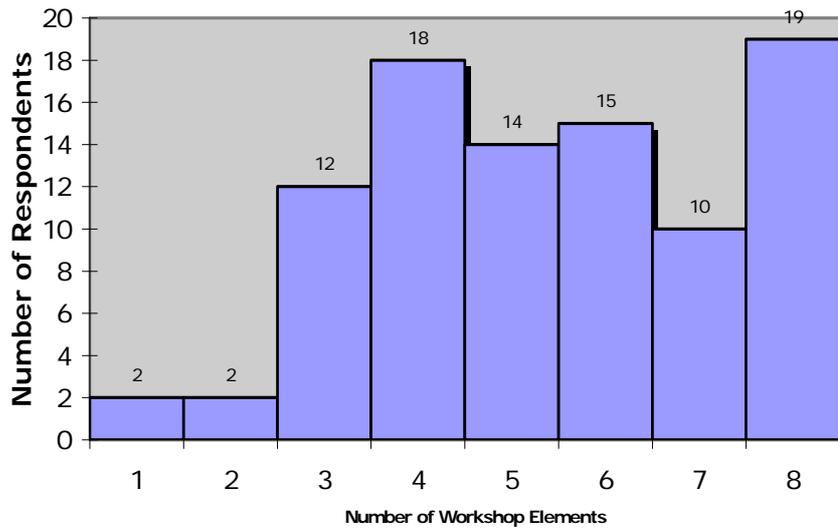


Figure 5 Chart to show number of workshop elements respondents found helpful

The above chart shows 96 per cent of respondents who answered this question thought **at least** 3 of the 8 elements of the Workshop content helpful in terms of making slips and trips reduction improvements in their Trust. The data also suggest a tendency for respondents either to rate between three and six of the Workshop elements as useful **or** to find all elements relevant. 63 per cent of respondents indicated that they found five or more (i.e. over half of the content of the Workshops) elements helpful.

The following table and chart shows numbers of respondents finding individual elements of the Workshops helpful:

Workshop Element	Number	%
Case For S&T	65	71
Slip Potential Model	59	64
Importance of Cleaning	60	65
Practical Demonstration	68	74
Practical Demonstration SAT	62	67
Floor Sample Exercise	65	71
Slip Resist Footwear	38	41
S&T Building Design	79	86

Table 8 Showing numbers of respondents finding individual elements of the workshops useful

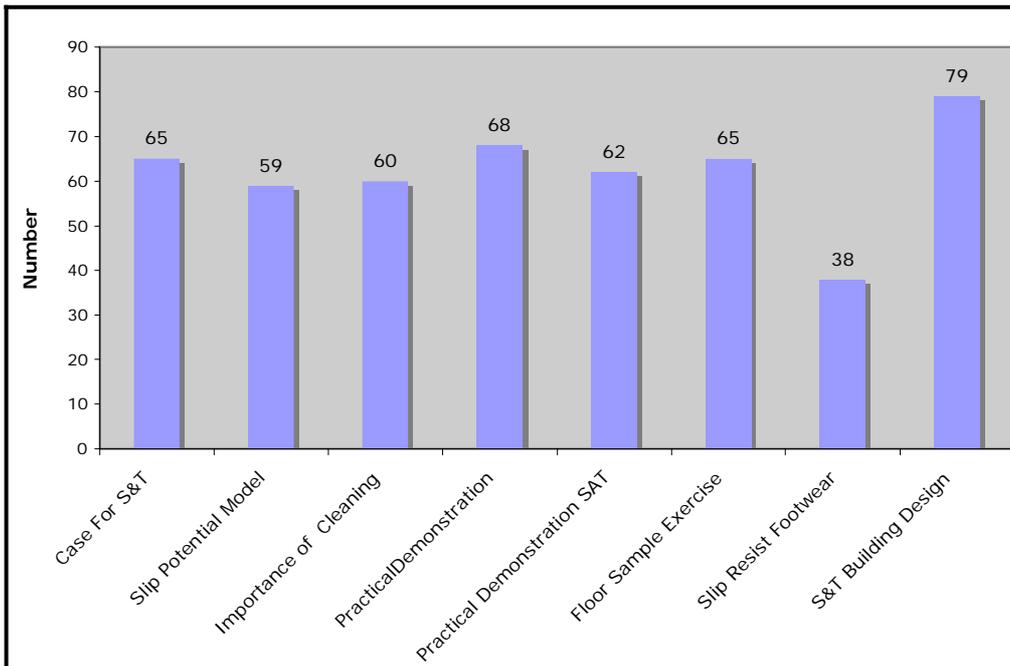


Figure 6 Chart showing number of respondents finding workshop elements helpful

Overall, respondents' views show that the Workshops were well balanced and helpful. Most workshop elements were described as useful by over half of respondents who responded to this question. As these proportions show a high, but flat profile on the above chart, the data shows all sessions were seen as helpful. When viewed in conjunction with the data summarising the number of sessions found helpful, the most plausible interpretation is local Trust circumstances influencing workshop elements seen as most relevant.

5.4 SLIP AND TRIP REDUCTION MEASURES AND ACCIDENT REDUCTION

Respondents were asked, "If slip and trip reduction measures have been introduced in your Trust, has there had been a reduction in accidents?" 116 respondents provided information in answer to this question. These responses are summarised in the following table and chart:

	Number	%
Yes	28	24
No	11	9
Don't know	77	66
Total	116	

Table 9 Summary of responses

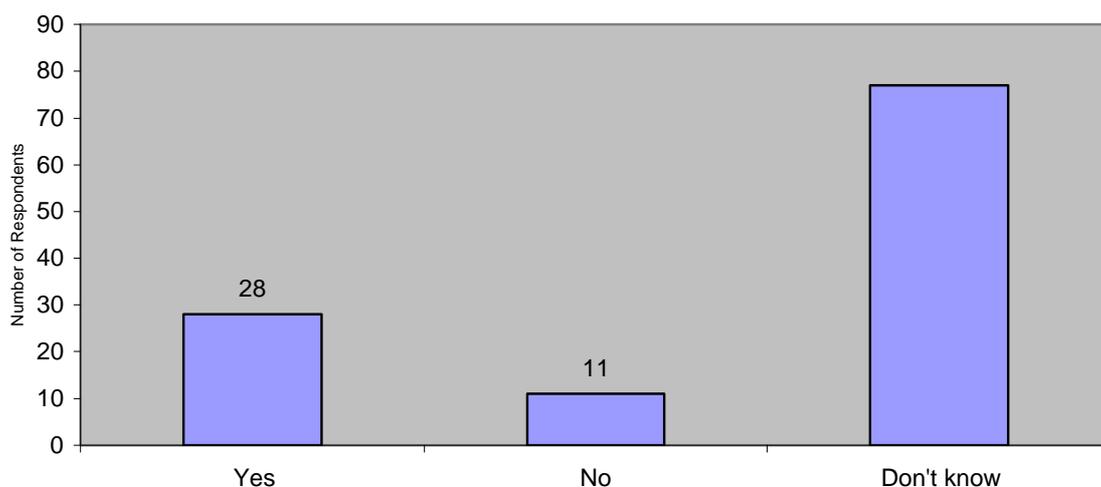


Figure 7 Chart showing summary of 'Have slip and trip reduction measures resulted in reduced numbers of accidents

The data summarised in the above chart indicates that over two thirds of respondents report that they have no knowledge of the impact of slip and trip reduction measures introduced in their Trust. Of the 28 respondents (about a quarter of the sample) reporting a reduction in accidents, 20 (only 16 per cent of the overall sample) report that the reduction is quantifiable. This finding suggests the operation of formal monitoring systems in these Trusts.

Respondents reporting a reduction in accident rates were offered the opportunity to report more details in a free text field (the comments are listed in full in Appendix 1). The main themes of these comments suggest an overall decline in slip and trip related incidents although, due to the qualitative nature of the data, it is not possible to infer a link between these reported reductions and Workshop attendance. Several of the comments include statistics and brief information on trends over time, suggesting that those respondents are operating systematic monitoring and data collection systems.

5.5 OTHER FACTORS INFLUENCING TRUSTS TO INTRODUCE SLIP AND TRIP REDUCTION MEASURES

Respondents were asked to indicate by means of a Yes/No question whether other factors, in addition to attendance at the Workshops, were influential in promoting the introduction of slip and trip reduction measures. Those responding yes were also invited to give further details using a free text box. The data for this question is summarised in the following table:

	Number	%
Yes	80	75
No	40	38
Total	120	

Table 10 Summary of data – other factors

Three quarters of the sample responded yes to this question, suggesting, not surprisingly, that NHS Trusts are influenced by a range of external factors when making decisions about

implementing slip and trip reduction measures i.e. for the majority of respondents, Workshop attendance was not the only determining factor.

The following chart summarises a thematic analysis of the comments provided in the free text box (a complete listing of respondent comments is provided in Appendix 2):

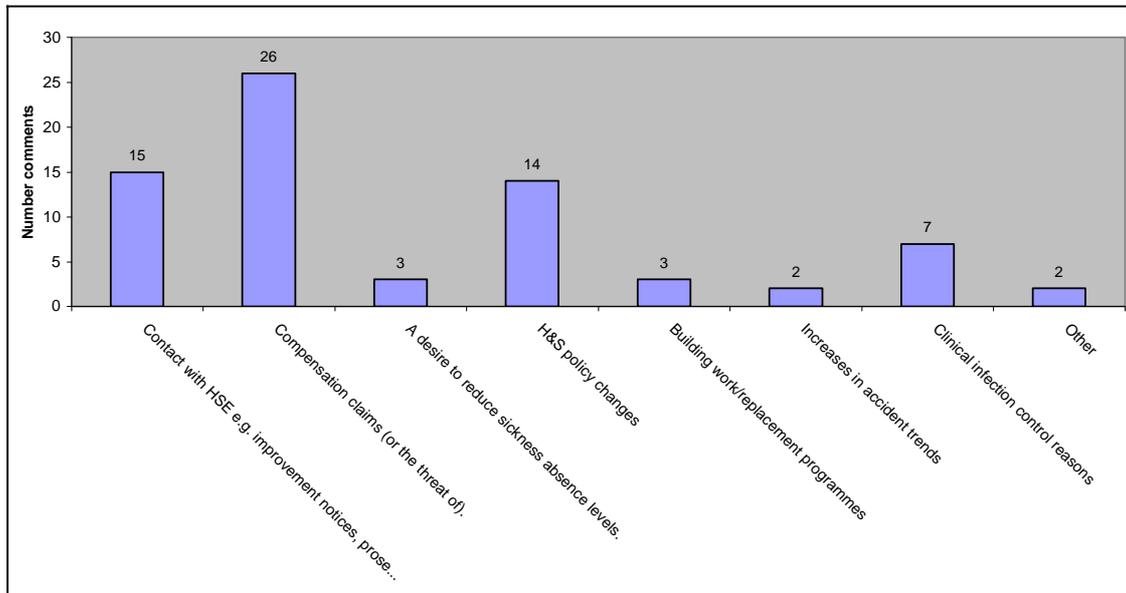


Figure 8 Summary of thematic analysis of other factors influencing the introduction of slip and trip reduction measures

The thematic analysis suggests that, in addition to attendance at the Workshop, Trusts are most influenced by one of three key issues when making decisions to introduce slip and trip reduction measures:

- Compensation claims
- Contact, or the potential of contact, with local HSE inspectors
- Internal policy changes

Analysis of these themes supports other evidence that shows financial considerations and regulatory pressures are strong external motivators to action. However, internal motivators also appear important, manifesting as local decisions to change/improve health and safety policies and procedures.

5.6 BARRIERS TO IMPROVING TRUST PERFORMANCE ON SLIP AND TRIP ISSUES

Respondents were asked to comment, using a free text box, on “*barriers that they had come up against with regard to improving Trust performance on slip and trip issues*”.

94 respondents offered comments about barriers to achieving improvements. The following table and chart summarises a thematic analysis of the comments provided in the free text box (a complete listing of respondent comments is provided in Appendix 3):

Barrier	Number Respondents	%
Cost/Finance	35	36
Staff and Management Attitudes	14	15
Architects/Builders	2	2
Adverse Perceptions Around Installing Safety Flooring (e.g. looks, cleaning and infection control objections)	10	10
Other	21	22
No Barriers Perceived	14	15
Total	96	100

Table 11 Summary of thematic analysis of comments provided in free text box

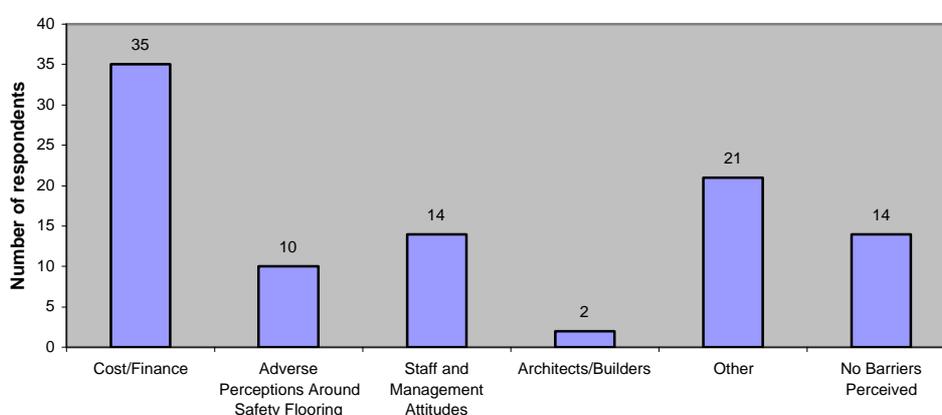


Figure 9 Summary of thematic analysis of barriers to improving performance on slips and trips

The range of barriers cited by respondents was broad, and not all were easily interpretable. However, finance and funding (eg to pay for new flooring) is clearly the leading perceived barrier, cited by about 36 percent of those who commented. Staff and management attitudes were the second most mentioned barrier, cited by about 15 percent of respondents. 10 respondents cited adverse perceptions around safety flooring, with 6 specifically citing the cleaning of slip resistant (or safety) flooring as an issue in connection with infection control. Interestingly, 15 percent of respondents who commented about barriers reported that they did not perceive any barriers to the introduction of reduction measures.

6 FIVE CASE STUDIES

6.1 CASE STUDY 1

Background

This case study describes the slip and trip reduction initiatives carried out by an NHS Trust in the north east of England. The main site of the Trust comprises an average size general hospital employing about 3500 staff. The Trust sent six staff to the Slips and Trips Workshop in 2006, including health and safety and estates specialists.

Attendance at the Workshop acted as a catalyst, motivating the adoption of a coordinated approach to reducing slip and trip incidents. A number of different teams were active in driving the initiatives forward, in particular the Catering, Domestic Services, Estates and Occupational Health and Safety Departments. The Trust is an active partner in the slips and trips work of the Health and Facilities Management Association local group.

Collecting Data on Slip and Trip Incidents

As a starting point, the Trust recognised that only a small proportion of slip and trip incidents in their hospital environment involved staff and visitors i.e. patient related circumstances trigger the majority of incidents.

The Trust introduced a new data recording and reporting system that separates out patient related falls. Statistics generated by the new process show that over 80 per cent of slip, trip and fall incidents are patient related. The remaining 20 per cent are in connection with environmental issues such as flooring, cleaning etc. The new system helps to ensure accidents are investigated by the appropriate people (e.g. Patient Falls team).

Catering Department Footwear Trials

The flooring in the main kitchens is old and due for replacement. Due to several instances of slip related falls, the Catering Manager commenced a trial of slip resistant footwear that is now standard equipment that all kitchen staff are required to wear.

Additionally, the Catering Manager gives all health and safety issues a high priority. All kitchen staff are actively involved in minimising slip and trip risk in the workplace e.g. the rapid cleaning up of spillages using dry mopping equipment supplied around the workplace. This policy is introduced during induction training and regularly reinforced.



Figure 10 Footwear used in trial

Introduction of a Micro Fibre Mopping System

The Domestic Services Manager has introduced a micro fibre mopping system. The system is used in all in-patient areas cleaned during business hours.

Mops are pre-wetted, so use optimum volumes of water, resulting in very fast floor drying times, thus minimising the risk of slipping accidents. In addition, there is less chance of spillage from mop buckets. Cleaners working during the day are trained in safe working practices (e.g. the half-and-half method) so that there is always a dry pathway for any pedestrians in the area being cleaned.

Overall, even though the micro fibre mopping equipment introduced here was more expensive than the traditional approach, it was deemed more hygienic, particularly with regard to infection control. It also helps to minimise slip risk by controlling over-wetting of floor surfaces.



Figure 11 Pre-wetted micro-fibre mops



Figure 12 Micro-fibre mop in use

Other Cleaning Systems

Corridor spills are reported to Domestic Services, who dispatch emergency response cleaners. Staff are tasked with protecting the area until cleaning is complete.

Safety floors are scrubbed and suction-dried using equipment appropriate for the flooring type. They are then clean mopped. Domestic Services report no problems with infection control issues when cleaning safety flooring. They believe the key to effective safety floor cleaning is adopting the right cleaning frequency and using compatible equipment.

Effective Refurbishment Practices

There is considerable refurbishment activity within the Trust, managed by the Estates Department. A number of the Estates team attended the Slips and Trips workshop and found the sessions on flooring slip-resistance testing very useful. They choose flooring using a risk assessment approach and liaise closely with Domestic Services and Health and Safety colleagues before major work or taking final decisions on flooring replacement.

In preparation for a major refurbishment of flooring in the kitchen areas, the Estates department are undertaking a long-term trial of safety quarry tiles (with carborundum inclusions) to determine durability and slip performance when wet. The trial has proved a valuable exercise.

HSE Inspection Activity

HSE conducted an inspection of the Trust since staff attended the workshop that looked closely at the Trust's performance on slip and trip issues. The Trust worked closely with the Inspectors, and the prevailing opinion is that the inspection process resulted in additional improvements to slip and trip performance. The Inspection report went direct to the Trust's Chief Executive. The Trust went on to adopt the HSE Inspection report as a working action plan.

Outcomes

Since attendance at the workshop and implementation of the various initiatives, staff falls have declined by around 34 per cent.

Key Emergent Themes

- **A co-ordinated approach between Trust Departments, reflecting the multifaceted nature of slip and trip risks**
- **The value of piloting new flooring materials before they are used in expensive refurbishment projects.**
- **The benefits of the intelligence provided by good data collection methods, resulting in accident investigation by appropriate personnel (e.g. Patient Falls team).**
- **The value of HSE Inspection activity i.e. reinforcing existing good practice while simultaneously putting slip and trip issues on the senior management agenda.**

6.2 CASE STUDY 2

Background

This case study reports on the experiences of a large Trust in North West England employing about 5000 staff on two sites. Responsibility for health and safety at the Trust lies with a small team of Physical Risk Managers who are part of the Trust's Facilities Services Department. Importantly, Facilities Services are also responsible for building maintenance and cleaning. A number of key people from the Trust attended the Slips and Trips workshop.

Slip and trip related accident statistics, particularly in main corridors, were a cause of some concern. Floor surfaces in the main corridors are comprised of vinyl tiles with a smooth, glossy reflective surface that looks fresh and hygienic. However, these smooth surfaces become a slip hazard when contaminated with water or other fluids. The Risk Management team decided to tackle the problem in 2007 by introducing a coordinated set of changes and new initiatives designed to minimise floor contamination risk.

Spill Station Initiative

A key initiative in the Trust's slip reduction strategy was the installation of Spill Stations throughout hospital corridors and in areas where spill risk is high. Each Spill Station consists of a wall mounted Wet Floor 'A' Sign accompanied by a large poster with an emergency contact number (see Figures 4 and 5). On seeing a spill, the emergency contact number puts staff in touch with a 24-hour cleaning team who attend as quickly as possible to clean up the spill.

Engaging staff support was crucial to the success of the Spill Station initiative. The initiative was well publicised to staff through a "Spills/Slips/Trips Awareness Day". This involved

cleaning staff, display stands, posters, competitions etc. Staff were encouraged to take responsibility for reporting spills, picking up litter and wearing sensible footwear. The Awareness Day also served to remind all staff of the importance of contamination free flooring. Commissioning an article in the staff magazine also helped promote the initiative. Monitoring of Spill Station use by Risk Managers has shown regular use of the facility.



Figure 13 Spill station 1



Figure 14 Spill station 2

Changes to Cleaning Regimes

Risk management staff worked closely with Domestic Services colleagues in a review of cleaning methods. This review led to a number of cleaning practice initiatives, including:

- Out of hours cleaning for areas such as the main outpatient department and busy entrance areas with a high public footfall;
- Using scrubber-driers to clean main corridor floors;
- Closing off stairwells during and immediately after cleaning in order to allow floor surfaces to dry; cleaners are given possession of a stairwell until it is cleaned and dried.
- Adoption of Department of Health mopping guidance, which also supports infection control procedures e.g. cleaning mops using a mop-head cleaning machine.

Entrance Area Matting

The Risk Management team realised that many entrance areas had inadequate entrance matting. The installation of new and extra matting at some entrances has helped introduce additional control to reduce the ingress of rainwater onto floors where there is high risk of contamination. The measures taken to date are considered temporary until refurbishment is due, at which time senior managers will be persuaded to “buy-in” to a more comprehensive entrance matting replacement programme.

Other Initiatives

Other initiatives taken by the Trust to reduce the risk of slip and trip related accidents include:

- Warning signs at appropriate locations such as entrances e.g. *“Shake wet umbrellas outside”*
- Providing cups with lids for staff taking drinks from restaurant/coffee bars to reduce the risk of spills on corridors

- A Trust procedure for the prevention of slips trips and falls.
- Research into flooring and entrance matting in preparation for refurbishment activities.
- Issuing staff working in high-risk areas such as kitchens with mandatory slip resistant footwear.

Obtaining Senior Management Buy-in

To compliment the above initiatives, the Risk Management Team also sought to obtain senior manager buy-in through the drafting of a Trust wide policy and procedure for the prevention of slips, trips and falls on Trust premises. Launched in parallel with the other initiatives, this document was endorsed by the Trust Chief Executive.

Outcomes

Although it is still relatively soon into the initiative, the results so far are encouraging. Slip and trip related accidents at the Trust have declined significantly since the introduction of the coordinated approach in 2007.

Key Emergent Themes

This case study illustrates a number of important themes:

- **The need to get “buy-in” from all staff to ensure the success of the spill station initiative**
- **A coordinated approach between various Trust departments**
- **The location of the Health and Safety function within the Trust’s Facilities Services Department made the required level of cooperation easier to achieve than if the Team was part of, say, the Human Resources Directorate.**
- **The importance of monitoring progress.**
- **Obtaining buy-in from senior management**

6.3 CASE STUDY 3

Background

Located in Scotland, this medium sized Trust comprises a set of modern buildings constructed in 1989. Responsibility for slip and trip issues lies with the Estates Manager and his team who are part of the Facilities Services Directorate. Over recent years, the Team have conducted a high profile awareness campaign on the site with the objective of driving down slip and trip related accidents.

A catalyst for many of the initiatives has been active participation in the specialist Slips and Trips group of Health Facilities Scotland, a pan NHS Scotland advisory body whose aim is to promote best practice in facilities management and property planning. The group was set up following the three Slips and Trips Workshops in Scotland. A key aim of Health Facilities Scotland is to promote the sharing of innovative ideas and good practice through regular meetings of NHS estates managers. This specialist group, comprised of NHS estates professionals from across Scotland, meets regularly to discuss key issues and share experience and good practice. This case study describes a number of measures that, in combination, have helped improve the Trust’s slip and trip incident performance.

Incident Pattern Audit

The starting point was a thorough audit of incident patterns using a database of recorded accidents and near misses. A footfall audit was also carried out, which provided information on the areas of peak activity. These audits provided the Estates Team with useful information about incident locations, circumstances and severity.

Investment in Large Area Entrance Matting

The Team noted an increase in the number of general complaints and compensation claims at various areas of the Hospital's access and egress routes. Control of contaminants was seen as the key to dealing with this problem, as the Team found it difficult to justify the high costs associated with installing large areas of slip resistant flooring. After successfully trialling this approach at a minor entrance, the Estates Team installed a large area of matting at the Hospital's main entrance. Located at the bottom of a sloping area, the main entrance was prone to small scale flooding during heavy rainfall. The project involved extending the entrance area by three metres, providing a large canopy to help stop the ingress of rainwater and installing special matting over a large area, including the ambulance-parking zone (see Figures 6 and 7). The three-stage matting system was chosen after extensive research by the Team and is proving to be very effective at removing water and other contaminants brought in on pedestrians' footwear.



Figure 15 Entrance matting and canopy – outside view



Figure 16 Entrance matting – internal view

Floor Cleaning

The hospital has a policy of employing a cleaning regime adapted to:

- Type of flooring
- Location and use pattern

For example, main corridors and wards are cleaned at night to lessen slip risk. No polishes or applications are used – only a dry buffer or appropriate spay is applied. Where wet mopping is used, a combination of a half floor cleaning method and caution signs are employed to ensure pedestrians only walk on dry floors. Infection control colleagues are always brought on-board early in the event of changes or the trialling of new initiatives.

Controlling Slip and Trip Risks In High Risk Areas

Kitchen areas were originally fitted with quarry tile style flooring but this was replaced with proprietary slip resistant flooring. Following attendance at the Slips and Trips Workshop, the catering manager also instigated a footwear replacement programme to provide slip resistant footwear for kitchen staff. The programme was supported fully by the trade union. The footwear was carefully sourced from a number of suppliers, trialled and is provided as personal protective equipment to all kitchen staff.

Other Initiatives

The Estates Department introduced a more rigorous Pre Planned Maintenance (PPM) inspection regime of footpaths and car parks, with the aim of early detection of possible slip/trip hazards. Estates managers instigated a rolling programme of replacing slabs (often broken by cars) with areas of tarmac. The latter surface was deemed to be more robust and less of a trip hazard over the longer term.

Structured awareness meetings were arranged involving the attendance of 40 staff identified by Heads of Departments. The aim was to raise awareness levels of slip and trip issues. These meetings reinforced existing management messages, and encouraged a “buy-in” ethos among middle ranking managers, with the hope that messages are further dispersed.

With the likelihood of several new build capital projects on the horizon, Estates Managers (using knowledge from the Slips and Trips workshop) are in a good position to challenge design teams and architects, allowing slip and trip risk minimisation to be designed in from the outset.

Outcomes

The Trust has seen a reduction in the number of reported incidents or "near misses" in the areas with the new barrier matting system at the main entrance. This outcome demonstrates clearly the benefits of effective contamination control in reducing slip related incidents on a large, busy site.

Key Emergent Themes

This case study illustrates a number of important themes:

- **Control of contaminants at key locations such as entrances can be an effective slip reduction measure**
- **Working within the constraints of the existing site need not prove a barrier to taking effective actions**
- **Discussions with professionals working in other healthcare settings can be catalyst for change as well as facilitating good practice information exchange**
- **Appropriate slip-resistant footwear can be an effective control in foreseeably wet areas such as kitchens**

6.4 CASE STUDY 4

Background

Slips and trips became an issue in this medium size Trust in Southwest England after they were served with two improvement notices and prosecuted by HSE. The Trust appointed a new Health and Safety Adviser soon after these events and she attended the Slips and Trips

workshop after taking up post. She found that although slips, trips and falls were the most common type of incident at the Trust, the risks associated with them were poorly managed.

She took steps to set priorities and to develop a culture of reporting and risk assessment with the aim of improving the Trust's performance with regard to slip, trip and falls incidents.

Attempting to Change the Culture

Many of the barriers to change were perceived to be cultural in origin. The Health and Safety Adviser introduced a number of initiatives with the goal of "growing", over a period of time, a more risk aware culture in the Trust.

Central to this was the introduction of 150 Risk Monitors. Risk Monitors are specially trained staff working on wards and departments who volunteer to undertake this role. On a monthly basis, Risk Monitors risk assess topics relevant to their work area. Slips, trips and falls are a mandatory topic in all areas. This risk assessment process is proactive, and linked directly to the Trust's capital works programme.

The Trust introduced a comprehensive reporting system that captures data on all incidents. All staff are encouraged to report incidents and hazards via the reporting system. After recording on the database, incidents are graded on a 1 to 5 scale. Feedback is an important aspect of the reporting process. Staff receive feedback on all reported incidents, thus reinforcing the efficacy of the reporting system and encouraging further reporting behaviour.

Training is also important. The aim is to pass on key messages through induction and mandatory staff training sessions, which includes awareness of slips and trips hazards along with the roles and responsibilities of staff.

In the opinion of the Trust Health and Safety Adviser, this culture change strategy has been successful in raising the profile not only of slips, trips and falls, but has also promoted the value of sensible risk assessment as an effective way of minimising risk in general.

Role of Health and Safety Adviser

The Health and Safety Adviser works very closely with strategic project teams to ensure suitable flooring is introduced when new building or refurbishment work is undertaken. Also, good working relationships with other Trust functions such as the Facilities Team are important in ensuring the adoption of effective risk reduction measures.

Reporting directly to the Risk Manager, the Health and Safety Adviser has a remit that involves the policy, training, assurance and culture change aspects of risk reduction across the Trust.

Other Practical Initiatives

- The introduction of an Estates Help Desk that prioritises calls to ensure that slip, trip and falls hazards are dealt with very quickly.
- Micro fibre cleaning methods introduced as a way of dealing with a link between increased cleaning activities on wards (to combat infection issues) and slip, trip and fall incidents.
- Introducing directional chevrons on flooring to indicate the presence of slopes (see Figure 8).

- Comprehensive pre-planned inspections of the whole site to identify slip and trip hazards at regular intervals. This activity will be carried out on a weekly basis when a new member of staff begins work.



Figure 17 Chevrons indication slope

Outcomes

The Trust saw a reduction in RIDDOR reportable slip, trip and fall incidents from 11 in 2004 to six in 2007, four of which were ward based and patient related.

Key Emergent Themes

This case study illustrates a number of important themes:

- **The importance of HSE Inspection activity, in co-ordination with awareness raising initiatives like the Slips and Trips workshops, as a catalyst for change.**
- **Effective risk reduction requires good cooperation between risk managers and functions such as facilities management.**
- **The effectiveness of a culture change approach in promoting buy-in from staff.**
- **The importance of training staff,**
- **The value of incident/near miss reporting as a way of building intelligence and as a way of gathering feedback on all reported incidents.**

6.5 CASE STUDY 5

Background

This case study reports the experiences of a medium sized Trust in Scotland. Controlling slip and trip risks at the site is the responsibility of the Estates Team, who have set up a quick response 24-hour helpdesk facility that allows all staff on the site to report problems and accidents. One person from the Trust attended the Slips and Trips Workshop.

The Estates Team has taken a number of initiatives aimed at reducing or controlling the risk of slip/trip related incidents such as the installation of Slip Resistant Flooring In High Risk Areas. Accident statistics flagged up a high slip risk corridor in a bridge link between two main hospital buildings. There were incidents of staff slipping on wet floor surfaces. Investigations showed that the slip risk was caused by condensation dripping off windows along with some ingress of rain when windows on the bridge were left open.



Figure 18 New safety flooring on bridge link



Figure 19 Heaters to stop condensation

Using information provided at the Slips and Trips Workshop, the Estates Team sourced and installed appropriate slip resistant flooring in and around the immediate bridge area, as well as fitting heaters to reduce condensation (see Figures 9 and 10). This has resulted in a reduction in slip accidents in this area.

Spillages

The General Services Team deals with spillages using wet pick-up equipment, with the objective of removing slip hazards as quickly as possible. As a further preventative measure to reduce the possibility of slip hazards occurring, lids are now standard issue on take-away drinks.

Cleaning

Half-and-half cleaning methods are in use, as is the regular use of wet floor signs, which are removed when floors are dry. Main corridors are cleaned during the night, with daytime cleaning of wards. Scrubber driers are used for the cleaning of areas installed with safety flooring. A steam-cleaning machine has also been purchased recently, this can be used with micro fibre mops. Estates work closely with Infection Control with regard to cleaning issues, with bi-monthly meetings allowing regular discussions.

Slip Resistant Footwear for Kitchen Staff

The Catering Manager has purchased special slip resistant footwear for staff working in kitchen environments. The footwear offers protection for staff should kitchen floors become contaminated.

Key Emergent Theme

- **The importance of installing appropriate slip resistant flooring in known high slip risk areas.**

6.6 CASE STUDIES – SUMMARISING THE IMPORTANT MESSAGES

A number of important messages emerge from an analysis of these case studies:

1. The organisational location of those responsible for advancing the slip and trip risk agenda (i.e. health and safety practitioners) appears crucially important. For example, working productively with estates or facilities managers will be much easier if risk

reduction staff are members of the same department. Influencing these crucial people will be easier if there are fewer communication barriers.

2. HSE Inspection activity, in conjunction with awareness raising activities like the Slips and Trips workshop, emerges as an important catalyst and motivator of change. HSE Inspectors were instrumental in sparking off several of the case study initiatives. In cases where Inspection was less of a driver, Trusts still found it beneficial to work with and involve their local HSE Inspector. Finally, HSE Inspection reports were cited as a useful way to push slip, trip and fall issues up the Trust senior management agenda.
3. The value added by networking with other Trusts in relation to combating slip and trip risk also emerges as an important and useful activity. Learning about what does and does not work has proved useful in several of these case studies. At its most practical, the networking is a potential good source of new ideas and may save Trusts having to “re-invent the wheel” when needing to deal with specific slip, trip and fall issues.
4. The advantages of having the support of staff and senior managers were important to the success of several of the initiatives described in the case studies. For example, getting important messages across to staff or securing adequate funding or resources will prove much easier if staff and managers have already “bought-in” to the advantages of reduced slip and trip risks.
5. Finally, a number of practical observations emerge from the case studies. These include: the benefits of good incident reporting and data collection systems (so that ‘hot-spots’ can be identified, action prioritised and incidents dealt with by appropriate personnel (e.g. Patient Falls teams); the advantages of piloting new flooring materials; the importance of using an appropriate and effective cleaning regime (particularly important with safety flooring) and systems to deal with occasional spillages; and, lastly, the observation that taking effective measures to reduce the slip and trip risk need not always prove costly. Many of the examples cited in this selection of case studies show that effective risk reduction is possible while working within the constraints imposed by the existing estate.

7 CONCLUSIONS

1. The survey data provides evidence that the Workshops are effective in terms of influencing delegates to:

- Carry out, or intend to carry out, slips and trip reduction measures in their Trusts
- Develop arguments to promote the case for reducing slip and trip hazards

2. Respondents found the Workshop content to be relevant and helpful. The balance and breadth of the content seems about right given the variation in roles and responsibilities of delegates, and also the known differing priorities of participating NHS Trusts. Further confirmation of the appropriateness of the Workshops content are the examples described in the case studies visits; these provide excellent examples of the practical application of the Workshop content.

3. The Workshops complement a range of other factors with regard to influencing respondents and their Trusts to take effective slip and trip reduction measures.

4. Respondents face a number of perceived barriers when contemplating the introduction of slip and trip reduction measures, e.g. costs/lack of financial resources (e.g. for new flooring) and adverse perceptions of the impact of safety floor use, particularly with regard to cleaning and infection control issues. However, evidence gathered from the case studies shows that implementing effective slip and trip reduction measures need not prove costly.

5. Further research, involving Infection Control Departments, may be needed to explore scientifically the issues surrounding the effective and efficient cleaning of safety flooring. This research should have as one of its objectives the development of a consistent approach to the hygienic cleaning of safety flooring.

6. Information from the case studies points to a number of important circumstances that may limit the effectiveness of attempts to reduce the risk from slip and trip issues in NHS Trusts. These circumstances may arise if Trust Health and Safety professionals:

- See the potential solutions to slip and trip risk solely in terms of refurbishment and/or capital projects with a high cost dimension. The case studies illustrate good examples of successful low cost initiatives operating within the constraints imposed by existing circumstances.
- Do not effectively influence important Trust functions such as Estate and Facilities Management colleagues.
- Do not make effective use of HSE Inspection activities, for example to court “buy-in” from senior Trust management.
- Do not take steps to effectively engage with the workforce e.g. adopting a slip and trip reduction policy that requires minimal staff involvement.
- Are working in isolation from other Trusts.

7. Do not challenge situations where inappropriate or ineffective cleaning regimes compromise slip and trip risk reduction measures, particularly with regard to the installation of safety flooring. The existence of good quality research to support the case for cleanable safety flooring would be advantageous.

8 APPENDIX 1: RESPONDENT COMMENTS ABOUT QUANTIFIABLE REDUCTIONS IN ACCIDENT RATES

Respondent comments are provided verbatim with no corrections applied by the author.

Respondent Comments About Quantifiable Reductions in Accident Rates

- Plymouth PCT have reviewed and monitored STF for a set period in one year and compared the results with the same period in the following year for four inpatient areas within Adults & Older Persons Services. This included repeat fallers. However, two units within one time range have since moved location to new purpose-built unit for the following time range, with new flooring, etc, so the results may not be wholly conclusive at this stage. The PCT is current reviewing 07 details with 08
- Incidents recorded on Datix and reported to RIDDOR
- Reduction in the number of reported incidents or "near misses" in the areas with new barrier matting system at main entrance
- Using a trend line on the annual statistics for slips trips and falls the trend is now downwards
- We have been monitoring incidents and the trend has gone down
- Falls total in last three years see reduction in total and injuries for patients 04/05 05/06 06/07 falls 1159 814 593 injuries 369 304 153
- Reported incidents
- Reduction of slips in catering area after a replacement of the flooring.
- A reduction in the number of incidents reported
- 20% reduction on reported incidents
- Windermere lodge corridors the numbers of incidents of slipping has reduced by over 50%
- There has been a slip campaign for some time that involved patient issues as well as staff ones. At the moment there has been a 18% reduction in total slip trip falls accidents even though there has been an increase in reporting in some areas. Staff incidents have been reduced but this is not totally quantifiable although the number of serious incidents has reduced.
- About 50% reduction but wouldn't say that all due to work done on st&f
- 72% reduction since 2004
- Approximately 50 % reduction
- Less instances of slips and trips in internal environments
- 2 fewer slips/trips compared to previous period.
- 10%reduction in staff slip and trip incidents (124 reduced to 112 per year) and 20% reduction (2232 reduced to 1777 per year) in patient incidents. Overall reduction of 19%.
- There has been at least a 40% reduction in Slip trip and fall incidents recorded in the last 2 years due to the initiatives implemented from the seminar.

9 APPENDIX 2: OTHER FACTORS INFLUENCING NHS TRUSTS TO INTRODUCE SLIP AND TRIP REDUCTION MEASURES

Respondent comments are provided verbatim with no corrections applied by the author.

Other Factors Influencing NHS Trusts To Introduce Slip and Trip Reduction Measures

- HSE Improvement Notices
- A nurse slipped on a drop of liquid and takes legal action against the hospital for inadequate lighting while the light was adequate.
- As previously mentioned, the organically ill inpatient unit does have consistently high levels of STF, and it was felt that medication might play some part in STF for some patients.
- Increase in admission of patients prone to falling
- NHSLA risk management standards. Compensation claims
- Reduce sickness absence, improve safety culture and reduce incidents
- Several years ago there was an increase in number of general complaints and compensation claims at various areas of the hospitals access and egress routes. The Estates Department introduced a more rigorous Pre Planned Maintenance (PPM) inspection regime of footpaths and car parks
- Acc stats, claims, PEAT inspection
- Compensation claims, a strategy to reduce patient falls and a desire to improve the workplace for all.
- Deep Cleaning money
- Incidents & potential claims
- HSE and our governance procedures
- Accident reports. Statistics from Universities Safety and Health Association. Claims.
- NHSLA/CNST standards require policy on slips & trips. Trust arrangements for management of stf incorporated into a new policy
- Ongoing plan.
- New building
- CLAIMS
- NPSA and MHRA guidance
- On going risk management strategy. Introduction of specific slips, trips related categories in our incident recording system.
- Improvement Notices!!
- Claims, safety of staff and patients etc., loss of time off, desire to improve flooring and safety record of Trust.
- Infection control monies found to improve patient areas, which included the removal of carpet and replacement with appropriate hard flooring.
- HSE inspection visit RIDDOR reports
- 3 claims in from staff from Windamere Lodge, Ellis v Bristol City Council Case law
- A number of incidents involving patients falling and hurting themselves.
- As before specific review of instances
- General good H&S management
- A visit from HSE and Improvement Notice served on other Healthcare sites
- Increase in reported s&t incidents
- There has always been consideration given to the type of flooring chosen, mainly from knowledge gained over the years within Estates. What the workshops did was take this to a different level by pulling information together and demonstrating the problems. This

Other Factors Influencing NHS Trusts To Introduce Slip and Trip Reduction Measures

consolidated existing knowledge and introduced many aspects never previously considered.

- Injuries to staff resulting in time off work
- 48% of Trust legal liability claims are slip/trip related
- Various
- HSE Inspection identified failings in housekeeping in some areas
- New cleaning contractor - increase in incidents therefore review their procedures and training and monitor their work constantly
- Improvement notices and prosecution in 2004
- Litigation is a significant factor in slip reduction regimes. However, some slip incidents have resulted in serious injury to staff and public.
- Increasing number of civil claims
- NHS targets, ongoing reduction in litigation due to falls. Reduce bed stay due to falls in hospital
- Falls group medical consultant led
- Ongoing replacement flooring and New build work. Inspections from a patient perspective have also influenced us
- Recent compensation claim that was investigated and slip testing carried out. This has been extended across the Trust site
- Don't know
- Compensation claims Absenteeism from staff injuries
- Litigation/Compensation for staff trip
- Improvement Notice served prior to attendance; claims due to incidents; compliance with NHSLA standards
- Workplace inspections
- Claims are now being taken in to account. Both Staff and visitors
- Compensation claims
- Compensation claims
- A risk assessment was carried out using the SAT tool and Sutronic duo device. After presenting findings to management flooring was vinyl flooring was replace by carpeting
- We had an investigation following a slip RIDOR incident
- Compensation claims, internal monitoring
- Request from NHS (CNST) to produce a Falls Policy for Patients (this was in addition to the Trust Slips and Trips Policy that had been produced following the HSE Road show
- To meet the Trust target to reduce claims from staff and visitor/patients
- We made and continue to make decisions based on the information we gained from the seminar and from the use of HSE sat tool
- Safety action notice
- Internal accident statistics, internal claims
- Inspections
- Increase in slipping incidents
- PEAT inspections, Health and Safety Audits
- Yes surveys are to be carried out
- Analysis of slips trips and falls in our elderly care wards. A Falls Group has been set up and has plotted key times and areas when/where falls occur.
- A number of trip hazards recorded on our risk register as red risks
- The changes implemented were designed to reduce the risks and also to improve the appearance of particularly entrances where flooring is difficult to keep clean.
- Workplace inspections
- The very nature of our business and insurance requirements / claims etc.
- HSE Inspections, Jan 2007

Other Factors Influencing NHS Trusts To Introduce Slip and Trip Reduction Measures

- Consultation visit from HSE Inspector
- Appropriate flooring to be assessed for all future builds.
- Control of infection issues
- Improvement notice issued to our Trust
- Compensation claims
- 3 claims in 06/07 due to slips & trips
- Topic has high national profile
- Safety Action Notice issued by Health Facilities Scotland to all NHS premises

10 APPENDIX 3: BARRIERS TO IMPROVING TRUST PERFORMANCE ON SLIP AND TRIP ISSUES

Respondent comments are provided verbatim with no corrections applied by the author.

Barriers to Improving Trust Performance on Slip and Trip Issues

- Money, money, money Da, da, da, da It's a rich man's world
- Financial problems
- Management attitude to Health & Safety is not always at the top of the agenda although attitudes towards H & S are becoming more positive
- None that I am aware of, in fact, the opposite - the people involved have been very co-operative.
- People didn't want to hear it. They re resistant to anything that took them away from their comfort zone, and didn't seem to care when it was demonstrated to them that the info on the floor spec was misleading. They were not interested in non-slip footwear, and took no notice of the advice.
- Cost Space limitations
- In general funding is an issue when trying to have flooring in areas of concern replaced.
- Changing workforce
- None
- Joint meeting with Projects to discuss type of flooring i.e. Corridor areas the need for non-slip or standard vinyl or should each area be risk assessed to the activity carried out? And to change culture and time management being un-realistic.
- In certain areas there are culture issues in refusing to acknowledge the seriousness of Slips, Trips and Falls accidents eg reluctance to wear appropriate and "sensible footwear" in the workplace, "not my problem" mentality regarding spillage of liquids in corridors etc
- Financial constraints when proposing to replace flooring that is nearing the end of its life (only for very large areas). However the funding was granted.
- Mainly cost.
- Not aware of any
- Choice of safety flooring in wet areas such as showers with regards cleaning
- I am not involved in flooring works
- N/A
- Financial cost & effect on individual budgets
- Barriers with other departments (Estates) due to their other priorities.
- None at the moment
- No significant barriers encountered as no major works have been necessary
- Sheer volume of work in this area
- Rehab elderly patients, trying to care for them selves
- Getting employees to act when seen
- COST
- Individual resistance/agenda
- Decisions made about office relocation without slip, trip problems being addressed
- The belief that slips and trips do not have a major impact upon the organisation.
- Funding, attitude of a few individuals
- Very few barriers experienced
- Changing perceptions to risk factors in relation to selection and maintenance of flooring
- Mainly financial, not enough resources to replace all the flooring we would like to.

Barriers to Improving Trust Performance on Slip and Trip Issues

- Resource
- Some staff will not wear the tried & tested shoes
- In existing facilities cost and disruption to lifting and replacing floor coverings
- None
- Lack of Funding to replace damaged or inappropriate floor-coverings
- Unable to drum up enough enthusiasm [and funding] in the face of all the other equally important issues that require resource of any kind
- Normal Financial Barriers
- Lack of funding. Decisions made at too higher level
- N/A
- The importance of presenting a clean hospital, polishing of floors makes the floor look good and apparently polishing non slip flooring makes it easier to clean, this practice has stopped now.
- None
- Difficult to instigate dry mopping after wet mainly as a resource/time issue
- Floor coverings are still exceptionally smooth and whilst non-slip when dry can be extremely slippery when wet and in a hospital setting that can easily happen with incontinent patients. The floor-covering standard is driven by Infection Control who insist on the very smooth flooring. In addition the flooring looks shiny when cleaned and hospital staff, patients and inspectors (not HSE) see a shiny floor and immediately consider the place is clean and infection free. This is a big issue and the guidance from the Dept of Health does not help.
- Finance to upgrade existing floor coverings
- Mostly financial and lack of knowledge of such requirements from non Estates Personnel
- Finance
- There are always individuals who think H&S is overdone - thankfully we have few of these in the organisation and they are outnumbered anyway. So given this I know of no barriers to improving the reduction of slips and falls.
- Financial
- Costs and difficulty in changing contractually agreed systems.
- Attitude of staff
- Each project employees architects who each have a favourite type of flooring. We consult the type of flooring to key staff who all have different needs for the floors. e.g. a dimpled non slip floor for wet room areas reduces slips but the cleaners and infection control do not like it as they want a smooth finish and that is sealed to prevent dirt build up.
- Old buildings with insufficient storeroom. Vast construction programme in progress. Old buildings which staff have outgrown and/or are not now suitable for current purposes
- Money
- Limited funding
- Resistance from PFI partners to do anything following data presented to them on slip incidents. Slip incidents have increased following opening of the new hospital but cleaning services are now contracted out by the PFI consortium.
- Time taken and cost of remedial measures
- It is difficult to gauge the effectiveness of any reduction measures, as many patient falls are difficult to attribute to a cause.
- Main barrier is time for staff to report and fully investigate incidents as well as dealing with patients needs.
- Staff not always following Trust procedures, although they have received training, resulting in incidents occurring.
- Too many other initiatives

Barriers to Improving Trust Performance on Slip and Trip Issues

- Lack of funding
- None really.
- Lack of resources Lack of acceptance of reduced slip floors
- All flooring is deemed to be safe - however, some areas may benefit from more modern materials and funding is sometimes a barrier. If a problem area was identified monies would be available in the health & safety budget
- The installation of more anti slip floor coverings.
- Funding is always an issue in public sector employment.
- Human error!
- Blocker in the Estates Department, Cleaning pressures around infection control (friction!). Planning going for the look/interesting materials with out much thought for safety.
- Staff reluctance to change working practices
- Provided appropriate guidelines issued and funding made available there are no barriers to making improvements in my personal opinion.
- PEAT inspection standards - which perceive "shiny floors" as clean floors; lack of funding to replace floors
- Input has been ignored at a new Hospital scheme where a project manager was influenced by looks rather than practicality
- Finance. Changing attitudes.
- Financial
- Poor performance by some contractual cleaning staff regarding the use of signage when cleaning floors
- None
- Funding
- Our estates department is under pressure to have work completed on time and to budget sometimes communications are a barrier.
- The barrier is one of finance
- None that I know of
- Competition for funding against other identified risks in the organisation
- Cost!
- n/a
- None
- Costs
- Availability of area to effect repairs
- Funding
- Inadequate amount of time to deal with so many matters. Slips and trips are just one of the issues that we could do more on - given the resources. Money, or the lack of it, is a big issue.
- Review and Implementation of staff Education and Training
- None
- Resources!
- One current project is the up-grade of our catering facility, including replacement flooring. The area is managed by contractors and they have employed designers for the project. The specifications have to be agreed by the Trust. The flooring roughness specified by them was lower than the SAT assessment results. Although they agreed with my inputs to the assessments, they did not want to change the flooring spec, stating it would be hard to clean and they have installed it in many other facilities - they know what they are doing!!! Of course the Trust enforced the requirements of the SAT assessment.
- Finance
- Every one

11 APPENDIX 4: TACKLING SLIPS AND TRIPS RESPONDENT INFORMATION SOURCES

Respondent comments are provided verbatim with no corrections applied by the author.

Tackling Slips And Trips - Respondent Information Sources

- HSE Manufacturers/Suppliers
- HSE website (**17 respondents**)
- HSE, associated H&S journals and web sites.
- HSE seminar
- HSE NPSA
- Part of an advisory group looking into slips, trips
- Government documentation
- HSE website, NHSLA
- HSE web site or our Health & Safety Officer
- From NHS HTM's Construction and Architectural Literature, British Standards and HSE etc
- HSE Slips trips falls seminar mostly. I then looked up additional information on the Internet.
- NHS Risk Management Group
- HSE, flooring brochures, flooring manufacturers.
- HSE website + documentation from the course
- Health & Safety dept
- HSE web site, trade journals
- H.S.E. Slips & Trips Workshop
- HSE (**5 respondents**)
- HSE, H&S journals, IOSH
- HSE WEB IOSH SITES
- HSE website
- Can't remember - think it was through h&s networking group
- HSE site, SHTM
- HSE, IOSH
- HSE, CRONER - I, MEETINGS, ETC
- University safety policy statements, Safety Literature, HSE website, discussion with colleagues
- HSE web pages - seminars - Magazines - colleagues
- HSE, Trade Union
- HSE Web site; Barbour Index; Health Facilities Scotland.
- Primarily HSE workshop and website. Some commercial publications and internet articles.
- HSE mail shot
- HSE HSL manufacturers
- Manufacturers, HSE, HFS.
- PFE, internet, suppliers
- H&S Ann James
- Various publications from HSE and NHS
- NHS Health Facilities Scotland.
- On-line i.e. HSE web-site / flooring manufacturers web-site - consult with other Trust Staff i.e. Risk Management
- HSE and NHS websites

Tackling Slips And Trips - Respondent Information Sources

- On the web, Local Health and Safety Department and also through Health Facilities Scotland
- Trust Health & Safety Advisors
- NEBOSH training HSE website and guidance. Other competent persons within the Trust
- Internal Health and Safety office HSE website
- Flooring manufacturers, Altro in Letchworth. Emails.
- HSE workshops. HSE web pages. NHS Safety adviser Forums
- HSE website, Barbour Index,
- HSE Web site and HSE publications
- Mostly from the HSE web site and communication from colleagues.
- Experience, trade mags, HSE presentations etc
- H&S publications
- The course and HSE website, Barbour index and IOSH material
- HSE, accident statistics
- Through training sessions, manufacturers and architects
- HSE / INTERNET / COURSES / NETWORKING
- HSE website / other Trusts
- HSE website initially
- HSE, IOSH, IIRSM & networking with other professionals
- HSE and Barbour
- From the HSE road show & information from other NHS organisations
- HSE, SHP, NHS SAFETY BULLETINS
- HSE website / leaflets
- Variety of sources including HSE, IOSH and Rospa plus NHS resources for patient safety
- HSE Website, other relevant websites that discuss slips, trips and falls, Manufacturers. Benchmark with other NHS Trusts.
- Clinical risk assessors in Trust, internet, national policies I become aware of
- At the workshop
- HSE, Internet, exhibitions, magazines
- Yourself
- Can't remember. Sorry!
- The web, internal health and safety advisors
- HSE web site Journals (SHP, etc.) Regional Safety Advisors Meetings
- Union/ TUC publications etc
- H&S Manager
- HSE Seminars + Website Trust + Union info
- HSE Website also discussion with fellow colleagues in Directorate also contractors providing services.
- Safety Journals, reviews of incidents, colleagues
- A seminar at St. Johnstone Football Ground and via the website. I found the SAT tool to be helpful and management took action to minimise the risks in regards slips trips and falls
- HSE website, IOSH meetings, journals, seminars
- Altro info, HSE
- HSE website. Internet. Trade publications
- Health and Safety Advisor
- HSE, Professional Journals, meetings, etc
- The Trust's health & safety Advisor plus trade magazines
- Internet & experience
- From the HSE Seminar

Tackling Slips And Trips - Respondent Information Sources

- HSE Web site. Barbour Index
- Various means literature HSE website informal contacts
- HSE website Colleagues. Professional journals
- INHOUSE TRAINING
- HSE guidance, manufacturers data sheets
- HSE / Health & Safety Advisor / Estates Groups
- Course documents, web site etc
- Falls Group, HSE website, Risk Group meetings
- HSE, Workshops and experience
- From the HSE web site as well as from other Trusts that I network with. s
- HSE Web site and other literature
- Internet & HSE
- HSE Web sites, Publications, Journals etc
- HSE/C
- Via Trust health & safety advisors
- Flooring manufacturers

Slips and Trips Workshop for NHS Health and Safety Professionals

The questionnaire will take approximately 10 minutes to complete. The save button can be utilised at any point and your answers will be saved. Just click on the link in the e-mail to restore the saved questionnaire.

Activities you may have carried out since attending the Workshop

Since attending the Workshop, which, if any, of the following activities has the Trust carried out, or is planning to carry out? (you may choose more than one option):

- Mapping the "hot spots" of slip related accidents and/or near misses
- Introduced new cleaning regimes
- Made use of HSE's Slips and Trips Assessment Tool
- Reviewed or changed any flooring materials in one or more sites
- Repaired damaged or uneven floors
- Tried new slip resistant footwear
- Run training sessions or cascaded information to colleagues or workers
- Consulted colleagues and/or safety reps to improving reporting procedures
- Improved housekeeping to reduce tripping accidents
- Set targets or produced an action plan for the reduction of slip/trip related accidents
- Carried out other measures not listed here
- No measures carried out

If other measures were carried out, please briefly describe:

Was the decision to carry out, or intend to carry out, these activities influenced by information or advice presented at the Workshop?

- Yes*
- No*

Please describe which aspects of the Workshop were helpful in identifying the relevant issues and how to approach them with regard to making improvements (you may choose more than one option):

- The case for slips and trips (perceptions, statistics, costs etc.)*
- The slip potential model (key elements, risk assessments)*
- The importance of cleaning*
- Practical demonstration of floor testing equipment (pendulum etc.)*
- Practical demonstration of the Slips Assessment Tool (SAT)*
- The exercise looking at the assessment of flooring samples*
- Slip resistant footwear*
- Slips and trips and the design of buildings*

To what extent did you call on the lessons learned at the Workshop in developing arguments that led to improvements in the way slip and trip hazards are managed in your Trust:

- A lot*
- A little*
- Not at all*

If slip and trip reduction measures have been introduced in your Trust, has there been a reduction in accidents?

- Yes*
- No*
- Don't know*
- No slip and trip reduction measures yet introduced*

Is this reduction quantifiable?

- Yes*
- No*

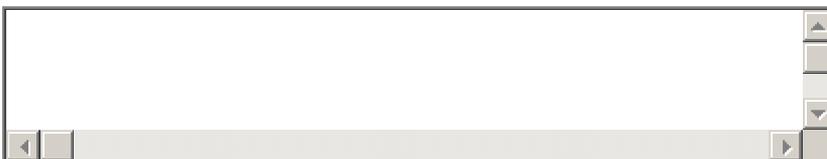
If yes, please give details:

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Were there any other factors that influenced the Trust to introduce slips and trips reduction measures (e.g. inspection visits, compensation claims)?

- Yes*
- No*

If yes, please give details:

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Please give details of any barriers you have come up against with regard to improving the Trust's performance on slips and trips:



About you

What is your job title?



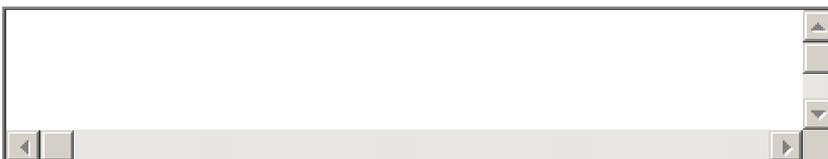
In which department do you work?



What are your main responsibilities?



How long have you been in your job?



How long have you worked for the Trust?

Where do you get your information about how to tackle slips and trips?

Please tell us about any further information you would find useful to help persuade the Trust's decision makers:

Would you be willing for the Trust to be involved in developing good practice case study material on managing slips and trips for wider dissemination throughout the NHS?

- Yes*
- No*

Please give your current contact details

Your name

Name of Trust

Address

Telephone Number

E-mail address

And finally, about the Trust

Approximately, how many staff does your Trust employ?

- Below 2000*
- Between 2000 and 4999*
- Between 5000 and 7000*
- Between 7001 and 10,000*
- Over 10,000*

How many sites does the Trust operate on?

- 1
- 2
- 3
- 4
- More than 4*

**Thank you for completing this
questionnaire**

APPENDIX 6: SUMMARY OF DELGATE FEEDBACK PROVIDED IMMEDIATLEY AFTER THE WORKSHOPS

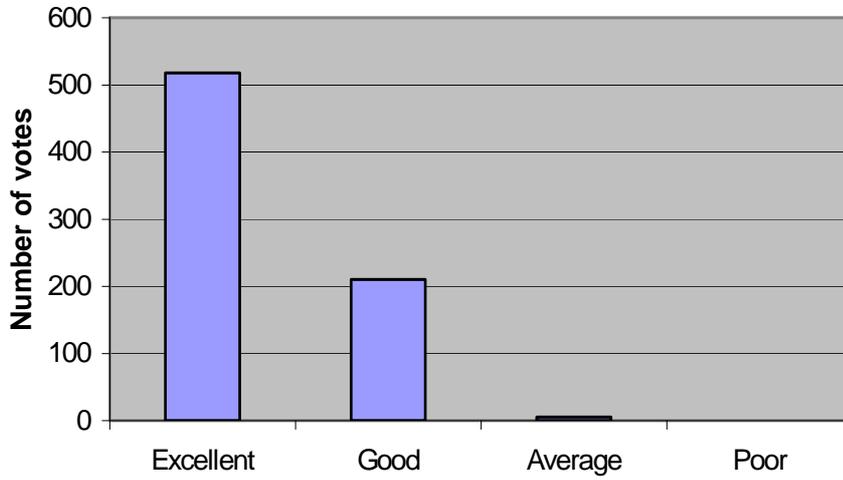


Figure 20 1) Overall, how would you rate today's event?

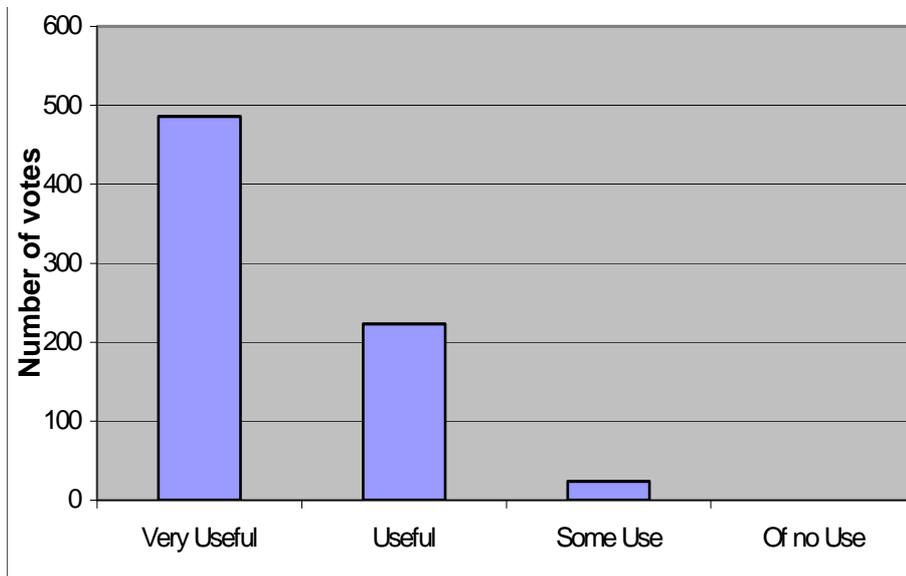


Figure 21 2) How useful do you think today's event will be to your work?

14 APPENDIX 7: TEXT OF E-MAIL INVITATION

Dear

On behalf of HSE's Slips and Trips team, the Health and Safety Laboratory is conducting a follow-up survey of delegates who have attended a HSE Slips and Trips workshop for the NHS.

HSE ran 23 workshops from 2005 to 2007 and is interested in gauging their longer term effectiveness in particular:

- the steps you have taken to tackle slips and trips in your Trust.
- the barriers you may have faced in taking action

I'd be very grateful if you could spend 5 minutes to complete our short, on-line questionnaire. Once completed, the questionnaire will be automatically returned to me.

No data is stored on the web server that hosts the survey questions. Your answers are transmitted directly to the HSL system, which store data securely. Any information provided will be treated in strict confidence.

Clicking on the link below accesses the questionnaire:

Best regards and thank you

David Fox
Work Psychologist
Health and Safety Laboratory Work Psychology Team

Slip and trip workshops for NHS staff

A survey and case study evaluation

During the period 2004 - 2007 HSE carried out a targeted initiative to reduce slips and trips accidents in NHS Trusts. A key element of the initiative was a one-day Slips and Trips Workshop, customised for the healthcare sector, and delivered regionally in 23 locations around the UK. The Workshops were targeted specifically at health and safety and other relevant practitioners working in NHS establishments. The aim of the Workshops was to:

- raise the profile of slips and trips as a health and safety issue;
- impart information about the range of slip and trip improvement measures available to NHS Trusts;
- make known the various sources of support and guidance that NHS Trusts can call on when addressing slip and trip related issues.

Evaluation questionnaires completed by delegates at the end of the workshops showed them to be very well received (see Appendix 6). This study looks at the impact of the Workshops in terms of subsequent slips and trips reduction measures put in place by NHS Trusts

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