

# Development Department

## Research Programme

### Research Findings No.144

## Management of Work-related Road Safety

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The Scottish Executive wished to establish the extent of work-related road safety practices and policies in organisations in Scotland, in order to highlight examples of good practice. The Health and Safety Executive and the Scottish Executive jointly commissioned research involving a telephone survey of over 1000 organisations in Scotland, in order to establish the extent to which road safety is considered a health and safety issue in Scottish workplaces, as well as an international literature review investigating individual differences contributing to driver behaviour, and the identification and documentation of good practice case studies of occupational road safety policy and procedures in the UK.

## Main Findings

- Forty-four percent of organisations indicated that less than 10% of their workforce were expected to drive as part of their job. A third indicated between 10% and 50% had driving responsibilities and 13% stated that at least half of their workforce drove as part of their job. 9% of organisations reported that none of their employees drove as part of their job.
- Travel by peripatetic/professional/sales staff was the most typical driving activity. The second most popular was the delivery and collection of goods; cars were the most common type of vehicle used, followed by light goods and then large goods vehicles.
- Of the work-related road accidents that had occurred during the past 3 years the majority of organisations had experienced a maximum of 10 accidents. However, 3% claimed to have had 50 or more accidents.
- The majority of accidents occurred during travel by peripatetic staff and delivery/collection of goods, and the most common vehicle involved in accidents was cars, followed by light goods vehicles.
- Approximately two-thirds (64%) of organisations claimed to have a policy relating to safe driving procedures. Only 2% of the sample had considered it, but not actually implemented one. The most common reason was out of concern for their staff, followed by adhering to H&S regulations, and then reducing costs.
- The most common procedure adopted was driver training, followed by a written policy statement and then driver assessments.
- The most common benefit was meeting a moral duty to employees and public, followed by reducing insurance premiums and improving overall performance. A third of organisations indicated that accident prevention policies produced effective results (largely measured via the number of reports, claims, and accidents occurring) and only 5% of those implementing such a policy reported that the procedures had not worked well. The main disadvantage was seen by a minority to be that such policies were time-consuming.

## Background

In response to the number of road accidents involving at-work vehicles, an inter-agency Work-related Road Safety Task Group was established in May 2000, serviced by the Department for Transport, Local Government and the Regions (DTLR) and the Health and Safety Executive. This group was established to consider the issue of work-related road traffic incidents. At the same time, the Scottish Executive wished to establish the extent of work-related road safety practices and policies in organisations in Scotland. This research was therefore jointly commissioned to meet these objectives.

The research highlighted the nature and range of safe driving initiatives/policies in place in Scottish based organisations, through conducting the telephone survey. In addition, the research investigated the impact of safe driving policies on the number of road traffic accidents, as well as developing case studies that demonstrated tangible benefits of adopting such policies and lessons learnt by those who have put such policies in place.

There is known to be an increased risk with company drivers and also with various driver characteristics. These are differences in the driving behaviour of certain individuals associated with, for example, age, gender, personality, risk perception, and social deviance. The literature review investigated these factors, and implications for work-related road safety were drawn from this.

## Aims and methods

The study had three main aims:

- Establish the contribution of individual factors to driving behaviour and the implications for managing work-related road safety.
- Establish the extent to which road safety is considered a health and safety issue in Scottish workplaces.
- Identify and document good practice case studies of occupational road safety policy and procedures.

These were achieved by:

- Conducting a review of the international literature on individual differences and driver behaviour.
- Conducting a telephone survey of a sample of Scottish workplaces (1006 organisations of varying sizes and sectors).
- Identifying and visiting a number of organisations with effective occupational road safety policies and procedures.

### Literature review – Main findings:

The international review of individual factors that affect driving behaviour found that:

- Men were more likely to have an accident than women.
- The nature of the accidents experienced by men and women were different.
- Younger drivers were at greater risk than were older drivers.
- There was generally a greater risk associated with increased levels of education.
- Certain personality characteristics were associated with increased risk; the most reported characteristics being 'Sensation Seeking' and risk taking.
- There was a relationship between social deviance and violations and accidents.
- There was a decreased risk of accident involvement with experience, although this tended to even out after eight years of experience.
- Stress was associated with increased accidents as were major life events.
- There was increased risk associated with certain medical conditions.

## Literature Review – Implications:

The findings of the literature review have significant implications for road safety policies and procedures, as it is evident that it is possible to recruit safer drivers, if driving is their main task. Recruitment procedures may include: personality profiling, pre-employment medical screening, and licence checks. The following issues are also discussed in the light of the findings: benefits of tailored training programmes, the role of stress management, employee awareness and involvement in procedure development, and shaping employee attitudes and safety culture.

## Telephone Survey – Findings

The telephone survey covered 1006 organisations in Scotland – 680 small to medium organisations (between 50 and 249 employees) and 326 large organisations (more than 250 employees).

The main sectors in which the majority of employees were expected to drive as part of their typical duties included transport communications and utilities; agriculture, forestry and fishing; and mining and construction. Over half of organisations surveyed indicated that travel by peripatetic/professional/sales staff was the most common activity undertaken, the second most popular activity being the delivery and collection of goods. The most common vehicles used were cars (73%), light goods vehicles (55%) and large goods vehicles (25%).

Four out of ten organisations indicated that there had been at least one work-related road accident in the past three years. Of these, 65% had had 10 accidents or less; 6% had between 11 and 20 accidents, 4% between 21 and 49 accidents, and 3% had had 50 or more accidents. However, a fifth of organisations (21%) could not recall the specific number of accidents encountered in the past 3 years. Large organisations were least likely to know how many accidents had occurred compared to medium sized organisations.

The two most frequent activities taking place when accidents occurred were travel by peripatetic/professional/sales staff and delivery and collection of goods; however, the incidence of accidents was proportionally highest whilst undertaking large goods haulage, followed by construction and maintenance

work. Over half of all accidents involved a car (54%) followed by a light goods vehicle (38%). However, accidents were likely to occur with 38% of large goods vehicle users, compared to 30% of car users and 28% of users of light goods vehicles.

Two thirds of organisations claimed to have actively considered ways to reduce traffic related accidents/incidents. This accounts for 76% of large organisations and 61% of medium organisations. In terms of experience of accidents, those organisations experiencing fewer accidents were least likely to have considered ways in which to reduce accidents.

Sixty-four percent of organisations claimed to have a policy relating to safe driving procedures – 70% of large organisations and 60% of medium sized organisations. In terms of sectors, transport, communication and utilities were more inclined to have a safe driving policy (88%) and those involved in manufacturing were least inclined to have such a policy (52%).

The majority of organisations that had a safe driving policy in place reported instigating this policy out of concerns for the safety of their staff/customers and to adhere to Health and Safety regulations. Results showed that some organisations are aware of the costs of failing to address these issues, as they are motivated to take action to reduce costs, prevent insurance claims and reduce accidents.

Over half of the organisations (56%) indicated that they provide driver training, with 41% having a written statement of policy. Over a third (35%) of organisations provide driver assessments.

The main advantages seen by organisations who had a safe driving policy in place were meeting a moral duty to employees and the public; reduction in insurance premiums; and an improvement in overall performance as a result of such policies being in place.

The majority (74%) of those who had a safe driving policy in place did not associate any particular disadvantages with it. The remainder saw the main disadvantage of implementing such policies as time consuming or costly.

Just over a third (34%) of organisations that currently operate accident prevention policies indicated that they had demonstrated results of the effectiveness of these policies. Success of accident prevention procedures were largely judged on a reduction on the amount of reports/claims/accidents (35%) and on an elimination of accidents (23%). Only 5% of those who had implemented accident reduction procedures stated that the approaches had not worked well, and some reasons for failure included approaches were too expensive; lack of time; approaches too advanced for what was needed; contractors unreliable; resistance from employees; and one-day courses were too fragmented.

## Telephone Survey – Implications

Although just under two thirds of organisations claimed to have a policy relating to safe driving procedures, when these were followed up in order to identify case studies, it appeared that some organisations reported having a policy if they had a general health and safety policy, even where this did not specifically state road safety risks. Where organisations had taken some action, more commonly training, this often could not be backed up with tangible evidence of improvement, partly due to the lack of data on which to compare before and after training intervention.

In addition, a fifth of respondents could not recall the specific number of accidents encountered in the past three years. To some extent this highlights the lack of understanding of the extent of occupational road risks and the likelihood that many organisations do not have an accurate indication of the costs associated with road accidents.

The results should therefore be treated with caution. Reported procedures may not necessarily be very comprehensive, and reported benefits may be based on perception rather than objective measures of performance improvement.

The fact that procedures are time consuming was the main disadvantage identified. Clearly, better awareness and guidance is required, particularly for small to medium organisations, who were less likely to have taken action, yet almost equally as likely to have people driving as part of their job.

## Case studies – Main Findings

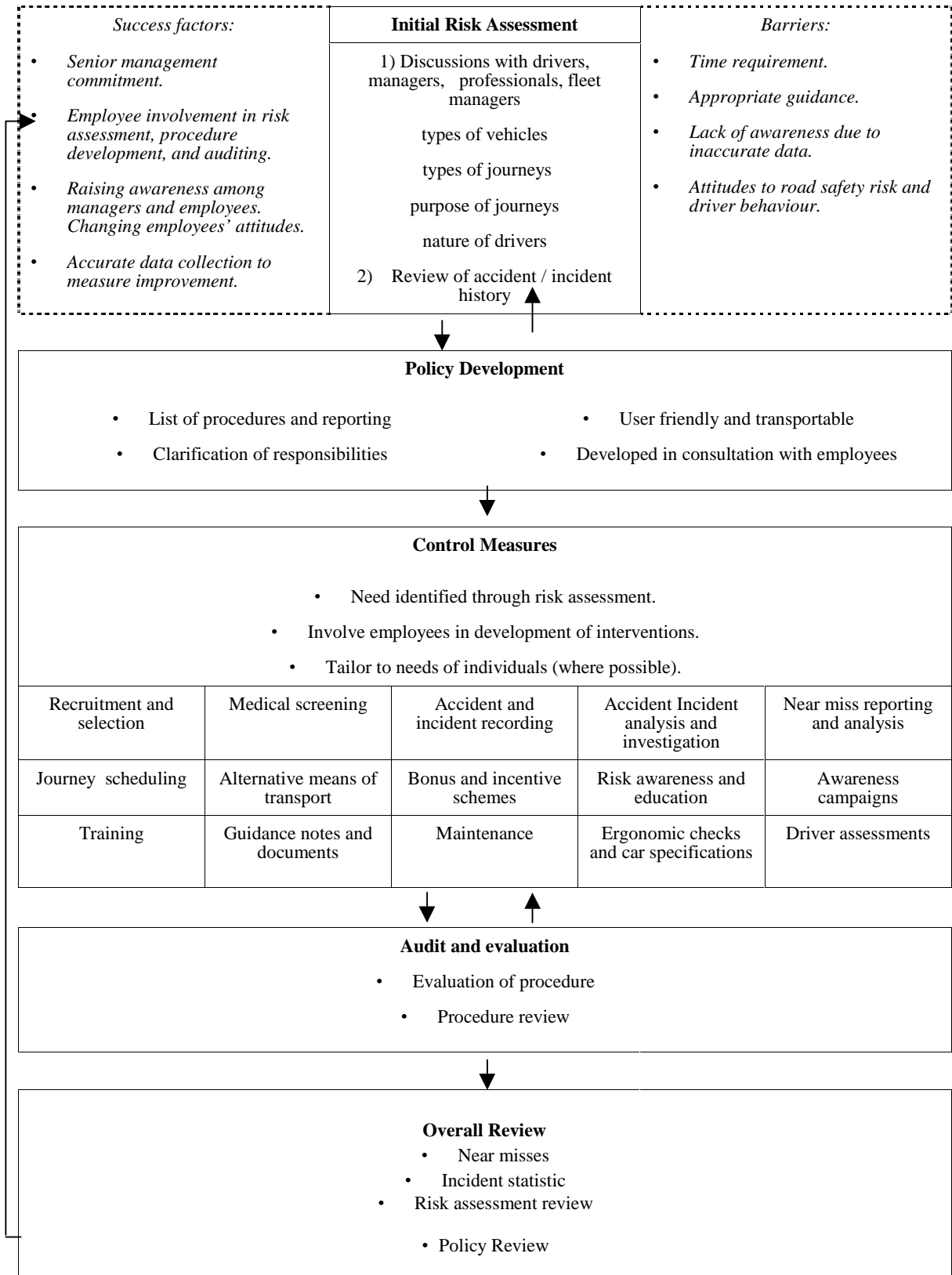
The case studies, which consisted of 18 organisations already adopting safe driving policies/procedures across England, Scotland and Wales, found that:

- Employers were motivated to introduce road safety policies in order to reduce accidents and associated injuries and costs or in order to meet their legal duties regarding the welfare of their employees and the public.
- There was a range of procedures that were employed to tackle work-related road safety. These included risk assessment, driver training, incident reporting, incentive programmes, driver handbook/general guidance, guidance on mobile phone use/hands free sets etc., awareness campaigns, vehicle maintenance procedures/ergonomic checks, breakdown guidance/assistance, and alternative means of transport.
- Most policies were co-ordinated by the health and safety specialist, often in conjunction with the fleet manager.
- Employers adopting such policies and procedures had seen a reduction in accidents and consequently a reduction in insurance premiums, reduced costs of vehicle damage and a reduction in sickness absence due to driving related injuries.
- Senior management commitment, involvement of employees in procedure development and risk assessment, and accurate data on which to measure improvement, were important characteristics of effective systems.
- More advanced systems aimed to change managers' and drivers' attitudes to the risks.

## Case Studies – Implications:

The case studies highlighted the 'success' factors that ensure that the procedures work effectively. In addition, barriers to effective implementation were also identified. These factors plus the range of procedures identified in the case studies, literature review, and telephone survey, have been drawn together in a model of good practice work-related road safety management (see Figure 1).

**Figure 1: Model of Occupational Road Safety Risk Management**



## Conclusions

The findings of this study have significant implications for how organisations implement an occupational road safety policy and associated procedures. Drawing on these findings, a model of good practice road safety risk management was presented in order to assist in motivating employers and providing guidance on action required.

## References

The full literature review report, 'The contribution of individual factors to driving behaviour: implications for managing work-related road safety', has been published separately by HSE as a Contract Research Report (available from HSE Books).

The case studies are covered in full in the 'Management of work-related road safety' Research Report, which has also been published separately by HSE, as a Contract Research Report (available from HSE Books).

The report which is summarised in this Research Findings is available on the HSE website ([www.hse.gov.uk](http://www.hse.gov.uk))

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