



Evaluation of the slips and trips roadshow seminars for government departments and the insurance industry

Prepared by **King's College London** for the
Health and Safety Executive 2005

RESEARCH REPORT 375



Evaluation of the slips and trips roadshow seminars for government departments and the insurance industry

**Michael Howard PhD, BSc, MCIEH and
Alastair Galbraith MSc, BA (Hons)**

King's College London
Division of Life Sciences
Franklin-Wilkins Building
150 Stamford Street
London, SE1 9NH

This report describes evaluation work on the slips and trips roadshow seminars conducted by the Slips Priority Programme Team of HSE for employees of Government departments and the insurance industry. The research employed a questionnaire that had previously been developed specifically for the evaluation of the seminars and a number of interviews. Three seminars were evaluated but because of the relatively small numbers of delegates involved and the lack of apparent difference between the groups the data were aggregated for analysis.

The evaluation found that, as in previous evaluations, the seminars had been highly successful in positively altering the knowledge and attitudes of participants. The interviews provided some interesting (if anecdotal) evidence for changes in safety behaviour. The study concludes that the roadshow seminars are a very effective means of reducing the risk of slip and trip injuries and makes some recommendations for progressing the programme.

This report and the work it describes were funded by the Health and Safety Executive (HSE). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect HSE policy.

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First published 2005

ISBN 0 7176 6153 9

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EXECUTIVE SUMMARY

The Health and Safety Executive (HSE) has conducted a series of one day seminars on slips and trips aimed at duty holders and others. These seminars are intended to increase knowledge, improve awareness and promote safe behavior regarding slips and trips. This initiative has been developed in response to an increasing awareness of the importance of slip and trip injuries in workplaces and the consequent Slips and Trips Priority Programme.

The seminars, now run by the Slips Programme Team, have developed over time and have become known as “the slips and trips roadshow”. This “roadshow” seminar is adapted to the needs of the target audience each time it is run. Previous evaluations have shown the roadshow seminars to be very effective in modifying the knowledge, attitudes and intended behaviour of delegates. There has also been some evidence of actual changes in peoples’ behaviour after attending the seminar.

The work reported here concerns the evaluation of the latest version of the slips and trips roadshow seminar which was delivered to employees in government departments and to employees in the insurance industry. A questionnaire instrument used previously and successfully to evaluate the seminars was used again here. This approach was supplemented by interviews with delegates up to three months after the seminar. Delegates were asked about their attitudes and actions taken since the seminar date.

The slips and trips roadshow seminar was again found to be very effective in meeting its objectives. Delegates’ knowledge of the causes of, and appropriate preventive mechanisms for, slip and trip accidents were significantly improved. Their attitudes to slip and trip risks were also significantly changed in a positive way. The interviews demonstrated a substantial amount of strong (if anecdotal) evidence of a positive attitude to slip and trip prevention. They also produced some evidence of started and intended initiatives on this issue.

The report concludes that the slips and trips roadshow has been very successful in promoting behaviours that will reduce the risk of slip and trip injuries in the insurance industry and government departments.

1. INTRODUCTION

1.1 HEALTH AND SAFETY IN THE UK

Within the UK's workplaces, health and safety related failures cause considerable suffering at both a social and economic level. The total cost of this to society was estimated in recent years to be as high as 18 billion GBP [Department of the Environment, Transport and the Regions (DETR) 2000] whilst the human costs of those injured, made ill or bereaved is immeasurable.

1.2 SLIP AND TRIP ACCIDENTS

Recent accident statistics show that in 2002/03 [projected (p)] 126,004 over 3 day injuries were reported, of which 24% were *slips, trips or falls on the same level* (HSE, 2004a).

For those accidents classified as major injuries to employees, 28,426 were reported. 37% of these were attributed directly to *slips, trips or falls on the same level*, the highest proportion of this category of accidents by far. The next highest number of major injuries were caused through *falls from a height* (14%) (HSE, 2004a) and it would be difficult to argue against the assertion that a large proportion of these originated from a slip or trip.

22% of the 182 fatalities recorded in 2002/03 (p) were attributable to *falls from height* (HSE, 2004a). This suggests that, even though slips and trip accidents account for a large proportion of the total accidents recorded, the true extent of their effect may not be accurately reflected by the statistics.

The statistics show that on average 33% of all reported major injuries are caused by a slip or trip with 20% of over 3 day injuries to employees and 2 fatalities per year. In addition they account for 50% of all reported accidents to members of the public (HSE 2004b).

In monetary terms this equates to a cost of roughly 512 million GBP to employers per year and 133 million GBP to the health service (HSE 2004b)

1.3 ADDRESSING SLIPS AND TRIPS

In 2000 the Government released its, "Revitalising health and safety", strategy statement which outlined aggressive targets to improve health and safety within the UK's workplaces.

Amongst these is the aim for all stakeholders working together to reduce the number of fatal and major injury accidents by 10% by 2010. In addition the number of working days lost per 100,000 from work related injury and ill health is to be reduced by 30% by 2010 (DETR 2000).

Since 2000 the accident statistics relating to slips and trips have fluctuated slightly although have not necessarily shown a reduction in their overall occurrence. As alluded to earlier though the figures do not always tell the whole story and it might be that it is actually the notoriously low reporting rates which have begun to increase and not the number of accidents.

A number of initiatives have been launched in response to the Revitalising programme. One of these is the 'Slips and trips roadshow' which aims to furnish delegates with both an increased understanding of slip and trip accidents and impress upon them the belief that steps can be taken to reduce the occurrence of these accidents.

The roadshow has been presented to various groups since 2000 most notably Environmental Health Officers, other Local Authority Inspectors, representatives of the UK's retail industry and the railway industry and has been developed and modified to appeal to those from other sectors of industry. The focus of this research is to evaluate the programme in its latest extension into members of staff of the insurance industry and Government departments.

The roadshow seminar itself is conducted by a core team of specialists on the topic. These include Mr. Stephen Taylor (Principal Inspector, HSE), Mr. Mark Thomas (HSE LAU) and Dr Steve Thorpe (HSL).

1.4 THE SLIPS AND TRIPS ROADSHOW SEMINAR

The roadshow seminar is a full day event commencing with an analysis of the perceptions of and attitudes to slip and trip accidents, contextualising them within an overview of the personal, financial and social costs. After assessing the efficacy of associated legislation, a brief history of research on slip resistance measurement is presented. The main factors which influence slip potential are then detailed, followed by a review of the risk assessment approach to slips and trips commonly employed by commercial retailers with the cost effectiveness of preventing accidents being highlighted. The delegates then break into three syndicate groups.

Syndicate groups

Dr Steve Thorpe concentrates on demonstrations of the Pendulum and Sled-type tests for floor surface grip and discusses the manufacture of various types of 'safety' flooring. The main point being made in this group is that the Pendulum test is the only reliable portable measure of slip resistance. Sled-type tests are very unreliable and commonly give misleading results particularly in wet or contaminated conditions and many of the flooring types purporting to be 'safety floors' have no discernibly measurable characteristics to support this claim. It is also pointed out that unscrupulous sales techniques and ignorance of slip resistance dynamics often result in incorrect beliefs regarding the suitability of a floor.

Mr. Stephen Taylor demonstrates the use of various versions of the Surtronic equipment (a small electronic device to measure micro-roughness) illustrating how the measurements made may be used as an aid to assessing the slip resistance of a floor. He then goes on to describe the Slips Assessment Tool (formerly known as the 'pedestrian slipping expert system'). This is a computer based user friendly program developed at HSL to allow safety ratings to be made of different floors which will soon be available for use via the internet.

The third syndicate group is conducted by Mr. Mark Thomas and consists firstly of a video presentation. A presentation is then given which highlights specific problems and solutions identified in and around various settings. This displays a number of photographs which aim to make delegates more aware of particular difficulties which can arise and offers a number of suggestions of how to manage these in practice.

In the afternoon sessions a brief reiteration of the points regarding surface roughness and co-efficient of friction is made. Following on from this a section on slip resistant footwear is presented. Mr. Stephen Taylor, a qualified architect and Principal HSE inspector then gives a presentation on design in relation to slip and trip hazards. The role of designers and architects in creating safe environments is stressed by Mr. Taylor and he points out the various demands expected of them such as aesthetics, durability and costs which, when combined, are often to the detriment of safety.

1.5 PERCEPTIONS OF AND ATTITUDES TO SLIP AND TRIP RISKS

Slip and trip accidents are frequently viewed with significantly less seriousness than they deserve. As mentioned in the seminar presentation, the popularity of television shows inviting the viewer to send in videotapes of mishaps and accidents (commonly slips or tips) reflects the prevalent attitude to such events as

being humorous. Unfortunately this attitude can degenerate into the assertion that very little can be done to reduce their occurrence as they come to be thought of as 'just one of those things', or as Leclercq (1999, p 59) put it: "A same (level) or low level fall is often considered a common place occupational accident, in the face of which the prevention officer remains powerless. As a result, prevention practices invariably fall short in respect of the risk involved."

Research into workplace practices has also suggested a particular dynamic between workers' and employers' perceptions which may be relevant here and could perhaps worsen the situation as regards slip and trip prevention.

To fully comprehend this we should note that management beliefs concerning the causal responsibility for an accident are highly informative in determining how they react to a particular accident (Lacroix and Dejoy, 1989). Similarly Dejoy (1994) went on to say that, "actions to manage safety derive more from attributions than from actual causes" (p 3).

Adding another dimension to this, Salminen (1992) discussed the 'defensive attribution hypothesis'. This suggests that accident subjects commonly attribute their accidents to external factors whilst others (in Salminen's discussion co-workers and foremen) would attribute the accident to the subjects' own actions. Further evidence also backed this up where managers in the workplace were more inclined to state that the causal responsibility for slips lay with the accident subject whilst the subject themselves believed others (e.g. the duty holder) should be held to account (Lehane and Stubbs, 2001).

Therefore if those in a position to prevent accidents place the blame with the accident subject, then the likelihood of them taking steps to prevent future reoccurrence is reduced considerably.

Perhaps more striking than the theories, however, are the individual cases which display the consequences of slip and trip accidents. One such example is discussed in the seminar and concerns a lady who slipped on wet leaves and twisted her knee on the entrance steps leading to her place of employment. Three years later the injury was worsened by a slip on a wet vinyl floor in the place where she worked which resulted in a fractured ankle. Following numerous operations her leg had to be amputated.

Cases such as this one highlight the fact that, far from being an unavoidable occurrence, incidents such as these can and, more importantly, should be prevented. As pointed out in the seminar, society as a whole pays for these unnecessary incidents whether it is through treatment required from the Health Service or the increasing court costs related to civil claims

2. METHOD

2.1 BASIS OF THE EVALUATION

To evaluate the seminar program, the researchers based their investigation on the goals which the HSE hopes to meet by presenting the roadshow to representatives of additional stakeholder groups. The aims were agreed with HSE to be;

By presenting the slips and trips roadshow to representatives of stakeholder groups, it is hoped those people will be provided with appropriate knowledge, skills and support to enable them to actively reduce the rates and severity of slip and trip accidents.

We can therefore identify three main areas which the seminar has the potential to alter: *knowledge, attitudes and perceptions, and behaviour.*

2.2 PARTICIPANTS

74 delegates at three roadshows completed questionnaires.

The first of these was held in London on 25.01.05 for representatives of the insurance industry; 15 delegates completed questionnaires.

The other two events were held for delegates from Government departments. One of these was in London on 26.01.05 with 27 participants. The final roadshow was held in Cardiff on 03.03.05 and involved 32 participants.

Because of the relatively small number of participants and the lack of clear differences between the groups the data were analysed together.

In addition 32 of these delegates were contacted randomly by means of telephone interview some time after the roadshow. The purpose of this was to acquire additional feedback and examine in what ways they had put the acquired information into practice.

2.3 PROCEDURE

Delegates were issued with the pre-seminar questionnaire upon arrival at the event. It was impressed upon them that the questionnaire be completed before commencement of the days' proceedings and the majority complied with this request.

Post-seminar questionnaires were issued in the closing stages of the seminar and, again, it was impressed upon delegates that they should complete the questionnaires before leaving. Most did this but a minority posted their questionnaires to the researchers at a later date.

Telephone interviews with delegates of the London roadshows took place 3 months after the first seminar. It was felt that this would allow sufficient time for details of any new initiatives that had been undertaken to emerge. For the delegates of the Cardiff roadshow, interviews were conducted just over a month later. Whilst the limited time elapsed made it difficult for any changes in behaviour to be fully evident, it was felt that useful feedback would be acquired.

Data from the questionnaire were analysed statistically by use of descriptive calculations of mean values and percentages. The statistical technique of chi-square (χ^2) was employed to gauge statistical significance of trends and relationships.

In most cases interviews were recorded and later transcribed¹. In a minority of cases note taking was thought to be sufficient to record some interviews.

2.4 DEVELOPMENT OF RESEARCH MATERIALS

In this section, the development of the questionnaire items will be discussed in detail. It has been explained previously that there are difficulties facing any attempts to reduce the incidence of slips and trips. Many of these are related to the perceptions of such accidents and stem from a lack of, or incorrect, knowledge on the subject. Clearly the main aim of the seminar programme is to produce fewer slip and trip accidents through the behaviour of those in attendance. The questionnaires, therefore, have been designed to assess the most salient points in this challenge, focusing on the three major components of knowledge, attitudes and behaviour.

The research tools used for this group were broadly the same as used for previous evaluations although they were adapted and modified so as to be tailored to the content of the particular roadshow, the audience and contemporary developments in the field. The questionnaire items described in this report relate to the tools used at this evaluation. Descriptions of the evolution and development of these research materials are available in the previous evaluation reports [Howard and Galbraith (2002a), Howard and Galbraith (2002b), Howard and Galbraith (2004)]. A copy of the questionnaire used in the report is contained in Appendix 1 and Appendix 2 of the report.

Questionnaire section one

Question (a) in section one of the questionnaire asks, '*From this list of incidents, please rate from 1 to 5 which you think led to the greatest number of major injury to employees in 2003/2004 (where 1 denotes the most common)*'. The correct answer for this is (1) *Slips, trips or falls on the same level* (33%), (2) *Falls from a height*, (22%), (3) *Injured while handling, lifting or carrying* (13%), (4) *Struck by moving or falling object* (12%) and (5) *Struck by moving vehicle* (2%) (<http://www.hse.gov.uk/statistics/tables/table8a.htm>). This is a knowledge based question which assesses whether or not delegates are aware that STAs are the most common cause of major injury to employees. It might be argued that the general population would not volunteer such a response due, in part, to the fallacy they are incidents with inconsequential outcomes. This question therefore affords a clarification of whether delegates are better informed and more conscious of the scale of the problem. It is acknowledged however, that delegates may be more inclined to choose the slips and trips answer simply because the questionnaire is being completed at a seminar on that subject.

The subject of question (b) (*How easy would you find it to obtain information about slips and trips from the HSE and / or other sources?*) assesses the attitudes of respondents in relation to support offered. To recall the strategy outlined in the Health and Safety Commission's Strategic Plan (HSC, 2001) we can note the aim is to, "develop the necessary ... support systems needed to achieve the outcomes" (p 5). An auxiliary aim of the seminar is therefore to promote the notion that information can be easily acquired and develop a sense of approachability for the HSE. By asking delegates' thoughts on such matters we may appraise any shift in opinion before and after the seminar.

Of the total number of major injuries to employees reported in 2003/2004 what percentage would you estimate were caused by slips and trips? is presented as item (c) in the questionnaire. The correct answer to this is 33% (<http://www.hse.gov.uk/statistics/tables/table8a.htm>). In some respects it is not of great importance whether

¹ Representative excerpts from the transcriptions are presented in appendix three.

respondents give the correct answer to this. We do not feel that an exact knowledge of the statistics surrounding STAs is necessary. However, what is of interest is whether respondents over or under-estimate the problem before and after the seminar. We would argue that by overestimating the problem it is more likely that delegates would be inclined to take action to remedy the situation.

The correct answer to (d) (*Of the total number of reported accidents involving members of the public in 2003/2004 what percentage would you estimate were caused by slips and trips?*) is 50% (<http://www.hse.gov.uk/slips/>). Similarly to question (c) it is of interest to discover whether respondents over or under-estimate the scale of this issue.

Manning *et al* (1988) calculated that the correct answer to question (e) (*What percentage of slip and trip accidents would you estimate could be easily prevented by improving housekeeping?*) was 25%. Perhaps the simplest and most immediately effective means of STA prevention is improved housekeeping so, whilst this is fundamentally a 'knowledge' based question it is more appropriate to view it as an attitudinal indicator. Therefore, although the 'correct' answer is 25% we may infer that a higher response indicates a more pro-active approach suggesting the respondent is convinced of the ease of preventability.

Item (f) (*In assessing a floor's grip characteristics which tests give reliable data?*) is based upon two fundamental issues. First, it is uncertain what knowledge delegates will have of various tests and the seminar will give them a greater understanding of how one might go about accurately testing for slip resistance. In addition there are many methods of assessment which are, at best, unreliable but perhaps could be more accurately described as misleading and inaccurate. By explaining the merits of particular testing procedures the seminar allows delegates to assert which test is most suited to a particular purpose. In instances where delegates may previously have accepted information from inappropriate equipment the shortcomings of their actions will hopefully be made apparent.

In asking respondents to *Please note the characteristics of footwear you believe to be especially important in reducing slip accidents*, item (g) is similar to (f) as there are a number of mistaken beliefs regarding footwear. The seminar addresses these and provides a more accurate appraisal of which characteristics are considered appropriate.

Section two

Section two of the questionnaire comprises 12 items with a Likert-like 7 point fixed response *pro forma* signifying varying levels of agreement with each statement. These statements assess the three main investigative areas of attitudes, knowledge and behaviour.

Several of the items are paired to allow patterns of response to be examined. A fault of some questionnaire surveys is to permit respondents to easily give answers they believe desirable in some way. As discussed in greater length in previous evaluation reports, the pairing of questions which we would expect similar answers to allows an assessment of the questionnaire's validity and a judgement whether delegates are answering in a truthful manner. In previous analyses, results allowed the researchers to be confident that the questionnaire was both a robust and valid tool and that respondents' questionnaires showed high levels of consistency between similar items.

Statements 1 and 6 (*Current safety precautions to prevent accidents from all causes are adequate* and *Current safety precautions to slip and trip prevention are adequate*) seek to discover if respondents view any distinctions between attempts to reduce accidents in general and STAs in particular.

A major component of the seminar proceedings is the demonstration of different equipment. The underlying intention of this is to make delegates aware that it is indeed possible to measure the slip resistance of a floor and

statement 2 (*The testing of existing floor surfaces for grip characteristics in situ is a perfectly viable option*) hopes to examine delegates' opinions and knowledge of this issue.

A debate running through some of the research on STAs concerns the blame or causation of accidents where certain individuals perceive the event in different ways. The person who has had the accidents, for example, may believe it was because of external factors such as a slippery floor whilst those in more of a position to do something about such external factors often think the accident arose as a result of the subjects own actions [Lacroix and Dejoy (1989), Salminen (1992), Dejoy (1994), Leclerq (1999) and Lehane and Stubbs (2001)].

Statements 3 (*Individuals who have a slip or trip do so because they were acting without due care and attention*), 8 (*In most case the person who has had the accident is to blame for their slip or trip*), 10 (*Employers / duty holders are primarily at fault for slips and trips in most cases*) and 11 (*Slips and trips are caused by structural and environmental factors*) aim to explore delegates' perceptions of this complex relationship further.

Statement 5 (*Cleaning regime methods are a major factor in determining the slip resistance of a floor*) is directly related to points made in the seminar. Whilst it is a statement to which agreement appears to make sense it is also something which, arguably, many people would not instantly think of. The role of this factor is however more important than might generally be assumed as pointed out by Leclerq and Saulnier (2002) in their discussion of the phenomenon of 'fouling'. This is where a residual build up on surfaces occurs. Such surfaces generally appear clean and so actually hold an increased risk of accidents.

As noted by Bentley and Haslam (2001), competing demands within the workplace are commonly cited by duty holders as a reason for failing to instil health and safety guidelines. In presenting delegates with the statement *Safety performance should be prioritised as a primary business target within workplaces* (statement 7) we are assessing their views of this topic and whether they believe a greater emphasis should be placed on such matters.

Section three (post seminar questionnaire)

The post-seminar questionnaire contained an additional third section designed to assess delegates' thoughts of the seminar day and its contents.

Briefly then, the first set of questions followed the fixed response *pro forma* described earlier and posed the following statements: '*The seminar helped to improve my skills in identifying slip and trip hazards*', '*I would recommend the slips and trips seminar to a colleague*', '*Before attending the seminar I already possessed the skills / knowledge passed on through the seminar*', '*The seminar programme was well organised*', '*Attending the slips and trips seminar has been a valuable experience*' and '*The course increased my knowledge of slip and trip hazards*'.

The final question asked respondents if they would like to make any additional comments for example any points about the roadshow or possible improvements to future events.

3. RESULTS AND DISCUSSION

3.1 SECTION ONE

(a) From this list of incidents, please rate from 1 to 5 which you think led to the greatest number of major injury to employees in 2003/2004.

The first item asked respondents to rate from 1 to 5 which of a list of accidents they thought had been the most common cause of major injury to employees. The results differed very little between pre and post questionnaires with 64% correctly identifying slips, trips and falls on the same level before the seminar and 74% after the seminar.

It was clear then that most attendees were already fairly well informed about such matters and the seminar helped to reinforce this.

(b) How easy would you find it to obtain information about slips and trips from the HSE and / or other sources?

A major aim of the roadshow is to make delegates aware that advice on slip and trip prevention is available therefore this question asked them how easy they thought it would be to gain further information on the topic.

There were initially over a third of delegates unsure (36.49%) about this. Following the seminar this had dropped dramatically to just 6.15% with no respondents believing it would be difficult or very difficult. This left as many as 93.8% believing it would be easy or very easy to secure advice. Incidentally this proved to be a statistically significant shift in opinion where $\chi^2 = 25.71$; $df = 6$; $p < 0.01$.

(c) Of the total number of major injuries to employees reported in 2003/2004 what percentage would you estimate were caused by slips and trips?

Question (c) which prompted respondents to note which percentage of major injuries were caused by slips and trips did not reveal any real change. The answers before and after the seminar maintained a broad range of responses although it is interesting to note that the correct answer of 33% was exceeded in calculated mean responses before and after the seminar.

The delegates' responses therefore were good to start off with and remained so; the most common response initially was 47% which was raised marginally to 48%.

(d) Of the total number of reported accidents involving members of the public in 2002/2003 what percentage would you estimate were caused by slips and trips?

Similarly to above, the pre-seminar responses started well (at a mean of 56%) and remained favourable (mean of 55%). Bearing in mind the calculated answer to this question is 50% then it is encouraging that the mean answers were roughly correct.

(e) What percentage of slip and trip accidents would you estimate could be easily prevented by improving housekeeping?

In asking what percentage of slip and trip accidents could be prevented by improved housekeeping the responses to the pre-seminar questionnaire resulted in a mean percentage of 68. This figure is well in excess of the 'correct' answer of one quarter (25%). Despite being the 'incorrect' answer this is very encouraging as it suggests delegates are convinced that slip and trip accidents can be considerably reduced by improving general orderliness in the workplace. Post seminar mean responses were also respectable but had actually reduced one percent to 67.

(f) In assessing a floor's grip characteristics which tests give reliable data?

The responses to this question were straightforward.

Before the seminar just 11% gave a satisfactory answer (e.g. the pendulum test) while this increased to 92% afterwards.

3.2 SECTION TWO

Statement 1 (*'Current safety precautions to prevent accidents from all causes are adequate'*) revealed a significant difference between pre and post seminar scores where $\chi^2 = 22.45$; $df = 6$; $p < 0.01$. So, whilst over half (56.77%) already disagreed, this percentage rose to 89.23 after the seminar.

Assuming that a low opinion of the current safety precautions for accident prevention would lead to delegates being more amenable to suggestions for improvements, we can view this level of opinion as a positive sign although not attributable to the roadshow seminars.

Statement 6 (*'Current safety precautions to slip and trip prevention are adequate'*) addressed the same issue with specific regard to slips and trips. Almost half (48.65%) of respondents disagreed with the statement initially. Significantly though (at a level of $\chi^2 = 29.05$; $df = 6$; $p < 0.01$) this rose after the seminar to 83.08%.

Moving on to examine delegates' views on tests to measure slip resistance we can look at statement 2 (*'The testing of existing floor surfaces for grip characteristics in situ is a perfectly viable option'*). Here we can again see a statistical difference between pre and post-seminar responses. 58.46% agreed with the statement after the seminar compared to 44.59% before, so there was a significant shift towards agreement (at a level of $\chi^2 = 13.80$; $df = 6$; $p < 0.05$). The seminar was therefore successful in encouraging delegates to appreciate that it is possible to test floor surfaces *in situ*.

The next main issue addressed by section two of the questionnaire concerns the causality of blame for slip and trip accidents. Statement 3 (*'Individuals who have a slip or trip do so because they were acting without due care and attention'*) is the first item to examine this. The number of delegates who disagreed at a level of 1 or 2 on the scale offered, roughly doubled after the seminar, (71.88% compared to 33.78%). This proved to be statistically significant at a level of $\chi^2 = 28.41$; $df = 6$; $p < 0.01$.

We can propose then that after the seminar, delegates' opinions moved yet further away from the view that individuals have accidents as a result of their own negligence.

Further support for this proposition was evident from statement 8 (*'In most cases the person who has had the accidents is to blame for their slip or trip'*). Whilst just 16.22% ticked '1' (i.e. strongly disagree) with this before the seminar, the figure rose to 41.54% afterwards.

The two statements that deal with employer / duty holder responsibility are 10 and 11;

Statement 10 (*'Employers / duty holders are primarily at fault for slips and trips in most cases'*) produced a significant shift towards agreement with the statement. 43.64% agreed at a level of '6' or '7' on the scale afterward the seminar as compared to just 13.5% before, ($\chi^2 = 18.42$; $df = 6$; $p < 0.01$).

Statement 11, (*'Slips and trips are caused by structural and environmental factors'*) results showed that delegates became much more aware of the role that structural and environmental factors play (as opposed to an individual's negligence). Those in agreement rose from just over a quarter (25.68%) before, to 58.46%, after the seminar, ($\chi^2 = 21.75$; $df = 6$; $p < 0.01$).

Statement 7 (*'Safety performance should be prioritised as a primary business target with workplaces'*) did not show an increase in agreement after seminar attendance. Those in overall agreement before and after were calculated to be 91.89% and 92.31% showing that good attitudes were maintained. Interestingly though, a relatively large number of delegates 55.38% ticked agreement at a level of '7' on the scale after the seminar compared to 27.03% before.

Finally statement 5 responses, (*'Cleaning regime methods are a major factor in determining the slip resistance of a floor'*) showed a significant difference. Before the seminar 36.49% ticked either '6' or '7, this rose to 77.34% following the seminar and was shown to be significant difference ($\chi^2 = 33.94$; $df = 6$; $p < 0.01$).

The roadshow, therefore, appeared to consistently improve both the knowledge and attitudes of those attending.

3.3 SECTION THREE (Post-seminar questionnaire)

The third section of the post-seminar questionnaire prompted respondents to provide a subjective assessment of the day. Table one displays the mean values calculated for respondents' level of agreement with each of the evaluatory statements.

Table 1: Mean calculations of agreement with evaluatory statements

Statement	Level of agreement (mean calculation)
<i>Helped to improve skills</i>	6.34
<i>Would recommend the seminar</i>	6.37
<i>Already possessed skills / knowledge</i>	2.63 (scale reversed)
<i>Seminar programme was well organised</i>	6.26
<i>Attendance a valuable experience</i>	6.29
<i>Increased knowledge of slip and trip hazards</i>	6.42

It is clear that participants were highly enthusiastic about all aspects of the seminar programme. Recalling that each statement was rated on a seven point scale it is most encouraging to note that five of the six statements, on mean calculations, approached the highest score. Statement three which asked whether delegates believed that they already had the skills and knowledge imparted through the programme, (weighted in the reverse direction of other statements here) suggests that some delegates already possessed a reasonable degree of prior knowledge. The figure is not so high, however as to cause concern and we can be safe in assuming that the majority of attendees benefited greatly from the presentations.

The final item in the questionnaire asked delegates to note any further comments which they might have; 18 of the 65 who completed the post-seminar questionnaire did so.

The vast majority of those completing this part of the questionnaire used it to complement the presenters on the quality of the seminar. For example comments such as, "Excellent day – well presented – could not have been better", "Enjoyable experience and the day packed with interesting topics", and, "Very interesting and informative day. Would be very beneficial for others in my organisation", were fairly typical comments.

There were three respondents who offered suggestions for future seminars. One of these said, "cover the civil liability exposure in more detail". Presumably this participant was a representative of the insurance industry and such a comment might be worth taking on board if additional presentations are made to such groups.

Another respondent asked that there be more input on trips. As explained in the seminar proceedings the research covering trips is, at present, less developed than that relating to slips. Nevertheless, as more is discovered about the dynamics of trip accidents it would be worthwhile incorporating that into the content of the roadshow.

The third comment said, "managing human behaviour could be included to cover other root causes of slips, trips and falls". The authors recall that this topic was covered throughout the presentations but would add that it may be of use to tease out some of the points made more explicitly.

Two negative comments were received but these related to the venue and uncomfortable seating. It was felt that the presenters have little control over such issues and, whilst it is unfortunate that certain respondents were unhappy with this, it should not be viewed as a cause for alarm.

One final point which was mentioned in the interview stage of the research rather than the questionnaire came from a participant with hearing difficulties. She claimed that, despite having asked for an induction loop to be available, this was absent on the day of the seminar. Efforts should be made to allow for such facilities in the future where necessary and available.

3.4 ADDITIONAL FEEDBACK

Those people contacted after the seminar were questioned on three main topics of discussion; one: what aspect of the roadshow they felt had particularly made an impression on them, two: what particular changes (if any) to their work practices had attendance at the roadshow stimulated, for example the introduction of new slip, trip related initiatives, and three: if they felt they had been *the right person* to attend the seminar. The third of these topics of discussion was raised because, for the roadshow to ultimately have an impact on reducing slip and trip accidents, it is clearly necessary for those attending it to be in a position to help with that aim. Excerpts of some of the interviews are contained in Appendix 3.

Impressions of the seminar

To start with the delegates' own impressions of the day itself, many picked out different aspects which appealed to them.

On a general level one interviewee said, "it gave me things to think about which I'd never even considered before as regards our slips, trips and falls programme". Such comments were common and it was clear that many delegates were only too aware that slips and trips were a problem but had little idea of how, if at all, they might be tackled. One particular delegate explained that the roadshow had been a great help as it, "explained a lot of root causes". He then went on to say that, "before the seminar I was probably one of these people who thought that we have a lot of slips, trips and falls but can't do much about them whereas after the seminar I realised there is a lot more you can do to prevent them". As another interviewee put it: "And now we know that we can actually prevent these accidents which, frankly, is something we didn't realise before".

Another participant noted that he was extremely impressed by the level of detail which the presentations went into. From his point of view he felt that he, "knew a bit about the subject but was pleasantly surprised to find how much (*he*) took from the course and how much more there is involved than I had first thought".

Others were quite shocked at the realisation that particular information offered by manufacturers can be misleading. In those instances the delegates made it clear that they would be taking much greater care in the future when assessing the authenticity of manufacturers' claims.

One of the biggest differences of opinion amongst delegates was on the level of technical detail gone into on the course. Many were very impressed by it, a typical comment being, "I really enjoyed the technical information about co-efficient of friction and the physics of it all". On the other hand another interviewee explained, "I found some of it a little too technical", although he did go on to say that, "generally speaking it was a very good course and certainly an eye opener".

One individual enthused about the technical side of matters went further. He said that, "the particularly interesting stuff for me was about the micro-roughness and we're actually getting a roughness meter here". Interestingly he went on to say, "I suspect the roughness meter company is actually getting a run on them. In fact I know they've had a run on them because I phoned up to order ours and they said they've been extremely busy; they said that every time the HSE go around the country the company gets a lot more orders".

Such comments obviously bode well for the roadshows and demonstrate that people are taking on board the messages imparted through the presentations and are increasingly taking advantage of facilities available to them (in this instance the online Slips Assessment Tool which is used in conjunction with a roughness meter).

When describing the day itself one delegate simply said, "I thought all of the information was very useful and relevant; it was amongst the few number of courses I've actually been on which was of use to me". Such sentiments were evident in other participants' views who compared the roadshow to other HSE led initiatives. As one put it, "I've had quite a lot of involvement with these HSE things over the years and I would say that it

was certainly better than a lot of the previous ones I've been at". He went on to explain how some other courses had been very legislatively led with little practical advice. Yet another delegate explained it in this way: "the HSE can be criticised in certain ways for simply telling people to go out and do things and often not actually giving any help or advice in how you might overcome certain difficulties. This particular course is one of the really positive ways of showing that you can do something and giving people practical advice and solutions is a real step forward in my opinion".

Changes since attendance

As regards changes since delegates had attended the roadshow, the majority of those asked mentioned fairly subtle alterations. Rather than spearheading any major new campaigns therefore, a great many of those spoken to described how the topic of slips and trips had simply become more of a priority and something which they, having been made more aware of, are now raising with others.

By way of example, one interviewee said that the roadshow had, "certainly increased my knowledge of what to look for in terms of the possible risks and what the hazards are". Taking this up a level another delegate explained how she now, "mentions a lot more about slips and trips now in advising people and the importance of keeping floor surfaces clean and dry, avoiding any damaged areas etc. So I have developed more of an understanding and I'm conveying that to our clients".

As regards instances where more tangible changes have been made many interviewees noted how they had or were in the process of producing guidance packs for other members of staff. Indeed the act of cascading the information throughout colleagues at their workplaces seemed fairly typical.

Others had begun producing information packs for other interested parties. For example, "I'm actually in the process of putting together a customer handout covering various topics and I'm going to include a health and safety section with slips and trips". Another individual explained how he has been recommending the Slips Assessment Tool to clients/customers.

A couple of examples of immediate changes included the individual who had since the seminar noticed algae growing on the fire escape. He had not thought to look at this before but has now ordered a solution to remove the potentially dangerous slip hazard.

Similarly another interviewee talked of a very slippery floor in the building where he works. Since attending the roadshow he has taken steps to remedy this situation by having 'sandpaper' strips laid on the surface.

One interviewee discussed the impact that the information on cleaning regimes had had on his organisation. He explained how they employ a lot of cleaning staff and that a review of their procedures and practices is currently underway

Perhaps of most importance were three separate individuals who mentioned that they had contacted or intend to contact the HSE with the aim of holding roadshows exclusively for their own company.

This provides support for the impact of the roadshow, as these attendees were so impressed that they wanted their own staff to be able to experience and learn from the presentations.

We have also become aware of the fact that a delegate working at the Houses of Parliament who attended the seminar on 26 January has organised a full day of slips and trips training for 40 to 50 key personnel working at Parliament for 25 October 2005.

Appropriateness of attendees

On the whole, interviewees felt as though they were the right people from their companies to attend.

There were some however who felt that they were not necessarily in a position to implement any changes, given their position in their organisation. One interviewee felt his hands were tied to a certain extent as the building in which he works is rented and the responsibility for maintenance of flooring for example is assumed by an external company. He felt, for those reasons, that it would have been more worthwhile had the contractors' staff been in attendance.

A number of those interviewed mentioned how they work primarily in an office environment which is typically carpeted throughout. Some of the principles and guidance offered in the roadshow is not as applicable to these settings but, for those in a strategic position, they felt confident the information they gained could be cascaded to others working in different settings within their organisation to good effect.

Some of those from the insurance industry, especially those in the position of underwriters, do not necessarily visit businesses or notice hazardous situations. It was noted that the information might have been more useful to someone working in the capacity of a surveyor. Indeed, when surveyors who had attended were interviewed, they agreed with this view. One in particular noted how the case studies included in the roadshow had been particularly useful in this respect: "In the past I tended to just step over things and not really think anything more of it really but it has certainly raised my awareness and I'm passing that on to our client base as well".

Similarly, another delegate found the case studies to be invaluable in dealing with clients: "it was ... good to get the case studies with people getting injuries because we can then go along to a client with that information. Clients ... don't like to be told that their business could operate better but you can actually provide them with some evidence to say 'Look here's another business that thought exactly the same way as you and this is what happened' and you can actually give them some proper case studies".

Generally, it is not possible to ensure that everyone in attendance at a seminar is best suited to it and in many cases the delegates themselves will not know until afterwards. Even for those who felt they might not have been ideally suited to the seminar it may be useful. One respondent said, "it's more a matter of drilling down into the department to get the right people in that department ...I'm probably the right person to go to the initial seminar and see what it was about but I think there are people dealing with health and safety issues on a day to day basis that I can perhaps extend an invitation to in the future now that I know a little bit more about the subject".

4. CONCLUSION

The slips and trips roadshow has been shown through this research to be successful in achieving its objectives when delivered to a number of further client groups, namely employees of Government departments and the insurance industry

Assessment of the effectiveness of the seminars was made by asking delegates to complete pre and post seminar questionnaires and by conducting interviews with delegates at intervals after the seminars. The questionnaires focused on the key themes of *knowledge*, *attitudes* and *behaviour* related to slip and trip accidents. These themes are indicative of a mindset that is likely to encourage the prevention of accidents in general and slip and trips in particular.

It was very encouraging, in terms of considering the continued application of the roadshow, to find that delegates' responses on the key themes, without exception, improved overall. In particular, there was evidence that this latest version of the roadshow has helped to change the behaviour of some attendees in that they reported promoting slip and trip prevention strategies more vigorously. Hopefully this will result eventually, in the changes in organisations known to be important in combating accident rates.

Interviews with several delegates after the events revealed some interesting findings. Perhaps most important were the further acknowledgement that slips and trips are a major problem in the industries involved and the view from delegates that they had not previously been aware of the ways in which these risks can be managed.

A few of those in attendance at this latest series of roadshows felt that the information they acquired might have been better suited to others working in a different capacity in their industry. This appears to be a matter of ensuring that those sending delegates are aware of the purpose and content of the seminars so that they send the most relevant staff.

5. RECOMMENDATIONS

It is recommended that the slips and trips roadshow seminars continue to be provided to various people involved in workplace safety as it has been shown to be very successful and is likely to result in the reduction of slip and trip risks.

It is also recommended that consideration be given to the development of generic information for managers to help them decide which of their staff are the most appropriate to attend the seminar. This could be provided to managers at short notice to help them choose most appropriate personnel to send to the seminar.

The seminar has been very successful in achieving its stated aims. Above we recommend that they be continued and extended. The success of the seminar mechanism has, however, been dependant upon the participation of the particular HSE staff involved. This means that the potential to simply expand the seminar programme is limited. The research reported here, however, provides some evidence of the kind of positive actions that delegates are taking after attendance at the seminars. We would like, therefore, to make some suggestions as to how these positive actions may be facilitated and encouraged.

These would involve cascade mechanisms using customised material e.g.

- PowerPoint presentations with speakers' notes could be produced to help delegates cascade the information contained in the seminar to their colleagues.
- Customised publicity packs could be produced for delegates to distribute in their own workplaces.
- Specially designed leaflets could be designed for delegates to distribute in their own workplaces.

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APPENDICES

APPENDIX ONE
Pre-seminar questionnaire

SECTION ONE

Question

(a) From this list of incidents, please rate from 1 to 5 which you think led to the greatest number of major injury to employees in 2003/2004 (where 1 denotes the most common).

Answer

Incident	Rate (1-5)
Struck by a moving or falling object	
Falls from a height	
Injured whilst handling, lifting or carrying	
Slips, trips or falls on the same level	
Struck by moving vehicle	

(b) How easy would you find it to obtain information about slips and trips from the HSE and / or other sources?

	<input checked="" type="checkbox"/> below
Very difficult	
Difficult	
Undecided	
Easy	
Very easy	

(c) Of the total number of major injuries to *employees* reported in 2003/2004 what percentage would you estimate were caused by slips and trips?

..... %

(d) Of the total number of reported accidents involving *members of the public* in 2003/2004 what percentage would you estimate were caused by slips and trips?

..... %

(e) What percentage of slip and trip accidents would you estimate could be easily prevented by improving housekeeping?

..... %

(f) In assessing a floor's grip characteristics which tests give reliable data?

.....

.....

.....

.....

.....

(g) Please note the characteristics of footwear you believe to be especially important in reducing slip accidents:

.....

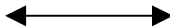
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SECTION TWO

 Statement	Level of agreement (please ✓ below)						
	Disagree			Agree			
	1	2	3	4	5	6	7
(1) Current safety precautions to prevent accidents from all causes are adequate.							
(2) The testing of existing floor surfaces for grip characteristics <i>in situ</i> is a perfectly viable option.							
(3) Individuals who have a slip or trip do so because they were acting without due care and attention.							
(4) Accidents will happen and there's little can be done to prevent that.							
(5) Cleaning regime methods are a major factor in determining the slip resistance of a floor.							
(6) Current safety precautions to slip and trip prevention are adequate.							
(7) Safety performance should be prioritised as a primary business target within workplaces.							
(8) In most cases the person who has had the accident is to blame for their slip or trip.							
(9) Slips and trips will always happen and there's not much can be done about it.							
(10) Employers / Duty Holders are primarily at fault for slips and trips in most cases.							
(11) Slips and trips are caused by structural and environmental factors.							

Please note your contact details below.

Name:

.....

Telephone number:

.....

APPENDIX TWO
Post-seminar questionnaire

SECTION ONE

Question

(a) From this list of incidents, please rate from 1 to 5 which you think led to the greatest number of major injury to employees in 2003/2004 (where 1 denotes the most common).

Answer

Incident	Rate (1-5)
Struck by a moving or falling object	
Falls from a height	
Injured whilst handling, lifting or carrying	
Slips, trips or falls on the same level	
Struck by moving vehicle	

(b) How easy would you find it to obtain information about slips and trips from the HSE and / or other sources?

	✓ below
Very difficult	
Difficult	
Undecided	
Easy	
Very easy	

(c) Of the total number of major injuries to *employees* reported in 2003/2004 what percentage would you estimate were caused by slips and trips?

..... %

(d) Of the total number of reported accidents involving *members of the public* in 2003/2004 what percentage would you estimate were caused by slips and trips?

..... %

(e) What percentage of slip and trip accidents would you estimate could be easily prevented by improving housekeeping?

..... %

(f) In assessing a floor's grip characteristics which tests give reliable data?

.....

.....

.....

.....

.....

(g) Please note the characteristics of footwear you believe to be especially important in reducing slip accidents:

.....

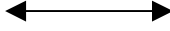
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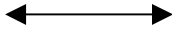
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.....

SECTION TWO

 Statement	Level of agreement (please ✓ below)						
	Disagree			Agree			
	1	2	3	4	5	6	7
(1) Current safety precautions to prevent accidents from all causes are adequate.							
(2) The testing of existing floor surfaces for grip characteristics <i>in situ</i> is a perfectly viable option.							
(3) Individuals who have a slip or trip do so because they were acting without due care and attention.							
(4) Accidents will happen and there's little can be done to prevent that.							
(5) Cleaning regime methods are a major factor in determining the slip resistance of a floor.							
(6) Current safety precautions to slip and trip prevention are adequate.							
(7) Safety performance should be prioritised as a primary business target within workplaces.							
(8) In most cases the person who has had the accidents is to blame for their slip or trip.							
(9) Slips and trips will always happen and there's not much can be done about it.							
(10) Employers / Duty Holders are primarily at fault for slips and trips in most cases.							
(11) Slips and trips are caused by structural and environmental factors.							

SECTION THREE

 Statement	Level of agreement (please ✓ below)						
	Disagree			Agree			
	1	2	3	4	5	6	7
The seminar helped me to improve my skills in identifying slip and trip hazards.							
I would recommend the slips and trips seminar to a colleague.							
Before attending the seminar I already possessed the skills / knowledge passed on through the programme.							
The seminar programme was well organised.							
Attending the slips and trips seminar has been a valuable experience.							
The course increased my knowledge of slip and trip hazards.							

Finally, please list any further comments you might have.
These could include anything from remarks on today's roadshow to any suggestions you might have of possible improvements for future seminars.

APPENDIX THREE
INTERVIEW EXCERPTS

ONE

(a) In general I found it to be a very useful programme. I went in there thinking that I knew a bit about the subject but was pleasantly surprised to find how much I took from the course and how much more there is involved than I had first thought. So, there was really nothing specific but I was pleasantly surprised at just how in depth the course was and it just opened my eyes to the minefield of hazards there are for slips and trips.

(b) Especially with regard to the type of flooring which we get, the course opened my eyes to how important the floor is and it's always at the forefront of my mind about the controls they have in terms of matting and that sort of thing. I went to a place last week where there was some highly polished terrazzo flooring which was causing problems with slip hazards and I was able to use some of the knowledge I'd gained from the course to speak about the issue of slips with the customer. And another thing that I've taken from the course is that I'm actually in the process of putting together a customer handout covering various topics and I'm going to include a health and safety section; with slips and trips being such an important area I'm going to put together some information for customers and the things that I learned at the course will be very useful for that.

(c) Yes, definitely. Being a surveyor it's something that I come across on a regular basis because I'm going out to claims and I'm assessing the risk of their operation which includes health and safety. So, it was definitely appropriate for me. The only thing I would say is that it's such a big subject that on my everyday run of the mill jobs, I wouldn't have the time to concentrate solely on slips. I would take bits of the course but if I concentrated on all the areas we covered in the course, I wouldn't be able to look at any other areas.

TWO

(a) Well I've actually spoken to xxxxx about delivering the seminar at one of our team meetings. Things like the cases which have come up and the claims which have led to large employer or public liability claims; you know they mentioned the xxxxx case for example. I've actually built that into my presentation to our team when I've delivered presentations to our team. So I've included those cases just to sharpen efforts with regards to our slips and falls. Also, the SAT tool, I have to say that I didn't know it existed prior to going to the seminar. I'm not particularly proud of that but I've been into the HSE website since and had a good look around it. It's certainly something which we could recommend to our clients perhaps before and incident and certainly after an incident as well. Working for an insurance company, slips, trips and falls are, as you'd expect, a fairly common occurrence as far as claims are concerned. But also, when we're going round workplaces, we see slips, trips and falls in the accident registers so that obviously alerts you to the fact that it's something you have to focus in on even if there haven't been any claims yet.

(b) I think it might be an idea to consider staging one of these events in the Leeds or Manchester area because they're fairly big regional centres for insurance companies and insurance brokers and it may go down well.

(c) Oh yes, and also with the feedback I got (although it was just verbally) after my presentation, a lot of people were asking for the pack which was handed out at the road show. It was because of that that I got back in touch with xxxxx to see if I could get some copies of the pack and he let me have a copy of the CD which I can just use to get copies made anyway because it really is very relevant to us. You see it's not just the big claims we're trying to avoid but also the lower level, more frequent ones – they have these adverts on TV where someone slips and gets say £5000 – well that sort of thing repeated with high frequency can be very damaging to an account as well.

THREE

(a) I think the best part was probably the ability to look at the various surfaces, see what they looked like and actually examine the changes that took place when liquid was applied. That was probably the bit that stood out the most.

(b) Yes, what we've done is to cascade out an amended version of the presentation which we've made suitable to insurance offices and we've now cascaded that throughout the organisation and obviously we wouldn't have done that had we not gone to the seminar.

(c) Some of the other people that could have come along would have been our risk surveyors because they're the people that actually go out and assess different environments for their suitability and liability of insurance. I believe one of my colleagues had already attended a previous seminar and he's a risk manager but it's good that underwriters have an understanding and appreciation of the risk. It may also have been worthwhile for surveyors though.

FOUR

(a) I think that overall it was very good and it was very constructive and delivered very well. The chap who gave the presentation on the slips tests ... the pendulum ... I found that quite interesting and it broadened my understanding of the issue.

(b) I represent an insurance company. I deliver advice and consultancy to clients of ours who are insured so I have mentioned to them about this seminar and have conveyed some of the points which I've learned in terms of initiating strategies within our insured clients; I have been proactive in that area. Basically what I've done is to pass on the information which I guess is as much as I can do in the capacity I operate in.

(c) I would have said so; whilst I do represent an organisation and I'm the risk manager within that organisation I wonder if the companies we insure would have found it useful to have representation at the event as well. We deliver a service to organisations in that we insure them and certainly the content in the seminar was very useful for me in helping to advise clients.

FIVE

(a) I thought it was very interesting and very informative. I don't know if there's anything else I could add to that ... I did like the practical sessions and the demonstrations with footwear and so on were very good.

(b) Well certainly with some of the surfaces that you think about as being slippery perhaps might not be rated as badly as you think but there was food for thought there for people who wanted the marble surfaces as there are alternatives to them now which give you that same look but aren't as dangerous.

(c) Yes. Unfortunately the SM contractor who deals with cleaning wasn't able to come and because they tend to be at the sharp end it would have been useful for them to come along. We're not so involved in the buying as such but more the monitoring of contracts and although we do have some influence in it it would be good for other departments to come along as well.

SIX

(a) I was very, very impressed by it. I thought it was great fun and it gave me things to think about which I'd never even considered before as regards our slips, trips and falls programme. I would've encouraged everyone to go on it except unfortunately we couldn't send everyone.

(b) Well we're in a bit of a strange situation at the moment in that we're in the process of forming a national health and safety team and they have a huge agenda and one of the things at the end of that agenda is monitoring and evaluation. So although we have data at the moment we can't compare it but hopefully in the future we'll be able to. What I can say on a personal level is that it's certainly changed my way of looking at things.

SEVEN

(a) I thought it was excellent. The particularly interesting stuff for me was about the micro-roughness and we're actually getting a roughness meter here. In fact we are also running the course here in October with HSE for our project managers, refreshment managers, housekeeping managers, people who would have an influence over the surfaces within our place as slips and trips are our biggest hazard with 50% of our accidents being to do with that. So, just generally, an excellent course ... all of it was relevant and had something we could learn from so,

by having the team down here to present the same course to our managers, we'll hopefully manage out a lot more slips and trips.

(c) Everyone else I've spoken to has thought the same as me; I suspect the roughness meter company is actually getting a run on them. In fact I know they've had a run on them because I phoned up to order ours and they said they've been extremely busy; they said that every time the HSE go around the country this company's get a lot more orders!

I think the HSE can be criticised in certain ways for simply telling people to go out and do things and often not actually giving any help or advice in how you might overcome certain difficulties. This particular course is one of the really positive ways of showing that you can do something and giving people practical advice and solutions is a real step forward in my opinion.

EIGHT

(a) Well I thought it was all pretty good actually and it was an incredibly interesting day. There wasn't any one individual point that I thought was particularly better than the rest but I did think it was an extremely well presented, well run day.

(b) It's certainly made me more aware of flooring purposes and potential slipping hazards and it's something I now raise with people when I'm out doing risk control surveys. It doesn't always go down particularly well but it's something that I definitely look at more closely. In the past I tended to just step over things and not really think anything more of it really but it has certainly raised my awareness and I'm passing that on to our client base as well. To be honest, I still have to pass on my notes from the seminar to my colleagues at work but that's something I'll be doing fairly soon.

(c) I would say definitely actually. I think it would be quite useful for claims people as well. I mean I don't know how you advertise it, whether it's via ABI registered companies for example, but I definitely think it would be worthwhile for claims departments as well.

NINE

(a) I thought that the way in which it was put across was brilliant and I think the presenters really understood their subject and conveyed it very well to someone like myself who is slightly technical but not particularly technical in those areas. I thought that they got the information across very well.

- Familiar with many of the topics before?

None really. I'm a chartered surveyor dealing with the acquisition of buildings and I saw this, as a certain extent, as an opportunity to do my CPD in an area which I knew little about. It is also very relevant because if I'm acquiring buildings I obviously have to make sure they're in a safe condition. One of things that came across my mind was that it is quite common to have these ornate marble hallways where a small amount of contamination can make it very dangerous; the remedy to that seems to be to put matting down which kind of defeats the purpose of having an attractive floor in the first place.

(b) I have encouraged senior managers here to try and get a day set up specifically for our regional works offices workforce; they are actually the people who are implementing health and safety across the country and would really benefit from that so I'm hoping that will come to fruition.

(c) Well yes and no. I'm the normal point of contact for DEFRA and my name came up because I'm on a number of departmental committees but it's more a matter of drilling down into the department to get the right people in that department. So I'm probably the right person to go to the initial seminar and see what it was about but I think there are people dealing with health and safety issues on a day to day basis that I can perhaps extend an invitation to in the future now that I know a little bit more about the subject.

TEN

(a) The thing that really came across for me was how unreliable some of the information is that comes out from manufacturers regarding the slip resistance of various surfaces. And also, I've been walking around in what I think are non-slip soles but the chances are that I would be equally at risk wearing these as with any other normal pair of shoes.

(b) Not yet at the moment but what I will be putting together is some guidance to the people that are managing our projects where we have new builds and refurbishment work taking place and to look at the material we're going to be using in areas where we have the possibility of water on surfaces. We have in the past had problems with people slipping when coming out of showers and the manufacturers told us that the problem is that people are using soap and body oils in the shower! So obviously our people are at fault and not the floor!! Anyway, we've been looking at how we can reduce slips by getting the proper surface down in the first place.

(c) It was very useful for me and I think that some other people it may have been useful for were the people on the project teams, the people who are at the coalface and actually dealing with the project in construction and refurbishment.

ELEVEN

(a) Well I found some of it a little too technical I must admit but, generally speaking, it was a very good course and certainly an eye opener. One of the things I did find quite interesting were the devices you could use to measure slip resistance but, obviously to purchase one would not be of much financial benefit because we only have 15 buildings and once you've gone round and checked them all then there's no use for the meter anymore.

(b) The buildings which we look after which are part of xxxxx are fairly old so what we have found in some areas is, for example, the flooring in the reception area might be a limestone type which has been down for 60 / 70 years and has become a little bit slippery. So what we've actually put in place in one area is to put down these sandpaper strips so that we've got a bit more grip on that particular floor. Unfortunately a lot of the buildings we deal with come under heritage so we can't just go in and rip the floor up or anything like that. In saying that, one of the buildings which is particularly old has the heritage applying to the outside but the inside is OK so there may be a long term project to refurbish that although that might be many moons away. Generally speaking we do have things like barrier mats in most reception areas to catch all the rain and things like that and if do see anything we think is a potential problem then we try to resolve it as quickly as we can.

(c) I think I am because I look after domestic services which applies to things like the cleaning of these types of areas and the buildings that we look after. So it was useful for me to attend because if they are going to decide to change any of the buildings then I can advise them prior to the build taking place to say that we need to look at the floor surfaces before. So I think from that point of view it was worthwhile me attending and the people that actually ran the course were very good; it was run at a good pace, had a bit of comedy so you weren't falling asleep with too much information. Overall then, a very interesting course.

TWELVE

(a) Probably the fact that when people put down non-slip floorings they're using a lot of European standards which, according to my feedback, are not of a standard high enough to reach British standards. Now that's a very useful bit of information for us because we do a lot of refurbishments in our organisation and move a lot of stuff around so we were getting quoted all these standards etc when we were putting the specifications together but we realise now that they're not actually meeting British standards. So that was the most interesting thing from my point of view.

It's really important to us because a lot of people in the industry and our clients want you to refer to standards and the British standards especially so when we get people quoted us certain things now we're in a position to throw it back and say it has to meet the British standards.

It's very interesting because a lot of the time out there people will quote that something applies to certain standards such as some kind of European compliance; now that might work where they are but not here. And a lot of people ship this stuff in from overseas.

THIRTEEN

(a) The demonstrations with particular samples and examples of type of situation which can occur.

-Awareness of such points before

Beforehand, not so much. I didn't have a great deal of awareness of the field but that has certainly improved now.

(b) I haven't used that much of it so far although it's certainly increased my knowledge of what to look for in terms of the possible risks and what the hazards are.

(c) I did find it useful and it increased my knowledge but it may have been more useful perhaps to a loss control surveyor or someone who is actually physically seeing risks as part of their day to day work. I did consider it useful though.

FOURTEEN

(a) I think really it made me more aware of slips and trips basically and the everyday hazards that you come across, not just in the office but also in the home as well. It really did come across very well.

(b) I wouldn't say we had introduced any new initiatives or changes in procedures but I would say that, because of what I've learned and has made me more aware, I do a weekly visual check around our buildings then every month we have a form to fill in and it's made me more aware when I'm filling that form in, of the things which I've learned and certain areas of the building which have more vulnerability when it comes to slips and trips. So it has changed our practices to a certain extent because I now say to people 'Look at that', or 'What's that?', or watch that particular area, especially in the kitchen or if someone's slipped something. So I now pass on these points.

(c) Definitely. It's part and parcel of my duties and it covered everything quite well I think. I also think colleagues of mine would benefit from the course as well and that's what I told my area manager here. You see, we have a health and safety team who visit us and talk about issues such as VDU safety and manual handling but obviously the slips and trips one is just as important; it's something that happens everyday.

FIFTEEN

(a) Personally speaking I've had quite a lot of involvement with these HSE things over the years and I would say that it was certainly better than a lot of the previous ones I've been at. Those tended to be very much legislatively led rather than having a practical element to them. I think what made it particularly interesting was the demonstrations of different types of surfaces and different techniques because usually what happens at these things in my experience is that they just talk at you rather than demonstrating what they're actually trying to get across.

(b) Well it certainly increased the awareness aspect but one of the things which I was a little disappointed to see was that there is no mention of the slips, trips and falls initiatives appearing in the new CDM regs revision that has just been released which really should be looking at where architects and designers are designing buildings and ensuring that these things are covered somewhere in the regulations or the company code of practice.

The principle is obviously to design out these sort of problems so that we don't have the slips, trips and falls in the first place ... that's the ideal philosophy.

(c) I have to say that the guys had more of a technical focus than you usually expect from the average HSE civil servant who is more interested in improvement notices or prohibition notices; so it was much more of a technical background which, from my perspective, is exactly what's needed.

SIXTEEN

(a) I found the whole seminar very, very interesting. It was because they explained a lot of root causes. Before the seminar I was probably one of these people who thought that we have a lot of slips, trips and falls but what can I do about it whereas after the seminar I realised that there is a lot more you can do to prevent them. So much so that we're probably going to be hosting our own roadshow in November sometime for all our clients and we're busy writing papers and everything else. So we have now adopted slips and trips as one of our major projects along with MSDs and stress. So information goes out on all three of those subjects now to our clients, risk managers etc; so we're beginning to spread the word.

(b) *See above*

(c) Yes I think so because obviously that was an insurance conference so they had the right people there and then it's really just up to them to go and cascade the information off. I know that xxxxx, the other person I went with, is very keen to have a roadshow in November and he'll probably invite some of the HSL staff along to present some of it again.

SEVENTEEN

(a) It was seeing how the slipperiness of floors is measured. It was interesting seeing it from the scientific side of things as opposed to the subjective. Because we've got a marble entrance to our building and we always had nice mats at the front door but nothing at the back entrance to the reception; we've now got matting down there as well and that helps a bit. But it's being able to say that we only need a small amount of water down anywhere and it's going to become like an ice rink and that it can be scientifically proven or do you want me to prove it with a bucket of water and you can walk over it.

(b) We're going to move into a new building and there're bits of work that need to be done; I've got involved with helping to advise on some issues there. For example there are showers with no way of stopping water coming out into the corridor and I know it's carpet but carpet can be pretty nasty when it gets wet as well, so I'm able to do something about that.

(c) Yes. The invitation was actually sent to the person who manages the estate and does things like leases and agrees who does what with landlords and that sort of thing and is involved in major projects to get buildings up to standard or maintain their standard and he felt he wasn't the appropriate person so he passed the invitation on to me ... the health and safety advisor. The thing is that I can then go back to him with the information I've got from it so we all benefit that way.

EIGHTEEN

(a) I enjoyed the whole thing to be honest. I liked the way the presentations went, I liked the format when we split into groups because they were of a reasonable size and I just found it really interesting; the subject material was good, the presentations were good. Very positive, I thought it was terrific.

(b) Well I think it's slightly different for us because in the areas we deal with we have a burgeoning relationship with the HSE because of our particular problems. So we know that slips and trips are a particular problem and yes it is being addressed.

(c) Definitely yes.

NINETEEN

(a) Nothing particularly leaps out but I did enjoy it. I thought it was informative.

-Unfamiliar with content before

There was a lot that I wasn't aware of. I thought that, for the job that I'm in, it may have been a bit too technical. So, although the information we were given was very good, some of it was maybe a little too technical. That's not to say that it was wrong or anything, that's just from my point of view.

- (b) Yes, I've used the information on health and safety inspection where our fire escape has got algae growing on it. So I've gone some ways to getting xxxxx (the company who looks after our building and are responsible for maintaining it) to put a new solution over the steps. So, yes that has helped.
- (c) Yes because I'm involved in all the health and safety inspections, the fire risk inspections and any problems where there are slips and trips come my way. So it's something that I'd never looked at before in depth and it has helped me.

TWENTY

- (a) Well I don't know if anything in particular stood out but I did think that overall it was an extremely good presentation. Whether it was appropriate to someone in my own position is a slightly different question because it looked to be aimed at those people who specify floors and things but that's not something I get involved in. But it was certainly an interesting and eye opening presentation.
- (b) Certainly not within the work environment and, as I mentioned, I don't think it was particularly appropriate to someone in my particular position. Being a Government department most of the flooring aspect of things is dealt with by a company called xxxxx who are in charge of all the buildings. In all honest the presentation would have been more useful had it been presented to them because they are the ones responsible for the flooring etc.
- (c) I mean, I am a health and safety officer on the management side of it so I did find the day enjoyable but whether it was appropriate for me is open to question. But that's the thing really; unless you attend these events then you're not going to know.

TWENTY-ONE

- (a) I felt the whole day was very useful. It helped me with a lot issues, helped my understanding of slips, trips and floor surfaces and helped to clarify a lot of issues.
- (b) It's made me look a lot more carefully at floor surfaces and contrasting floors etc.
- (c) Yes. From my point of view it would be useful to send along some architects and perhaps the maintenance people from our department as well. That would save me cascading the information to them as it's obviously easier if the HSE come along and tell them first hand. So I think that designers, architects and maintenance personnel who are dealing with that sort of thing day in, day out because they're responsible for allocating the materials etc and it would help to make them more aware of it and, like I say, it's easier if it comes from HSE.

TWENTY-TWO

- (a) Well I suppose the biggest thing was that our offices are carpeted right the way through and there are some areas such as the fire exits, the kitchen areas and toilets where obviously we have different floor coverings. So it really just highlighted the potential risk really; that was the main thing from my point of view, the fact that there is a potential risk and that we need to be aware of that. When it came to the tests that people can use then that wasn't quite so relevant to me but it's still useful to be aware of the techniques which are available.
- (b) To be honest, we're in the middle of setting up a health and safety committee so I think that what will probably happen is that once it is established we'll have more opportunity to look at some of the points raised with regard to potential risk to staff. With the buildings which we work in the vast majority of flooring is carpeted anyway so the risk is relatively small in comparison to most businesses although there are obviously still some potential risks and we intend to bring those to the attention of people. Some of the issues, for example, we will be bring to the attention of the landlord as we are tenants of the building here: one of the things that I picked up on was the metal fire exits which we have but obviously the cost of replacing that would be astronomical so, hopefully, it shouldn't be a problem if people don't spill things on there. Nonetheless I mentioned this to my line manager and, certainly from my point of view I just very much appreciate this useful information.

TWENTY-THREE

(a) Well I guess it might be better if I were just to explain the reasons why I was there; the reasons were twofold really. First was just to gain a better understanding of the issues surrounding slips and trips and how big an impact they really do have in industry in the UK from an insurance perspective and how or if anything could be done in the area in which I work which is motor trade. Secondly I'm also doing risk management exams so it was felt that this might just help my overall exam process. I guess what I hoped to take from the day was whether we, as underwriters, could perhaps influence the way in which our clients manage their businesses; I guess the short answer to that is that we can't directly because what we would be looking for when we take on a risk is that we take on a surveyor to assess the risk of a premises where they would check for things like security, fire precautions and health and safety issues. Now they would then themselves suggest ways to improve how the business operates in terms of, for example, health and safety procedures. So they would have requirements to improve any particular risks which if they didn't improve then we would come off cover. Also they would have recommendations for improvements which, if they weren't met, we would still continue providing cover. So the surveyor is really our front line contact for health and safety issues with the individual client and, as an underwriter, I would act on the information coming from them perhaps loading premiums or giving discounts depending on how large or small certain risks were. So, it's really the surveyor I guess that would be the point of contact with the client and they would have the most influence in directing whether or not something needed to be done from a health and safety perspective.

(b) Well there were two or three others from my company on the course and what we've actually done is to pass the information packs round the underwriters that we all work with and there's also been a presentation being put together just to make out underwriters across the country aware of slips, trips and falls and just how big an issue it actually is because I guess from our perspective we probably don't realise how significant all these claims are because there're a lot of them but generally they don't tend to cost a lot of money. You might have someone off work for a couple of weeks but when you're talking about employers' liability compensation it would only be costing us something like three or four thousand pounds and it's not until you get a real serious injury that you're getting into larger claims. It's sometimes just when you get the large claims that alarm bells start ringing and you start to try and think of doing something then but I think we really need to start looking more at the smaller claims and especially the frequency of them to try to take some action before it develops into a potentially large loss.

(c) The liability surveyors I think would find it extremely useful. To be fair I think our company are very good at putting the surveyors through these courses just to make them aware of all the issues and all the liability and property surveyor have got to go through NEBOSH training so that they do have a grounding in health and safety procedures and know what to look for in any given setting. I think it was actually good to get the case studies with people getting injuries because we can then go along to a client with that information. Clients obviously don't like to be told that their business could operate better but if you actually provide them with some evidence to say 'Look here's another business that thought exactly the same way as you and this is what happened' and you can actually give them some proper case studies.

TWENTY-FOUR

(a) I differed with the other three (*of same organisation who attended*) on that: I'm a health and safety advisor and the other three are from accommodation. I really enjoyed the technical information about co-efficient of friction and the physics of it all but they found that a bit too much detail. As regards the different sessions that they had, they were all very good actually. At one point they showed all the different devices for measuring co-efficient of friction and I think that most people probably glazed over at that point but I think the afternoon session where they showed all the different photographs was very interesting and it also proved that we're not the only ones who make mistakes and that some of the biggest organisations in the world build these very dangerous buildings. I thought the day was arranged very well.

(b) What I took away from it was the information on different floor coverings and testing and making sure architects don't just design and engineer some test but also making sure that the floors are tested when they're wet. There are new buildings going up here right now where the same thing has happened again so it's made me much more aware and now we look at all of this whereas before we weren't looking at it at all. We were aware that people were having accidents on certain areas like our steps outside where we have now put a special covering on but, more importantly, we're aware of these things from the start and can address these issues from the beginning. And now we know that we can actually prevent these accidents which, frankly, is something we didn't realise before.

One thing that struck me about the three presenters was how well they got on together. They really seemed to like each other and worked together well as a team and that's really important when you're putting together a day like that. They also had a good sense of humour so were able to take perhaps quite a dry subject and make it as entertaining and as interesting as they could.

(c) Definitely. You must have the health and safety advisors there and our health and safety officer should really have attended as well. But the health and safety people must go because they are the ones dealing with all the prevention obviously. I think those from accommodation departments do take something from it but perhaps not as much but the health and safety people can in turn alert the designers and whoever else to ensure that the correct approach is taken from the outset and the health and safety people will make sure that is done because they will attempt to prevent accidents at all costs.

Personnel might also be worth inviting along because they would also be interested in things that might damage a person in any way and health and safety is usually part of human resources as well so that would be a relevant area for them.

TWENTY-FIVE

(a) I thought all of the information was very useful and relevant; it was amongst the few number of courses I've actually been on which was of use to me.

(b) Well we're currently looking at our offices. We have a range of offices and we're looking at those in the light of certain regulations, issues of health and safety and particularly the issues that came up in that seminar. So it's an ongoing situation as far as I'm concerned.

(c) The health and safety officer was intending to go but she was unable to make it so they passed it on to me and I suggested to her that if she gets the opportunity to go to it sometime in the future then she should do as it was very worthwhile. I had a spare pack which was available and I passed one to her and my line manager ...
(inaudible)

TWENTY-SIX

(a) Well the speakers definitely stood out. They were enthusiastic, they brought the subject over well and it was a lot more interesting than might be thought from the subject matter. The way they presented it really brought home how important the cleaning is and keeping floor surfaces dry are etc. But I thought the lecturers were the ones who brought that home and that really stood out for me.

(b) I do mention a lot more about slips and trips now in advising people and the importance of keeping floor surfaces clean and dry, avoiding any damaged areas etc. So I have developed more of an understanding and I am conveying to our clients.

(c) For me especially. A large part of my job is to advise clients on how to maintain standards of health and safety and I know so much more about this aspect of it now that it has made a big difference.



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ISBN 0-7176-6153-9



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