Occupational health and safety support systems for small and medium sized enterprises

A Literature Review

Prepared by BOMEL Limited for the Health and Safety Executive 2005

RESEARCH REPORT 410
Occupational health and safety support systems for small and medium sized enterprises

A Literature Review

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This report describes an international review of the occupational health and safety support systems (OHSSS) for small and medium sized enterprises (SMEs). The aim of this review was to identify and review occupational health support models and programmes for SMEs similar in scope to the model proposed by HSE for its occupational health, safety and return to work support (OHSR) model. Searches revealed that there is little information on such models in the refereed occupational health literature; and, as such, information was sought from a combination of the Internet and contacts. A total of almost 40 projects / programmes were identified for inclusion in the study, from the UK, from Europe and the rest of the world. These spanned a broad range of project sizes, from Maintaining Work Ability programme in Finland, which delivered training to 23,000 people, to small scale projects involving a few dozen SMEs. Each of these has been reviewed to provide the evidence base contained in this report.

This review has highlighted the issues relating to each of the individual components of HSE’s proposed OHSR model. Each of these components has been used elsewhere either individually or in combination with some of the other components. Where individual components corresponding to those in HSE’s proposed model have been used in the systems reviewed, the available evidence was largely positive, although certain limitations have been noted. However, none of the systems reviewed has taken an holistic approach similar to that proposed by HSE.

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

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EXECUTIVE SUMMARY

INTRODUCTION

Work related illness is a major issue for the UK workforce and for society as a whole. In the UK in 2002/03, it was estimated that 2.2 million people were suffering from an illness which they believed was caused or made worse by their current or past work (a). The total cost to the economy of work related illness for 2001/2002 is estimated by HSE to be between £13.1 and £22.2 billion (b).

The aim of this literature review is to identify and review occupational health (OH) support models and programmes for SMEs similar in scope to the model proposed by HSE for its occupational health, safety and return to work support (OHSR) model. Searches revealed that there is little information on such models in the refereed occupational health literature; and, as such, information was sought from a combination of the Internet and contacts. A total of almost 40 projects / programmes were identified for inclusion in the study, from the UK, from Europe and the rest of the world. These spanned a broad range of project sizes, from Maintaining Work Ability programme in Finland, which delivered training to 23,000 people, to small scale projects involving a few dozen SMEs in Vermont, USA. Each of these has been reviewed to provide the evidence base contained in this report.

OVERALL FINDINGS

Much of the information provided about the models lacked key elements of quantified data with no mention of cost-benefit or cost-effectiveness evaluation. Generally, where quantitative information was provided, it was in terms of outputs such as the number of people trained and not in terms of outcomes such as the positive effects on OH.

A number of qualitative benefits of OH models were identified from the review. These included opportunities for employees to develop and learn new skills; reductions in staff turnover and absences; rehabilitation services for workers who have been away from work for long periods of time; the provision of a community service with regional OH models; and lower insurance premiums for the employer as a result of participating in the OH models. However, the lack of evaluation data precluded quantitative appraisal of the benefits.

The OH models were reviewed to identify any areas where they have not been successful. However, the reference material obtained typically limited its comments to the positive components of the service provided such as the number of people trained or the number of information packs distributed. Shortcomings were only identified in models of:

1. The development of occupational health services tailored to SMEs in Denmark

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(a) Health and Safety Statistics Highlights: 2003/04

2. The inter-enterprise safety coordinator in France

3. The integrating approach for spreading safety culture in Italy

4. The skilled trades programme in the Netherlands.

In these models the shortcomings included: SMEs not attending previously arranged workshops; SMEs viewing the model as time consuming and too expensive; and the workload on the occupational health and safety experts being too great. Shortcomings appeared not to be restricted to particular sectors or model types.

The models identified in the review were split into those from the UK, those from Europe and those from the rest of the world. It was typically found that the models from the UK were targeted towards specific regions, whilst those from Europe and the rest of the world consisted of national approaches and would tend to be targeted towards specific sectors. The models from Europe and the rest of the world tend to be underpinned by a national centre of excellence.

Contacts made with various bodies revealed a major concern of lack of funding and resources. This is particularly evident with the WHAT model in Bradford and the Leeds OHAS model. These are both considered by their staff to be significantly under-resourced to the extent that they do not actively market their services to avoid stretching their already limited resources any further.

The lack of funding may also relate to the earlier point about the absence of evaluations. To conduct an evaluation effectively requires time and effort since it needs to be undertaken objectively, needs to cover all components of the model being assessed and needs to be completed over a meaningful period of time through a cyclical process of evaluation and re-evaluation. This all requires funding, and for this reason, it is understandable why some providers do not evaluate their services or opt for in-house assessments of outputs such as the number of people trained or the number of information packs distributed.

NHS Plus were contacted to obtain their views on their model and the issues that they encountered. It was believed that they would be able to provide useful information since they offer support to industry, commerce and the public sector focusing on SMEs. NHS Plus were contacted on a number of occasions to obtain relevant information. However, communication from a Section Head of NHS Plus, indicated that NHS Plus is a network of autonomous OH departments and that the information required is not stored centrally. We would recommend that any future study target individual regions.

**FINDINGS IN RELATION TO HSE’S PROPOSED OHSR MODEL**

The techniques employed in the OH models reviewed in relation to **active marketing** varied from placing posters on walls of GP surgeries to risk management forums and mobile inspection units.

The **customers/clients** targeted by the OH models reviewed all included employees and/or employers of SMEs. Furthermore, two of the UK models were involved in projects that specifically targeted minority groups and vulnerable workers such as older workers, younger workers and ethnic minority communities.
All of the models identified in the review have *access points* which provide basic advice on general occupational health and safety issues free of charge to the *customer/client*. Examples of *access points* included telephone support lines, Internet websites, appointments in GP surgeries and contact with community networks or professional bodies. The majority of the models used a combination of *access points* rather than relying on one, however, again this was dependent on the level of funding available. Typically, the number of *access points* used varied in proportion to the funds available.

A number of the service providers used multimedia techniques such as the Internet, e-mail and CD-ROMs as their *access points*. Electronic materials means are likely to be relatively cheap to produce the relevant materials and maintain them. In contrast to other *access points*, these have the advantages of being remotely-accessed in individual homes or offices and can be reached by large numbers of people. However, it is not possible to verify the extent of the take-up of such *access points* since most of these models did not evaluate the effectiveness of their multi-media techniques. The one exception to this is the Safe and Healthy Working scheme in Scotland which from its baseline evaluation ascertained that micro-sized businesses are more inclined to prefer paper based information than electronic information when compared with small and medium sized businesses. However, it is likely to be cheaper to distribute and maintain electronic media than paper-based equivalents.

All of the models considered in the literature review cover the *support service* component of the OHSR model by offering occupational health and safety advice via advisors with relevant experience and qualifications. One of the most common techniques for providing *support services* is by the use of a toolkit that offers advice on occupational health and safety along with the use of different *access points* such as workbooks, CD-ROMs or talks.

One of the models identified in the review used mobile inspection units to provide part of its *support service* to farmers. By providing access to customers/clients, the use of promotional campaigns to market the service, and the use of a network of professionals and partnerships at local levels, the mobile inspection unit could also cover the components of *active marketing, access points, support service* and *specialist support* in addition to *support services*.

Many of the models reviewed use networks of appropriate professionals and partnerships at local levels. However, they differ from the OHSR component of *specialist support* in that they are provided free of charge to the employer. The one exception to this is Constructing Better Health in the UK which offers a supplementary service of specialists that is chargeable to the employer.

Ten of the national models identified in the review are underpinned by an organisation which fulfils some or all of the functions identified under the *national centre of excellence* component of the OHSR model. The functions include responsibility for overall management and facilitation of the service, marketing strategy, developing standards and benchmarking and research and evaluation.

The review of the available literature has highlighted the issues relating to each of the individual components of HSE’s proposed OHSR model. Each of these components has been used either individually or in combination with some of the other components. Where individual components have been used in the systems reviewed, the available evidence was largely
positive, although certain limitations have been noted. However, none of the systems reviewed has taken an holistic approach similar to that proposed by HSE.

RECOMMENDATIONS

On the basis of the findings from the literature review, the following recommendations are tentatively made:

- Consideration needs to be given to the greater use of multimedia methods to provide occupational health and safety support. Two of the models identified in the review take advantage of multimedia methods in this way, and as well as being relatively inexpensive to distribute, they can be used to reach large numbers of customers/clients. The increasingly high levels of access to personal computers and the Internet among the general population provide the means for uptake. However, people need to be made aware that such information does exist.

- Sufficient funding sources are required for those schemes which will use HSE’s OHSR model, such that there will be sufficient resources to undertake the work and market the services. This funding should allow for impact evaluation. This will mitigate the funding issues encountered with other occupational health and safety models, particularly in the UK.

- Safety Awareness Days and mobile inspection units have the potential to address a large number of the components in the HSE OHSR model. As such, their use should be considered as part of occupational health and safety support systems.

- There is a need for models to involve relevant stakeholders and professional associations when providing occupational health and safety support to ensure the message will be delivered as effectively as possible. This is particularly applicable to regional or sector based approaches where partnerships with local community groups or professional / trade associations should lead to the customers/clients to being more receptive to the information provided by the models.
1 INTRODUCTION

1.1 BACKGROUND

Work related illness is a major issue for the UK workforce and for society as a whole. An estimated 2.2 million people in the UK in 2002/03 were suffering from an illness which they believed was caused or made worse by their current or past work\(^1\); around 700,000 of those first became aware of the problem in the previous 12 months. The total cost to the economy of work related illness for 2001/2002 was estimated at between £13.1 billion and £22.2 billion which is approximately three to four times the cost of workplace injuries (£3.2 billion to £6.2 billion)\(^2\).

There are over 19 million Small and Medium Sized Enterprises (SMEs) in the European Union and they employ approximately 70% of Europe’s working population\(^3\). However, 82% of all reported occupational injuries occur in SMEs, and in some cases the figure rises to 90% for fatal accidents\(^4\). This may be influenced by a number of possible factors:

- Many SMEs are susceptible to market fluctuations which could have an influence on their focus on health & safety with a variable rather than consistent approach
- SMEs are often more labour intensive than larger organisations, relying more on manual operations and handling than larger organisations, which may be able to invest in specialist equipment
- Managers in SMEs are responsible for a range of functions and may have limited time and resources for promoting employee well-being and health
- SMEs are potentially less inclined than large organisations to use occupational health and safety services.

The Occupational Health (OH) of workers can be improved by a variety of interventions, both aimed at the prevention of health problems and curing or alleviating the illnesses of people who already suffer them. The International Labour Organisation (ILO) recommends that occupational health services should establish a programme of activity tailored to the undertaking or undertakings they serve, taking into particular account the occupational hazards in the working environment as well as the problems specific to the branches of economic activity concerned\(^5\). Taking due note of their recommendations the ILO identified the following necessary requirements for OH services:

- Surveillance of the working environment
- Surveillance of the workers’ health
- Information, education, training and advice
- First aid treatment and health programmes
Other functions (e.g. analysis of the results of the surveillance of the workers’ health and of the working environment, and proposing measures to improve them).

These activities are expanded in more detail in Section 2.2 of this report which contains a definition of OH. In practice, many of the programmes and projects described in this report only provide a subset of these functions.

1.2 OBJECTIVES

The objectives of this project are to:

1. Identify and review existing occupational health and safety support models for SMEs. This was undertaken in two main steps: identifying the key models; and gathering and summarising information on these key models.

2. Engage with various bodies to obtain their views on the support models and any issues that emerged.

3. Produce a report that contains information on the various models identified and a series of recommendations that will include how the evidence gathered can be used to inform the proposed HSE OHSR model.

1.3 STUDY CONTEXT

In July 2000 the Health and Safety Commission and the Health and Safety Executive (HSC/E) launched the document Securing Health Together: A Long-Term Occupational Health Strategy for England, Scotland and Wales. The strategy represents Government bodies concerned with occupational health, along with interested parties outside Government, working in collaboration to achieve a number of common goals:

- To reduce ill health both in workers and the public caused, or made worse, by work
- To help people who have been ill, whether caused by work or not, to return to work
- To improve work opportunities for people currently not in employment due to ill health or disability; and
- To use the work environment to help people maintain or improve their health.

The strategy has a target completion date of 2010, by which time the following targets are intended to be met:

- A 20% reduction in the incidence of work-related ill health
- A 20% reduction in ill health to members of the public caused by work activity
• A 30% reduction in the number of work days lost due to work-related ill health

• Everyone currently in employment but off work due to ill health or disability is, where necessary and appropriate, made aware of opportunities for rehabilitation back into work as early as possible; and

• Everyone currently not in employment due to ill health or disability is, where necessary and appropriate, made aware of and offered opportunities to prepare for and find work.

In February 2004, HSC/E launched a Strategy for Workplace Health and Safety to 2010 and Beyond. The strategy identified the need to address occupational health and safety with strategic and partnership based approaches to help reach the targets listed above. This is being delivered through the HSE Better Health at Work Partnership Programme which prioritises working with partners in a voluntary manner to improve access to occupational health support. SMEs are being particularly targeted with this programme since research has indicated that only around 3% of people working in SMEs have access to comprehensive occupational health support\(^6\).

Within this programme, an Occupational Health, Safety and return to work support (OHSR) model has been devised which can be applied nationally. The model is active in preventing ill health, promoting rehabilitation and encouraging people to get back to work more quickly. To test this model, two stages have been identified. For the first phase, the following three pilots have been set up by HSE:

1. ‘Constructing Better Health’ which provides advice and support to SME employers and employees involved in building work in Leicestershire.

2. ‘Safe and Healthy Working’ which is an occupational health and safety service for all employees and employers of SMEs in Scotland.

3. An integrated occupational health, safety and rehabilitation support service in the West Yorkshire district of Kirklees. This pilot is in the process of being launched with the first stage commencing in October 2004 before the rest of the service becomes ‘live’ in January 2005.

The second phase involves assessing whether the OHSR model meets its aims and the ways it can be implemented effectively. The model is provided at Figure 1.
Figure 1  HSE's OHSR model
Figure 1 illustrates that the OHSR model has a number of linked and related components. Active marketing refers to the need to raise awareness of occupational health and safety and its potential benefits. Customers/clients relates to employers and employees and includes peripatetic workers and the self-employed. Access points provide generic advice on common occupational health and safety queries and all are free to the user. The core of the model is the Support Service. This involves the provision of occupational health and safety advice by ‘problem solvers’ who have relevant qualifications and experience. This service is also free to the user. Specialist support, if required, however, is chargeable to the employer. This will be provided via a network of appropriate professionals and partnerships local to the business. These service components are underpinned by a National Centre of Excellence which has overall management and facilitation of the service including developing a marketing strategy, developing standards and benchmarking and research and evaluation.

The information obtained from the two phases will inform how future occupational health services can be effectively developed in Great Britain and whether further funding to roll out support provision nationwide is justified.

### 1.4 SCOPE OF REPORT

Section 2 of the report describes the methodology used to meet the objectives presented above. This includes details of the information sources used to identify the key occupational health and safety support models for SMEs.

Section 3 provides a discussion of the existing occupational health and safety support models in relation to HSE’s OHSR model and the recommendations in Section 4.

The occupational health and safety models identified by the literature review are listed in detail in the Appendices section. The models are classified in terms of those from the UK, those from Europe and those from outside Europe. These are provided in Appendices A, B and C respectively.
2 METHODOLOGY

2.1 INTRODUCTION

This section of the report provides a definition of Occupational Health and details how the research was undertaken in order to meet the objectives stated in Section 1.3.

2.2 DEFINITION OF OCCUPATIONAL HEALTH

The term occupational health covers a diverse range of activities. The seminal definition for much activity, worldwide, is the ILO Occupational Health Recommendations of 1985, outlined in Section 1.1 that defines the following elements of occupational health services:

1. Surveillance of the Working Environment, which includes:
   • identification and evaluation of the environmental factors which may affect the workers' health
   • assessment of conditions of occupational hygiene and factors in the organisation of work which may give rise to risks for the health of workers
   • assessment of collective and personal protective equipment
   • assessment, where appropriate, of exposure of workers to hazardous agents by valid and generally accepted monitoring methods.

2. Surveillance of Workers' Health, including:
   • health assessment of workers before their assignment to specific tasks which may involve a danger to their health or that of others
   • health assessment at periodic intervals during employment which involves exposure to a particular hazard to health
   • health assessment on resumption of work after a prolonged absence for health reasons for the purpose of determining its possible occupational causes, of recommending appropriate action to protect the workers and of determining the worker's suitability for the job and needs for reassignment and rehabilitation
   • health assessment on and after the termination of assignments involving hazards which might cause or contribute to future health impairment
   • assessment of control systems designed to eliminate or reduce exposure.
3. Information, Education, Training, Advice, including:

- designing and implementing programmes of information, education and training on health and hygiene in relation to work for the personnel of the undertaking, and for those with an occupational health role.

4. First Aid, Treatment and Health Programmes

5. Other functions, which include:

- analysis of the results of the surveillance of the workers' health and of the working environment; and

- proposing measures for improving them.

The ILO recommendations have been made, in effect, to national Governments and set a high standard for the provision of OH services.

The five functions as noted above are a valuable framework for assessing the scope of an OH service programme or project. When first drawn up it may have been believed that little attention would have to be given to certain functions for some type of activity. For example, it might have been believed that little would be needed on surveillance for an office-based activity. However, the growing awareness of problems such as stress confirms that a holistic OH approach is desirable, covering all five functions. It also provides a framework for assessing projects and approaches. For example, the occupational health support provided by a GP will normally only contribute to the treatment function of an OH problem. It may be a valuable service, but is incomplete. On the other hand the OH service support potentially available from NHS Plus appears to cover all areas.

2.3 METHODOLOGY

2.3.1 Overview

The methodology for the project was originally designed around 3 distinct activities, namely:

Activity 1 – Review Existing Models

This activity had the objective of an international review of existing information on Occupational Health Support Systems similar in scope to the model developed by the HSE. The research activity was then to be broken down into 2 steps:

- Step 1 – Identify the key models
- Step 2 – Gather and summarise information on the key models.
Activity 2 – Engaging With Various Bodies

This activity involved engaging with various industry bodies, organisations with existing support systems and Government departments to get their views on these support models. This information is designed to build on data obtained from Activity 1 and was designed to provide anecdotal evidence which may have otherwise been missed.

Activity 3 – Report

A detailed report (as presented here) to cover the findings of the detailed review.

2.3.2 Methodology Adopted

It was initially envisaged that a range of primary information sources such as occupational health/safety journals, publications from the European Agency for Safety and Health at Work, the European Commission’s Senior Labour Inspector’s Committee (SLIC), industry/trade associations and Government departments would be used to identify the key occupational health and safety support models for SMEs.

The initial literature searches revealed that traditional approaches were unlikely to yield sufficient evidence. The models of most interest are those which had been adopted or tested in some form of a programme. At the start of the work BOMEL were aware of the main UK programmes and services, such as the Workers Health Advice Team in Bradford, and Workwell in Sandwell. Searches of abstracts from a range of occupational health journals did not make any references to these known programmes and revealed few others. The main sources searched were:

- Occupational and Environmental Medicine Online, a British Medical Journal with a worldwide scope
- The Journal of Occupational and Environmental Medicine (JOEM) (a US resource
- The Journal of Occupational Medicine, again UK based but with a worldwide scope
- The Australia and New Zealand Journal of Occupational Medicine

The results of the searches of Occupational and Environmental Medicine Online illustrate the issue. A total of 331 references were found which contained the words program, programme or model in the text. When scanned, however, only two of those referred to a specific occupational health delivery intervention, Wellworks-2, concerned with using OH interviews to pass on advice about smoking to blue collar workers in the US, and an unnamed trial from the Netherlands concerned with offering OH support for workers at risk of early retirement due to ill health. Further investigation revealed no mention of the known UK models or programmes.

Little information on occupational health models and programs could be accessed through refereed sources, the usual approach for a literature review. Around ten papers in total dealt
with relevant topics such as evaluation methodologies\(^7\), or with programmes dealing with a limited group of workers e.g. civil servants in Ireland\(^8\).

There are a number of possible reasons for this lack of coverage in the formal, refereed journals. The first is that there is a significant delay, possibly several years, between a service or programme being established and results being published. The current range of published papers may reflect the level of interest in the topic several years ago. Another factor may be that these programmes and models are not seen as providing useful or interesting topics for refereed journals. This is unfortunate, since well designed programmes with tried and evaluated delivery models are the key to improving the health and wellbeing of the workforce.

In the absence of formal publications other information sources were investigated. The European Agency for Health and Safety at Work has produced a report on improving occupational safety and health in SMEs, with examples of schemes\(^9\). That is a valuable pointer to work that has taken place, but the reports were generated by the promoter of the individual programme or project and are hence somewhat variable in content, in part reflecting the different cultures and approaches to health investment across Europe. This was investigated further, using the Internet and e-mail, but produced limited information in the time available. A précis of the available information on the key projects is included in this report. It would take significant effort to follow these up further, almost certainly involving visits and in depth interviews. Such visits and interviews are beyond the scope of this work.

That left a variety of sources of information, mainly ephemeral in nature. It was concluded that the most effective methodology was to conduct Internet searches to identify programmes and projects directly and collect details of the models employed. A selection of these were followed up by telephone to investigate further. Given the need to understand the advantages and disadvantages of particular models in some detail it would have been desirable to conduct in depth interviews.

The key advantages of a web based approach to identify projects and programmes and collect information on delivery models are:

- Speed – the Internet provides information quickly.
- Comprehensive coverage – it is likely that any significant programme/project/activity will be tracked down, either via its own website, via that of a parent or sponsor organisation or by a link.
- Early detection – web pages are generally established quickly in the first stages of a project/programme, when the enthusiasm runs high.

The drawbacks of a web based search are:

- The presentation depth and coverage of the programme is often patchy.
- The content may not give an objective view of the programme.
- Material may not be removed even though it is out of date (e.g. if the information is superseded or the project has finished).
There is often no information on whether the material is current.

Conversely the material may be ephemeral – it may be removed or modified without warning.

Despite these disadvantages it was concluded that a web based search offered the best opportunity of producing worthwhile results in the time available. It was decided that the best approach was to conduct a well structured and documented first level search, to aid reproducibility.

### 2.4 INTERNET SEARCHES

The search engine used was Google (www.google.co.uk) and a worldwide search was conducted of sites with the phrase ‘occupational health safety’ along with the terms ‘support’ and/or ‘SME’. Around 60,000 results were found, and of these the first 250 websites were examined to determine whether the information provided was relevant and met the study objectives. After the first 250 websites were examined it was found that the websites were becoming increasingly less relevant to the objectives and, consequently, were not examined.

Where links were provided on the web pages these were also investigated to identify any further relevant information that could be obtained. Internet information is, by its nature, ephemeral, and electronic and paper copies of the information were maintained.

### 2.5 ORGANISATIONS COVERED

The first step in the analysis was a search of the web pages of the following organisations, in addition to the journal abstract services and web pages referred to previously.

- The European Agency for Health and Safety at Work
- The European Commission’s Senior Labour Inspector’s Committee (SLIC)
- The UK Health and Safety Executive (HSE)
- Other UK Government departments such as the Department for Trade and Industry (DTI), and the Department of Health
- UK health and safety organisations and professional bodies such as the Institute of Occupational Safety and Health (IOSH) and the Royal Society for the Prevention of Accidents (ROSPA)
- New Zealand Occupational Health Service
- American Occupational Safety and Health Association
- Japanese Industrial Safety and Health Department
2.6 SUMMARISING THE KEY REVIEW INFORMATION

The key features of each of the models identified from the Internet are summarised in terms of the following headings, and are recorded within Appendices A, B and C of this report:

- Background
- Delivery of model
- Evaluation
- Primary source of information.

As indicated above the contents and coverage of these web pages may be somewhat patchy. In some cases it was possible to gain extra information, for example if a research paper linked to a project was identified or if a telephone interview revealed extra information. All such information has been included in the various programme reports.

2.7 ENGAGING WITH RELEVANT BODIES

The study also included some engagement with industry bodies, organisations with existing occupational support systems and Government departments to obtain their views on these support models. This was achieved through telephone interviews. In addition to obtaining information over and above that available from the literature review, it was hoped that the telephone interviews would provide information on how the models were evaluated, what went right and/or wrong and the general feedback that had been obtained.

Telephone numbers and appropriate individuals to contact were obtained through the Internet searches since contact information would frequently be provided along with the details of the model. For the purposes of this study, the bodies contacted by telephone were primarily from the UK. The individuals contacted were helpful, but did not appear to have the detailed information sought or were reluctant to give ascribed views.

Information was also sought from authorities in other countries. One early conclusion from the investigations was that there is significant interest in OH in Australia, with a number of projects and initiatives in place, mainly at state level. We have included a selection of these in the report. As in the UK, however, many of these initiatives appear to be relatively small in scale, in comparison with the problem. In other cases the information was incomplete and an investigation, possibly via a study tour, would eventually be needed to expand on the material. In the course of this work we gained some understanding on the operation of the Australian workplace health and safety system, which has both direct parallels and significant differences from that of the UK. We have included that information in Appendix C of this report which contains details of project results from outside Europe and is entitled ‘An Overview of OH services in Australia’.
Particular thanks for assistance are due to Dr Claire Mayhew, of the Department of Management, Griffith Business School, Griffith University, Brisbane, Australia and Susan Carbone, Strategic Development Manager, Policy & Workplace Health Strategies Bureau, Health Canada.
3 DISCUSSION

3.1 OVERVIEW

The core objective of this study was to review the occupational support systems available to SMEs, both in the UK and internationally. That included assessing the models, or system structures, used in various projects or programmes and then identifying what worked well, what worked less well and drawing on that information to identify lessons in relation to HSE’s model of occupational health and safety support for SME’s across Great Britain.

The Internet approach was successful in the sense that it allowed the identification of a substantial number of pilots, projects and programmes. Internet pages are generally prepared at the inception or growth phase of programmes and tend to give a positive view on what will be achieved; they are perhaps not as objective as one may wish. Only rarely do they give figures which will allow the success, or otherwise, of a project to be evaluated. That is true for projects both in the UK and overseas.

A selection of the identified UK projects was followed up by telephone. Information obtained from these contacts has been included in the descriptions of the various projects. These contacts confirmed that full impact evaluations are quite rare. In part, that comes from the scope of occupational health provision, which overlaps with individual and environmental health issues, and in part is to do with the fact that almost any programme has a number of stakeholders, with different priorities and aspirations. No single evaluation is likely to be relevant to all stakeholders. There also seemed to be reluctance to release quantified data or cost information even if it seemed likely that it would exist in a well managed programme. That reluctance might be overcome in face-to-face interviews, but that was not possible in this study.

The various components of HSE’s Occupational Health, Safety and return to work support (OHSR) model are discussed in relation to the information obtained from the literature review. Relating the information obtained from the review in this way will assist in building the business case for the OHSR model for future occupational health services in the UK.

One final issue is the definition of OH and its boundaries. OH is often bundled with other initiatives and there is a clear overlap with individual health and public health. The reality for the majority of workers in the UK is that the primary source of occupational health support is their GP\(^{10,6}\). That is inevitably biased towards providing reactive support after the event. On the other hand, it is readily available and has been evaluated in an HSE Report\(^{11}\). In effect, that is the basic OH service and we have focussed on identifying initiatives or projects which could, potentially, build on that.

3.2 HSE’S OHSR MODEL

HSE’s Occupational Health, Safety and return to work support model is introduced in Section 1.3 of this report. There are six main components to it which are discussed in the following sections with reference to relevant OH support models identified in this report.
3.2.1 Active Marketing

This refers to the need to raise awareness of occupational health and safety and its potential benefits. The literature review revealed the following examples in relation to this:

- **Funding.** To effectively market occupational health and safety services, a minimum level of funding is required. The review revealed that a number of occupational health and safety programmes consider themselves to be so short of funding and resources that they do not participate in active marketing of their services as they do not want to be inundated with requests for information and increase their (already high) workload. This was evidenced with both the WHAT scheme in Bradford and Leeds OHAS.

- **Techniques of active marketing.** The review revealed that there were a number of different marketing techniques employed by occupational health and safety programmes. This may be attributed to the level of funding available to market the services. The techniques ranged from placing posters on walls of GP surgeries (Leeds OHAS), dedicated Internet sites (Constructing Better Health), risk management forums (Risk management for SMEs in Finland and the Good Neighbour Scheme in the UK) and mobile inspection units (Agriculture sector in Navarre).

3.2.2 Customers and clients

This component relates to the employees and employers that the OH support models target to raise awareness of occupational health and safety. In addition to targeting SMEs, the models in the review would generally target all relevant customers/clients who fall within their scope. For instance, this could be workers in a particular region, from a particular sector or who are affected by a particular health and safety issue such as stress.

Some of the models identified in the review were involved in targeting specific minority groups and vulnerable workers such as Workwell (older workers, young workers and ethnic minority communities) and SOHAS (ethnic minority workers).

3.2.3 Access Points

Access Points relate to the need to provide generic advice on common occupational health and safety queries and are provided free of charge to the user. As expected all of the models reviewed have Access Points in order to allow the customers/clients to have access to the information. These access points take the form of telephone advice lines, Internet websites, appointments in GP surgeries and contact with community networks or professional bodies. The majority of the models use a combination of Access Points rather than relying on one specific method to ensure that the occupational health and safety message is communicated as effectively as possible.

A number of the models used electronic multimedia techniques such as e-mail, Internet and CD-ROM to provide information to customers/clients. For example, the Risk Assessment and Prevention model for the Luxembourg Construction Sector uses both the Internet and CD-ROMs to deliver their advice on occupational health and safety to SMEs. Although the development of multimedia techniques can be expensive to set up, in the long run they are cheaper than other methods of providing advice, since they can be remotely accessed in a user’s
home or office by large numbers of people. The Scotland’s Health at Work SME toolkit is delivered in the form of an interactive CD-ROM which can be posted to anybody who requests it.

3.2.4 Support Service

This component forms the core of the OHSR model and involves the provision of occupational health and safety advice by problem solvers with relevant experience and qualifications. This is also reflected in the models in this review which all have similar advisors to provide information to customers/clients. The advice includes information for SMEs on issues such as the provision of health and safety, legal requirements, insurance requirements and rehabilitation and they are provided in the form of access points as detailed above.

One of the most common methods of providing Support Services is with the use of a toolkit. This can be seen with the Work Positive programme in Ireland and Scotland and the Workplace Health Promotion in Bakeries in Germany programme, both of which provide SMEs with toolkits that offer advice on occupational health and safety. The former model’s toolkit is used to assist in the assessment and control of risks, while the latter toolkit includes, among others, lectures on health and safety for apprentice bakers and a workbook providing information on health hazards and how to control them.

The agricultural programme in Navarre, Spain used mobile inspection units to provide part of its Support Service to farmers in Navarre. These inspection visits tied in with promotional campaigns focussing on the particular region being visited. Thus, the strategic plan in Navarre corresponds with a number of components of the HSE OHSR model. The use of promotional campaigns and the dissemination activities can be likened to the Active Marketing component while the use of the mobile inspection units corresponds to the Access Points and Support Service. This method is similar to the Safety Awareness Days (SADs) used by HSE in the UK Agriculture sector whereby awareness of occupational health and safety is raised by inviting farmers to attend half day awareness events at local venues such as agricultural colleges. The events include a series of short presentations and demonstrations by trained instructors and HSE staff on topics such as working at heights, vehicle maintenance, roofwork, manual handling and other areas relevant to agriculture.

It is worth noting that the use of inspection units and SADs can also be applied to other components in the HSE OHSR model since they can be used as a form of Active Marketing to raise awareness, as Access Points to provide information to the user and as a form of Specialist Support since they involve networks of appropriate professionals and partnerships at local levels with local farmers.

3.2.5 Specialist Support

This component of the HSE OHSR model refers to the use of a virtual network of appropriate professionals and partnerships at local levels. Although it was found that a number of the models identified in this review used networks of appropriate professionals and partnerships at local levels, most of them differed from the HSE OHSR model in that they were offered free of charge. For instance, WHAT in Bradford, Workwell in Sandwell and the agriculture plan in Navarre all offer networks of professionals and local level partnerships free of charge. This can be explained by the fact that these specialist support services are often advisory unlike the
specialist support provided by the OHSR model which offers targeted services from professionals such as occupational health physicians, physiotherapists, ergonomists etc.

3.2.6 National Centre of Excellence

This underpins all the other components and has overall management and facilitation of the service. Understandably, it is the national models in the review rather than the regional models which cover this component, furthermore, the national centres of excellence are generally associated with the relevant sector association. A good example of this is the objectives and prevention contracts in the concrete product manufacturing industry in France which is underpinned by the Concrete Industry Federation and the National Health Insurance Fund. This has enabled national agreements to be signed and the French social security system to devote more than 7 million Euros to the campaign.

3.3 OUTPUT EVALUATION

A key question of all the projects received is whether the services and their benefits are sustainable. All demand the input of resources and the key issue is to evaluate whether they generate sufficient benefits to justify the continuing input of resources needed, if they are to provide a sustainable and useful long term service. Given the central role of evaluation, the outputs were given particular attention when investigating programmes and the approaches are discussed in the following sections.

Cost benefit or cost effectiveness evaluations are traditionally required to guide investment in services or products, both in the public and private sector. Yet the investigations conducted in drawing up this report suggest that there have been relatively few of these for OH support services in the UK\textsuperscript{(12)} and even fewer for international projects. The evaluations which were researched and reported are found to usually focus on outputs.

The first level of evaluation is to measure the outputs from programmes. These include parameters such as the number of enquiries dealt with, the numbers of people or companies seen as part of the programme, the number of training days delivered or the number of workshops held. Where projects have released such information it has been included in the project descriptions. Such information says little about the project or service effectiveness in delivering improved OH but is, nevertheless a valuable indicator of its size and scope. Such evaluations sometimes include the perceptions and views of stakeholders, as a readily measurable outcome. Often projects have targets, or ambitions, for outputs when they are established and evaluations of this type can be assessed recording the achieved outputs against the initial objectives.

One particularly comprehensive evaluation of that type, examining the OH provision in Sheffield, has been described by Bradshaw et al\textsuperscript{(13)}. A similar study, examining the provision of OH services to the construction industry in Hong Kong, in terms of the ILO functions, has been described by Yu et al\textsuperscript{(14)}. Another deals with the evaluation of OH support services within the NHS in London\textsuperscript{(15)}. Although it is tempting to use output parameters to compare the effectiveness or scope of different services, some care is necessary to ensure that those being measured are directly comparable; the results are probably best used as a spur for discussion.
Nevertheless there are such studies in the literature. One macroscopic survey of this type, with particular reference to SMEs, compares OH services in Japan and Finland\textsuperscript{(16)} and found that Finland has achieved a greater coverage of OH services for SMEs than Japan. In addition, in Finland, a risk assessment for each workplace determines the contents of its OH services, while, in contrast, health management based on a general health examination is the major type of OH service in Japan.

3.4 OUTCOME EVALUATION

The next level of evaluation is to measure changes generated by services or OH initiatives, in terms of a defined OH outcome for a population of individuals. Often that will involve a decision at the individual worker level e.g. does this individual qualify for a particular benefit, should treatment be given or should he/she be retired early? That immediately raises the issue of measuring a health outcome or worker capability. Health and capability are inherently multidimensional, with many variables. Despite considerable interest in expert systems for diagnosis and as decision aids in the 1980s, that type of decision is still often left to a qualified medical professional.

Relatively little information on outcomes was available for the projects described in this report. One exception is the Sheffield Occupational Health Advisory Service where 196 people were assisted to return to work. The other area where an OH service may have produced measurable outcomes was postponing early retirement on health grounds. For example, in Groningen there did seem to be a reduction in the number of early retirements, although details of numbers and years are not available. Similarly, the maintaining Work Ability national programme in Finland seems to have coincided with an increase in the average retirement age of one year, although other factors are likely to have had an influence. One initiative, in an aerospace company, reduced medical retirements by around two-thirds\textsuperscript{(17)}.

3.5 ECONOMIC EVALUATION

Economic evaluation of programmes and projects is important for the following reasons:

- Evaluations of the costs and benefits provides a common basis for comparing different programmes

- Funding is always an issue. Valuations of costs and benefits allow the funding authority to judge whether the programme is delivering/could potentially deliver value for money and whether more, or less, funding is justified.

Robust economic evaluation is a clear objective for those responsible for promoting and funding any expansion of occupational health activity. As Nicholson\textsuperscript{(12)} indicates, without either legislation or a clearly visible return on OH services, expenditure will tend to be restricted to the workforces of enlightened employers. Since progress on legislation also depends, in part, on
the strength of the economic case, then robust economic evaluations are a prerequisite for
decisions on the provision of OH services support at both the company and national level.

The searches conducted as part of this programme reveal a dearth of economic evaluations for
OH services. There are several possible explanations.

The first is the complexity of the topic. Often the costs of an OH service can be derived,
although that can become complex when some contributions will be in kind, that might include
the labour of voluntary trained assessors and the use of space in surgeries or community centres.
Nevertheless, with research it would be possible to identify such costs. In other cases the costs
are difficult to identify separately. For example, the most readily available OH support for most
UK workers is a visit to a GP. These are broad range health professionals and often will not
know whether or not any health problems are linked to work until a consultation or
investigation has taken place. In some cases the health problem itself will straddle the boundary
between work and private life. That is particularly true for psychological or behavioural issues.
Although it should be possible to put a figure on the cost of providing an OH service, it may not
be a simple exercise. None of the examples examined in the course of this study gave clear,
unambiguous cost data.

Benefit valuation poses more problems. The first is differentiating between true benefits and
transfer payments. Obviously, if a worker can be prevented from falling ill, or effectively
rehabilitated and returned to the workforce, that is a benefit, or saved cost, for the worker, the
employer and Government. Those benefits can be evaluated and the general approach to such
economic evaluation has been set out by the HSE (The costs to Britain of workplace accidents
and work related ill health in 1995/1996, HSE Books, 1999). As always in such evaluations the
benefit will depend on a number of assumptions which must be fully argued and recorded -
economic evaluation is not an exact science.

Benefit estimation is more of a problem where workers abilities are impaired to the point where
they are unable to continue in the same job and must find easier work or retire. Most of the UK
OH projects include some provision for informing such people of their benefit entitlements and
assisting them to make a claim. If they succeed due to the activities of the project then the
individual gains but those responsible for providing the benefits may be considered to incur a
cost. From the viewpoint of society as a whole, such payments are transfers and are neutral,
although they may be justified on social equity grounds. However, there are also a range of
other tangible and intangible benefits or costs, including the costs of lost output while a new
worker is recruited and trained, and the cost of pain, grief or suffering caused by the
occupational health problem.

Although no comprehensive cost benefit evaluations were found in the searches undertaken for
this study we did identify papers which deal with benefit assessment methodology, including
methodologies for use in specific applications. Miller et a(7) compared a cost model/benefit
threshold approach with contingent valuation/willingness to pay approach. In the cost model
approach the costs of the service are identified and as outlined previously, cost estimations are
usually simpler than the benefit estimation. Once the costs have been estimated, the threshold
benefit value required to justify setting up or maintaining a service can be derived. It may then
be simpler to determine whether the benefits are above or below that value than to determine
absolute figures. That simplifies the benefit calculation problem but does not eliminate it. In
the example, the benefits used still depend largely on the benefits estimated by professionals
involved in the OH service system. That was in a substantial, enlightened employer (Boots) and it may well be that professionals in such a company would have different experience and perceptions of such benefits than a broad range manager in an SME.

The contingent value approach depends for its benefit estimates on a willingness to pay judgements by those who must invest in the OH service, which may either be the organisation or the individual. That can be determined by surveys, often using stated preference techniques. The key difficulties are then defining an OH service system or model in sufficient detail so that purchasers can reach an informed, rational decision. Another is that the willingness to pay expressed by individuals in the survey is highly subjective and may well differ from that which applies in practice. Market research is an inexact science and the acid test is whether the product is eventually purchased. Once again, up front willingness will be a function of exposure and knowledge and intangibles, e.g. welfare concerns. Hence, the results from this approach also will vary from organisation to organisation and, again, specific research with SMEs would be necessary to put a value on that.

Miller et al\(^\text{(7)}\) also outline an empirical approach for assessing benefits, effectively using a structured questioning approach which asks stakeholders, particularly those who will benefit from a service, what they think it is worth. Again that produces a benefit figure which will be related to exposure to systems and the organisation’s culture. It is debatable whether it provided a figure which might be used in an investment case in a profit driven business.

A further methodology, the value case approach, has been proposed by Marston\(^\text{(18)}\) that parallels the shareholder value approach in profit driven organisations. It provides an alternative viewpoint but, as in the above approaches, the challenge is to ascribe value to the range of tangible and intangible benefits generated by occupational health services.

### 3.6 EVALUATION CONCLUSIONS

There is no obvious consensus on how the cost effectiveness of OH systems should be evaluated. The contingent valuation approach is particularly attractive in situations where a service exists and can be experienced by individuals or employers who can elect to use it or not, either by paying directly or via an insurance policy. One factor which proved to be a disappointment to the BOMEL research team in this study was not being able to gain access to figures on the use made of NHS Plus, particularly by smaller firms and the average costs when it is used. The types of service provided by NHS Plus appear well suited to SMEs, and examples are included in the website. The rate of take up of this service and the clearly identified costs to users coupled with surveys to identify why a range of organisations have used or not made use of its services would provide the basis for a comprehensive cost benefit assessment of OH service for SMEs.

It would be extremely valuable and informative to conduct a series of investigations and surveys based around NHS Plus to determine what use is made of it, user satisfaction, growth rates and the reasoning of those who do not use it. That should provide clear pointers to OH service needs, price elasticity and any market failure mechanisms.
3.7 **FUNDING**

All models of occupational health and safety support require funding. That is essential to cover operating costs and overheads including advertising and promoting their services. Once again, funding information is sparse.

This study found that a number of projects claim that they do not receive sufficient funds, and that their resources do not meet the demand for their services. WHAT and Leeds OHAS are two such examples of models that are under resourced to the extent that they do not advertise their services in the community since they do not want to experience a significant increase in their workload. If both of these models were in receipt of more funds then they would be able to provide a more effective service to SMEs, making them more aware of occupational health and safety. However, it is difficult to make a case for funds without a thorough and robust evaluation.

It could be argued that the absence of an evaluation with some models is also related to the lack of funding. Effective evaluations are expensive and need to be repeated over a period of time.

3.8 **MARKET FAILURE AND OPPORTUNITY COSTS**

The costs of work related ill health and injury in the UK have been estimated as between £34 billion to £54.3 billion\(^2\). That is the sum of individual costs (loss of income plus pain, grief and suffering), employer’s costs (lost output plus compensation claims) and societal costs (costs to NHS and other institutions). The breakdown of these costs is shown in Table 1.

**Table 1** UK national cost of work related illness to individuals, employers and society (HSE 2001/02 interim estimates)

<table>
<thead>
<tr>
<th>Cost to:</th>
<th>Cost (billions)</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individuals</strong></td>
<td>£10.1 to 14.7</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Employers</strong></td>
<td>£3.9 to 7.8</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Society</strong></td>
<td>£20 to 31.8</td>
<td>58%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>£34 to 54.3</td>
<td>100%</td>
</tr>
</tbody>
</table>

This study suggests that there is a mismatch between the scale of OH projects identified and the funding they are given. That is, funding is inadequate for the scale of the problem they are designed to tackle. If the projects are expected to make a measurable difference to OH in the area they serve a radical change is required. For example in a representative city of 1 million people the expected annual cost of work related illness would be about £250 million. That is not far from the size of Liverpool and Sheffield, both hosts to projects outlined in this report.
We were not able to determine the annual costs of those projects in those city but we estimate that both are well under £1 million. The discussion with individuals from those projects revealed that they were being held back by lack of resources and relied for funding on a mix of grants and charitable donations, and contributions in kind. None of that is to belittle the efforts of those projects; they appear to offer a valued service and may well be cost effective, for the scale at which they operate.

Those projects are not the only OH service activity in the respective cities. Over 50 per cent of the total cost would be costs to society, including costs borne by the Health Service. As discussed previously the NHS, in effect, provides much of the current OH support.

The key issue is why, given the costs of occupational ill health, more money is not forthcoming for projects aimed at specifically addressing that problem? The pressures to contribute would appear to come from:

- For individuals and employers, the most likely protection against the direct cost of occupational health problems is through insurance schemes. These may be either personal schemes or schemes run by employers on behalf of the employee. These schemes provide an ‘easy’ alternative for a number of SMEs and their employees, hence a reluctance to change to a more proactive approach in addressing OH issues. The culture here being that if the solution is working, why try to fix it if it is not broken. Even though the alternative may be more attractive.

- In the case of societal costs, the pressure to contribute to improvements comes from potential reductions in both NHS and benefit costs. Whereas the NHS and Government are aware of the costs in providing direct services to the UK population in terms of occupational health support, the link between greater investment in improved OH schemes and projects to reduce the direct costs currently being incurred has not been made strongly enough. Hopefully, this research and other studies will revise this trend.

The fact that substantial contributions are not available to organisations aiming to improve OH suggest that there is market failure, a lack of belief that the necessary investment would produce a beneficial result for the organisation making that investment, using whatever investment criterion is employed by the individual or organisation. Given the apparent scale of the benefits, which seem to be well accepted, the lack of investment suggests a lack of confidence that investment would create an adequate return. None of the projects or research identified in this report contain sufficient evaluation evidence to build such confidence and this is one of the major findings of this project.

Another potential constraint is the number of occupational health nurses that would almost certainly be a component of a viable OH system. However, the Royal College of Nursing Manpower surveys\(^{(19)}\) suggest that there is a fine balance between the availability of nursing staff and the demand. It may be difficult to find sufficient numbers of nurses with experience/training in OH and it is unlikely they could be drawn from other parts of the NHS. Almost certainly special training would be required, as in the Maintaining Work Ability programme in Finland where over 23,000 people were trained in OH matters, about half of them
were workplace representatives and the other half were medical staff. The population of Finland is just over 5 million, less than one tenth of the UK figure.

A pilot scale OH service sufficiently comprehensive in scope to rigorously assess the benefits of the various functions is likely to be a complex, significant activity. Although cost recovery may be a component of the system, a significant sum is likely to be required up front, and attention will have to be given to recruiting and training appropriate personnel. If such a pilot was properly run, and the results favourable, the potential benefit to the NHS and UK Government may well be substantial.

3.9 SYSTEM MODELS

One of the major objectives of the study was to identify effective system models, to determine what worked well and what worked less well.

At present there is an implicit model of the UK OH service system, effectively the various organisations with OH service responsibilities in the country and the interactions between them. The costs of that model are not known, because they are embedded within the costs of bodies with multiple responsibilities, such as the NHS and HSE. If the contributions of those bodies to addressing the OH problem are stable then it suggests, as described above, that the opportunity cost of transferring resources would result in a greater loss in other areas of activity.

If that is the case then further investment in OH services would have to be found from alternative sources, in effect creating a new national model, optimised to further reduce the scale of the OH costs faced by the UK. Given the potential it is disappointing that so little attention has been paid to model design. The literature searches at the start of the investigation only revealed one explicit mention of models, in an editorial in Occupational Health Journal\(^{(20)}\). All of the projects identified in the study had some form of model, or system design, but there was no information beyond the first level descriptions that have been included within the project text. Once again a survey, and not a literature review, would be required to define these clearly. It might not be worth doing so for a number of the identified projects in this report.

One topic that is often discussed at present is whether such OH service support can be provided by partnership activities. Although there is much discussion of providing OH by partnership activities, at present that may not be the best way forward. The drawback of a partnership is that often contributions are not seen as being in the business mainstream of the partner and are liable to be withdrawn. In many ways the present distribution of projects, relatively small in scale with resource limitations is a consequence of a partnership approach. Partnership without long term commitments by the partners is unlikely to succeed.
4 \hspace{1em} RECOMMENDATIONS

On the basis of the work undertaken in this project, the following recommendations are made:

1. Consideration needs to be given to the greater use of multimedia methods to provide occupational health and safety support. Two of the models identified in the review take advantage of multimedia methods in this way, and as well as being relatively inexpensive to distribute, they can be used to reach large numbers of customers/clients. The increasingly high levels of access to personal computers and the Internet among the general population provide the means for uptake. However, people need to be made aware that such information does exist.

2. Sufficient funding sources are required for those schemes which will use HSE’s OHSR model, such that there will be sufficient resources to undertake the work and market the services. This funding should allow for impact evaluation. This will mitigate the funding issues encountered with other occupational health and safety models, particularly in the UK.

3. Safety Awareness Days and mobile inspection units have the potential to address a large number of the components in the HSE OHSR model. As such, their use should be considered as part of occupational health and safety support systems.

4. There is a need for models to involve relevant stakeholders and professional associations when providing occupational health and safety support to ensure the message will be delivered as effectively as possible. This is particularly applicable to regional or sector based approaches where partnerships with local community groups or professional / trade associations should lead to the customers/clients to being more receptive to the information provided by the models.
5 REFERENCES


7. Miller, P. Rossiter, P and Nuttall, D. Demonstrating the economic value of occupational health services, Occupational Medicine, 52, (8,) pp. 477-483.


10. McDonald, J.C. The estimated workforce served by Occupational physicians in the UK, Occupational Medicine, 52 (7) pp401-406

11. The evaluation of occupational health advice in primary health care, RR242/2004 HSE Books

12. Nicholson, P. OHS in the UK – challenges and opportunities, P. Nicholson, Occupational Medicine, 54 (3) pp 147-152


17 Khan, S. Effectiveness of Interventions – reducing medical retirements by 64 per cent after the introduction of some interventions. *Occupational medicine. 52*, pp426, 2002


APPENDIX A

UNITED KINGDOM PROJECT RESULTS
A. INTRODUCTION

This appendix presents the results of the review of existing occupational health and safety support schemes for SMEs in the UK. In addition to the information obtained from identifying and summarising the key models, the details gained from engaging with the various bodies are provided.

A.1 THE UK WORK AND HEALTH NETWORK

The Work and Health Network (WHN) is a national group of occupational health advisory organisations which are committed to creating healthier workplaces, and alleviating the impact of work-related ill health and accidents. The WHN reflects a diverse range of expertise in delivering occupational health support work in primary health care, the SME sector and the voluntary sector and schemes exist in Bradford, Leeds, Liverpool, Rotherham, Barnsley, Doncaster, Sheffield, Sandwell and London. These schemes are independently funded and have links with trade unions, chambers of commerce, academic institutions, and primary care trusts in their respective areas. These schemes are now discussed in detail using consistent headings throughout.
A.2 WORKERS HEALTH ADVICE TEAM

Background
The Workers’ Health Advice Team (WHAT) was set up in 1998 to offer a wide range of work and health services for all employees in Bradford. WHAT have firm working links with all of the district’s unions and the Bradford Occupational Health Project and the team have been recognised by the Trades Union Congress (TUC) as the preferred model of independent occupational health advice. The advice team work in a doctor’s surgery in Bradford interviewed patients, and offering advice and support on links between ill health and work conditions. The team consists of volunteers who have had work related injuries. The volunteers are subsequently supported in the development of new skills, regaining of old skills to return to work and in retraining in a new area.

Delivery of model
The model is delivered with the following services which are available for all workers in Bradford:

- Independent health and safety advice on a range of occupational health issues such as sickness benefits, medical appeal tribunal representation, rehabilitation and disability discrimination
- Drop-in advice service, telephone advice service and asbestos advice service
- Independent counselling on stress related illness
- Health and safety training for voluntary organisations and union representatives
- Policy development consultancy services for voluntary and community groups
- Promoting trade union approaches to health and safety and supporting safety representatives
- Organising of events such as Workers’ Memorial Day and European Health and Safety at Work week
- Supporting groups such as Bradford RSI support group, Bradford Asbestos Victims’ Support Group and Bullying at Work Support Group
- Provision of volunteers who have suffered work related injuries
- Evaluation and benefits

WHAT evaluate their training sessions with post training questionnaires. These show the service to have been well received.
The following figures are available for the services provided by WHAT in 2003:

- 537 enquiries were dealt with, of which 327 were face to face appointments.
- 13 training workshops for voluntary/community groups were provided
- Seven voluntary/community groups received consultancy support.

Four Bradford events were organised.

The benefits of WHAT include helping thousands of workers to successfully gain compensation and benefits and providing workers who have been injured at work with the opportunity to develop new skills and retrain in a new area. Furthermore, WHAT is viewed as providing a community service in that advice and support is provided to anyone who requests it.

Despite these benefits, there is still the problem with funding that WHAT experiences. The Bradford Community Grants Unit and the Healthy Bradford Fund Team provide funding for only one full time equivalent post even though funding is required for two full time positions. As a results WHAT do not advertise their services since they do not want to be inundated with requests for information and increase their already high workload.

**Primary information sources**
Carol Duerdon

Workers’ Health Advice Team, 01274 393949.

http://www.communigate.co.uk/brad/rsibradford/page2.phtml
A.3 LEEDS OCCUPATIONAL HEALTH ADVISORY SERVICE

Background
A large number of employees in the West Yorkshire city of Leeds do not have access to occupational health services and, thus, the Leeds Occupational Health Advisory Service (Leeds OHAS) was established in 1989 to address this need. Leeds OHAS is an independent occupational health advisory service which operates largely within the context of doctors’ surgeries offering patients support and guidance in identifying and preventing work-related ill health. The service is administered by volunteer health professionals, trade unionists, and community representatives with the simple remit of reducing work-related ill health in Leeds. It is funded by Leeds City Council’s Social Services Department and Leeds South PCT.

Delivery of model
The occupational health advisory service is delivered largely in conjunction with doctors’ surgeries in Leeds and provides the following elements:

- Opportunistic interviews with patients waiting for GP appointments. This entails recording occupational health history, hazard exposure and related health effects. Relevant advice and information is subsequently, then, provided to the patient

- Interviews with patients who have occupational health problems and have been referred to Leeds OHAS by their GP. This typically covers issues such as musculo-skeletal disorders, stress, dermatitis, respiratory problems and VDU problems

- Risk assessments and writing of safety policies and procedures to assist employers with safety policies, procedures and risk assessments.

In terms of advertising the Leeds OHAS, and making patients aware of the service, posters are placed on GP surgeries providing further information to patients. However, no other efforts are made to increase awareness of the service because of the lack of funding experienced by Leeds OHAS and the belief that they do not have the resources to deal with a significant increase in their workload.

Evaluation and benefits
The Leeds OHAS has been evaluated on a number of occasions.

- In 2000, an independent evaluation conducted by Leeds Metropolitan University found evidence that surgery sessions were successful in preventing and reducing work-related ill health. The evaluation entailed postal surveys with GPs, interviews with patients in primary care and qualitative interviews with GPs and project workers.

- In 2003 another independent evaluation conducted by Leeds Metropolitan University on GP patient referral services provided evidence of significant occupational health and safety improvements; substantial reductions in sickness absence; and reductions in GP consultations as a result of Leeds OHAS. Again, the evaluation involved postal surveys with GPs, interviews with patients in primary care and qualitative interviews with GPs and project workers.
In 2004, an independent evaluation was undertaken on the effectiveness of the GP-patient referral element of primary care work. Patients referred by GPs to Leeds OHAS were given questionnaires to determine whether the referral service provided by Leeds OHAS was perceived by them as effective in improving work-related ill health. The results found that the advice and support provided by Leeds OHAS advisors increased empowerment and confidence among the patients and an earlier return to work as a result of the referral.

In terms of benefits, the evaluations have indicated that there are a number that emerge from the provision of Leeds OHAS.

- By preventing occupational ill health symptoms from worsening, Leeds OHAS can also assist in the rehabilitation of the patients, and, hence, decrease the burden on GPs who are less likely to be specialists in occupational health and safety.

- The service enables patients to return to work earlier than they would have done if they had not used the service because they are provided with greater levels of empowerment and confidence when dealing with their work-related ill health.

- Improvements in health and safety in the workplace as a result of the support and advice provided to patients. These improvements included changes in desks/workstations, provision of personal protective equipment and higher levels of contact with safety managers and trade union representatives. In addition, by enabling patients to identify the symptoms of occupational ill health they have a greater likelihood of reporting future problems in their workplace.

**Primary information sources**
A.4 WORKPLACE HEALTH ADVICE MANAGEMENT SERVICE

Background
The Workplace Health Advice Management Service (WHAMS) emerged as a continuation of the Health Action Zone and Health Promoting Workplace Advice provision in Barnsley and Rotherham to address the occupational health needs of businesses in the South Yorkshire towns of Barnsley, Doncaster and Rotherham. The majority of these businesses are SMEs and, subsequently, WHAMS is targeted specifically to addressing the occupational health needs of these companies by working in partnership with Primary Care Trusts, local Chambers of Commerce, the local Metropolitan Borough council and the local employers’ coalition to reduce the amount of lost time from accidents and incidents of ill health in the workplace.

Delivery of model
The service is funded through the Single Regeneration Budget round 6 (SRB6) which works with the local community to provide long term regeneration to towns and cities. Occupational Health Advisors based in a centrally located GP practice offer the following range of services to SMEs:

- Workplace health audits
- Health promotion information and training
- Health and Safety audits
- Health policy development
- Risk assessments
- Safety training
- Guidance on regulations and legislation

Evaluation and benefits
Up to the end of 2003, a total of 215 companies in South Yorkshire had received support from WHAMS. An internal evaluation of WHAMS was undertaken in December 2003 by conducting follow up interviews with individuals who had used the services. The evaluation found the following results:

- Improvements in employee health
- Reductions in absenteeism from work
- Reductions in staff turnover
- Successful client feedback after using WHAMS
A number of benefits were identified:

- The establishment of occupational health advice services within GP surgeries by WHAMS occupational health advisors
- Lower insurance premiums for SMEs. One SME is reported to have had a 65% decrease in insurance premiums as a result of using WHAMS
- Provision of information to employees which they would not otherwise be aware of, or have access to
- Increased savings for SMEs through reductions in staff absenteeism and turnover

**Primary information sources**
John Robinson. WHAMS, 01709 302584. [http://whig.org.uk/groups/whn/whams](http://whig.org.uk/groups/whn/whams)
A.5 BARNSLEY HEALTHY WORKPLACE ADVISOR

Background
The Barnsley Healthy Workplace Advisor is a main-stream service within the Barnsley Metropolitan Borough Council Regulatory Services. The advisor themselves help businesses comply with legal requirements and adopt health promotion policies by providing free advice and support, training for employers and employees and help with policy development and risk assessments. The businesses are made aware of the Barnsley Healthy Workplace Advisor through the following methods:

- By being directly contacted through telephone calls
- Through referrals from Enforcement Officers following inspections
- Referrals through intermediaries and partner agencies (e.g. the Federation of Small Businesses, Job Centre etc.)
- Contact through the Internet and/or e-mail
- Publicity and word of mouth

Delivery of model
The Barnsley Healthy Workplace Advisor works with local businesses, their employees, charities and the voluntary sector to provide the following services:

- Improve the health, safety and lifestyle of the local workforce
- Help raise awareness of occupational health and safety within local businesses
- Improve business health and safety compliance
- Provide training to help employers and employees make informed choices to improve their health

The training is provided for employees, managers and supervisors with either locally certified, or if requested, nationally certified courses. The subjects covered range from Basic Awareness; Risk Assessment; and Accident Investigation to Health and Safety Management; Hazardous Substances and Electrical Safety.

Evaluation and Benefits
Details of evaluations of the Barnsley Healthy Workplace Advisor are not available. However, the following figures are provided for the period from January 2000:

- Six hundred and fifty seven businesses and individuals have been contacted/visited/advised
- An average of 90 training courses have been provided
• Around 744 people have been trained

A benefit of the service is that it provides young people, largely from disadvantaged backgrounds, with an awareness of health and safety and provides the skills to prepare for future employment.

Primary information sources
Edwin Marrison. Healthy Workplace Advisor 01266 773861

http://www.barnsley.gov.uk/service/healthsafety/introductionandforeword.asp
A.6 WORKWELL

Background
SMEs make up the majority of businesses in the West Midlands borough of Sandwell. Consequently, the Sandwell Healthy Workplace Strategy was developed by Sandwell Health Authority in 1997 to outline a coordinated approach for a borough-wide occupational health service aimed at SMEs. This led to the formation of Workwell which provides services to benefit business and employees in Sandwell. Workwell has the objective of raising awareness of workplace health, including health and safety and health promotion among SMEs in the Black Country and West Birmingham and works directly with business intermediaries, particularly the Chamber of Commerce/Business Link, local authorities, employer groups and trade associations.

The Workwell project team is made up of a consultant occupational physician, a health and safety practitioner, two occupational health nurses and two project support workers.

Delivery of model
Workwell offers SMEs a confidential baseline well-being assessment which involves an occupational health and safety review and an action plan. The action plan can then be used to determine who Workwell will provide their services to. The services can include access to occupational health and safety training, access to health promotion including smoking, drugs, nutrition and exercise and signposting to specialist health and safety support agencies.

In addition to the services, Workwell is also involved in partnerships with organisations and with pilot projects to improve awareness of occupational health and safety among SMEs in Sandwell. These include:

- **Primary care.** A partnership between Workwell, primary health care staff, private providers, community development workers and local businesses to deliver and evaluate health promotion activities including smoking cessation and personal health checks in the workplace.

- **Older workers.** Workwell formed part of the Sandwell Pre-Retirement Pilot Project funded by the Department of Health as one of eight national pilots. The focus was on SMEs and ethnic minority communities providing health screening on a local industrial estate.

- **Voluntary sector.** A working partnership with the Training for All Foundation and Sandwell Council Voluntary Organisations enables voluntary organisations to access workplace health assessments provided by Workwell and health and safety training specific to their sector.

- **Other services.** A number of other services have been developed by Workwell which include the development and provision of occupational health education for young construction workers, a fire risk assessment CD-ROM for businesses, asbestos awareness cards for construction and maintenance workers and health at work training programs for young people.
**Evaluation and Benefits**

An evaluation of Workwell was conducted by Staffordshire University and concerned how it delivered added value to customers as evidenced by the achievement of results. The evaluation showed that by April 2002, Workwell had developed services that depended on core processes that added value for stakeholders. A detailed evaluation of the company interventions has been scheduled to be conducted in 2004.

On the basis of the evaluation a number of strengths of the programme were identified:

- Collaboration and effective ways of working in partnership have contributed to the success of Workwell
- Occupational health provision is part of the value chain that delivers added value to employers and the workforce provides a successful model
- Workwell has developed a unique specialist expertise in the field of occupational health with SMEs in Sandwell. This expertise has developed around Sandwell’s core service processes.
- Workwell has developed a range of approaches for identifying stakeholder needs and managers have a strong commitment to evidence based market research to identify future developments and market changes
- Workwell effectively commits resources over its range of projects and this provides the basis for future action
- Workwell is effective in improving the capabilities of its own employees and providing them with training opportunities that contribute to the work of the programme and add value for primary stakeholders.

**Primary information sources**

Barry Wilkes. Workwell. 0121 557 4733.

http://www.webwell.sandwell.gov.uk/server.php?navId=00g02k
A.7 SHEFFIELD OCCUPATIONAL HEALTH ADVISORY SERVICE

Background
Sheffield Occupational Health Advisory Service (SOHAS) has been providing a comprehensive range of services to support and enable people in Sheffield to manage their workplace health for almost 25 years. It is committed to responding to the changing needs that workers and ex-workers have for prevention advice, health surveillance, advice on benefits and retirement issues, rehabilitation and job retention. SOHAS is a charitable organisation that receives funding from Sheffield Primary Care Trusts (PCT), the Department of Health, the Department of Work and Pensions, South Yorkshire Community Foundation, Upperthorpe Healthy Living Centre and Burngreave New Deal for Communities.

Delivery of model
SOHAS operates in 23 doctor’s surgeries across Sheffield providing a comprehensive city wide service and there is a resource and information centre located in its office. SOHAS’s core service involves aiming to reduce the impact of work-related ill health to individuals, employers and society by advice on issues such as prevention, rehabilitation, employment law and rights and benefits. In addition, it is involved in the following:

- **Workcare project.** SOHAS and Sheffield Care Trust have been involved in a multi-million pound Job Retention and Rehabilitation research pilot since 2003. The project aims to ensure that workers who are absent from work for six weeks or more due to a work-related illness have effective interventions to remain employed

- **Occupational health in the voluntary sector.** A safety advisor has been appointed at SOHAS in conjunction with Voluntary Action Sheffield under the HSE Workers’ Safety Adviser Challenge Fund. The voluntary organisations are offered advice on health and safety and empowered to make it a priority.

- **The Black and Minority Ethnic (BME) Workplace Health Programme.** This project seeks to raise workplace health awareness and support Sheffield’s black and minority ethnic communities. Volunteers are recruited by SOHAS to help overcome cultural and language barriers. The volunteers are trained to deliver information in communities and workplaces.

- **Seminars and conferences.** SOHAS organises seminars each year to disseminate information and raise awareness

- **Work Health Information Gateway.** The Work Health Information Gateway (WHIG) website is funded by the Health Department Section 64 and was launched in November 2004 to be a valuable national occupational health resource, accessible to people of all abilities and easy to use.
Evaluation and Benefits
The following figures provide information on the service provided:

- Over 1200 patients are seen each year in primary care. 30% of the patients work in the health or steel manufacturing sectors with stress and musculo-skeletal problems being the most prevalent causes of ill health. The advice provided includes prevention (25%), return to work (18%), and employment, common, and health and safety law (approximately 30%).

- Three hundred and fifty two people have consented to participating in the research and 196 people have been assisted to return to work.

In terms of evaluation, SOHAS has been evaluated by a collaboration between the Institute of Occupational Health and the University of Central England10. The evaluation has been conducted in conjunction with the Healthworks occupational health and safety support system which is discussed in greater detail at Section A.8. The evaluation involved interviewing patients who attended participating doctor’s surgeries between September 2002 and May 2003. Patients who agreed to be interviewed were asked to complete a baseline occupational health questionnaire in order to gather information on their workplace exposures, symptomology, possible health effects and their demographic details.

A total of 139 patients participated in the evaluation and the following findings emerged:

- The majority of participants approved of the advice they were given

- There is a requirement for occupational health advice at the primary care level and when it is provided there is sufficient engagement to justify its provision

- Up to six months after receiving advice, participants reported observable changes in the workplace

- After receiving advice, participants reported a reduced number of total workplace hazards and seemed more aware of physical hazards in the workplace.

Primary information sources
Sheffield OHAS. 0114 275 5760 http://www.sohas.co.uk/
A.8 HEALTHWORKS IN LONDON

Background
Healthworks in London is an occupational health and safety advisory service which has been operating in the London Borough of Newham since 1997 and is a partnership organisation receiving funding from Newham PCT, the Department of Health and Newham’s regeneration Fund. The service has the objective of raising awareness of work related health problems and of preventing and reducing ill-health caused or made worse by work. This is achieved by working with local people and relevant stakeholders such as family doctors, health workers, schools, community groups and employer groups.

Delivery of model
Healthworks operates in ten doctor’s surgeries and one community centre in Newham to provide the following:

- Independent and confidential advice, information and support on the prevention of work related ill-health
- Legal aspects of health and safety and rights in the workplace
- Information on organisations and agencies who can offer help and/or support
- Resources on health and safety at work
- Support, advice and training on work related ill-health and prevention for family doctors, health workers and other organisations.
- Specialist advice and support for home workers and young people.

Evaluation and Benefits
Healthworks has been evaluated in conjunction with the SOHAS occupational health and safety support scheme by The Institute of Occupational Health and the University of Central England. Thus, the evaluation findings of SOHAS described at Section A.7 apply to Healthworks too.

Primary information sources
Healthworks in London, 0208 430 4410  http://www.healthworks-in-london.org.uk/
A.9 SAFETY AND SUPPORT FOR BUSINESS

Background
The Safety and Support for Business (SAS) project was funded by the Single Regeneration Budget (SRB) to provide a range of health and safety interventions for SMEs in Liverpool. The area of Liverpool that the project covered is characterised by high levels of unemployment and above average rates of ill health, and there are approximately 600 businesses, 70% of which are SMEs.

The initial development of SAS involved a detailed consultation by the project’s management team with local businesses, business associates and other service providers in the area. The consultation revealed that basic health and safety support was deemed to be the most important health priority for small businesses. As a result the overall philosophy of SAS was to provide health support which met the immediate agenda of the businesses.

Delivery of model
Following the consultation phase, a range of interventions were formulated aimed at both the individual level (e.g. training) and the organisation level (e.g. policy development). These interventions were:

- A health and safety starter pack specifically designed by the SAS project for small businesses. The pack provides information on issues such as writing a company health and safety policy and guidance on conducting risk assessments.

- Workplace health and safety inspections. This involves the SAS health and safety officer providing specific and tailored knowledge on assessing and controlling risks to their employees and technical aspects of hazards relating to their activity.

- Advice for the development of health and safety policy documentation. Unlike the starter pack and inspections, this intervention entailed a fee and involved the health and safety officer providing detailed guidance on the preparation of company health and safety policy, risk assessments and method statements.

- Health and safety training. This also involved a fee and the training is bespoke enabling companies to comply with regulatory requirements and meet the requirements of contracting companies.

Evaluation and Benefits
An independent evaluation of the scheme was undertaken by Liverpool John Moores University. A total of 36 face to face and telephone interviews were undertaken with representatives from a sample of participating businesses. The following results emerged from the evaluation:

- Of the target population of 600 local businesses, 140 had had contact with the SAS project team

- 63% were motivated to participate by the offer of a free inspection of their premises
• 22% thought that some other benefit may result from participation, e.g. lower insurance premiums

• 7% were motivated by some other trigger, e.g. an imminent inspection from a regulatory authority

• 4% were recommended to the project by word of mouth

Table 1 provides a breakdown of uptake on each of the intervention options.

<table>
<thead>
<tr>
<th>Companies by business sector</th>
<th>Starter Pack</th>
<th>Inspection</th>
<th>Policy</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>90%</td>
<td>60%</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>96%</td>
<td>35%</td>
<td>26%</td>
<td>30%</td>
</tr>
<tr>
<td>Retail</td>
<td>100%</td>
<td>30%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Service</td>
<td>94%</td>
<td>28%</td>
<td>6%</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>90%</td>
<td>33%</td>
<td>13%</td>
<td>16%</td>
</tr>
</tbody>
</table>

**Table 1** shows that the SMEs are more inclined to use the starter pack and inspection than policy and training. This is not surprising since the former are provided by SAS free of charge while the policy and training involves payment.

The following benefits were identified from the SAS project:

• The involvement of the businesses, business associates and other service providers in the consultation stage of the project increased the levels of trust in the aims of the scheme by participating businesses

• The involvement of the target population during the development stage ensured potential problems could be understood and appropriate actions taken if necessary at an early stage

• Allowing SMEs to adopt a flexible approach to participation is believed to have helped remove some of the negative preconceptions regarding health and safety
• If similar resources are available, the SAS project method can potentially be applied to other regions in the UK and even across Europe.

Primary information sources
Charlie Kavanagh. Health@work, 0151 236 6608
A.10 CONSTRUCTING BETTER HEALTH

Background
The construction industry has the highest rate of musculo-skeletal disorders (MSDs) of all industries and has high rates of other illnesses such as noise induced hearing loss, hand arm vibration syndrome (HAVS) asbestos and cement dermatitis. To address these issues Constructing Better Health (CBH) was launched in October 2004. This is a two year pilot project which provides advice and support to SME construction firms in Leicestershire. The advice and support is free and confidential and is targeted to employers, workers, designers and clients of building work in Leicestershire, i.e. anyone that is involved in work that is covered by the Construction Design & Management Regulations (CDM).

The pilot helps to provide guidance on simple ways to protect health on construction sites and its objective is to test ways of hitting health improvement targets so that a national scheme can be developed based on good evidence.

CBH is forged through a partnership across the construction industry and is supported by a range of organisations including the Association of British Insurers, CITB, DTI, DWP, the Federation of Master Builders and the TGWU.

Delivery of model
The CBH team consists of a partnership between a health and safety consultancy and an occupational health provider. A site team of occupational health specialists provide a range of free services to SMEs which include the following:

- A telephone helpline and website
- Briefings and training sessions
- Site checks and walk-through risk assessments
- Drafting policies and procedures
- Health screening for construction workers
- Practical advice on how to reduce exposure to hazards in the workplace

In addition to this free core set of services provided by CBH, further supplementary services are provided by a network of occupational health specialists. The network is determined by CBH who establish and maintain a database of competent, high quality providers that offer the specialist services required that go beyond the free pilot support services. The network includes:

- Occupational hygienists
- PPE providers
- Welfare facility providers
• Rehabilitation service providers
• Ergonomists
• Physiotherapists

**Evaluation and Benefits**
An evaluation has yet to be conducted since CBH has only been in existence since October 2004. However, the pilot scheme in itself can be seen as a form of evaluation since it will determine whether the programme can be extended nationwide after two years.

**Primary source**
[www.fitbuilder.com](http://www.fitbuilder.com)
A.11 SAFE AND HEALTHY WORKING

Background
In 2001, the SME Occupational Health Implementation Group was established to advise the Scottish Executive on how to increase occupational health services in workplaces – particularly in SMEs. The group identified the following two key aims to raise awareness of occupational health services among SMEs in Scotland:

- Allowing all SME employers and employees equal access to confidential, high quality information advice and support enabling them to identify occupational health and safety problems they may be experiencing.

- Working with Scotland’s Health at Work, and other relevant parties, to raise the awareness of and prevalence of occupational health and safety policies in SMEs, particularly where there is potential to improve employees’ health and well being and company productivity.

As a result of these aims, the Safe and Healthy Working Group was established to provide an occupational health and safety service for all employees and employers in SMEs in Scotland.

Delivery of model
There are three key elements of Safe and Healthy Working:

- A free and telephone advice line providing confidential advice and guidance to employers, employees and individuals. The telephones are operated by occupational health and safety professionals who offer immediate advice and guidance and information on other relevant services.

- A website specifically designed for SMEs providing information on Workplace Occupational Health and Safety issues. It is intended that the website will become an online advice service which provides another source of information that complements the telephone advice line.

- Professional advisors available throughout Scotland to carry out a workplace visit to identify the occupational health and safety needs in SMEs. The advisors will be working within NHS boards to ensure equity of access to SMEs and will be specialists in occupational health or health and safety.

Evaluation and Benefits
An independent evaluation is due to be conducted of Safe and Healthy Working entailing interviews with service users, service providers and other stakeholders. However, a baseline evaluation of occupational health and safety awareness among SMEs was undertaken in April 2003 with 1000 telephone interviews conducted with a random sample of SMEs. The following findings emerged from the baseline evaluation:
• The majority of SMEs in Scotland report having access to some health and safety services. Although they believe they have good knowledge and understanding of health and safety issue, awareness of workplace health initiatives is poor.

• Ten percent of SMEs perceive no hazards in the workplace.

• The awareness of health and safety issues and action taken depends on the size of the SME.

• Micro sized businesses are more inclined to prefer paper-based information compared to small and medium sized workplaces.

• Perceived risks vary by industry sector. There are also differences by industry sector in awareness, proactivity and the methods through which advice and information are sought.

• There are no regional differences

**Primary source**

[www.sahw.co.uk](http://www.sahw.co.uk)
A.12 SCOTLAND’S HEALTH AT WORK SME TOOLKIT

Background

Death rates in Scotland from cancer, heart disease and strokes are higher than almost any other western industrialised nation. In addition, the Confederation of British Industry (CBI) calculates that around £13 billion is lost by British industry every year through sickness absence from work. Consequently, if businesses in Scotland are to be successful, employers need to help their workers to not only avoid serious health conditions, but gain the many benefits of good health.

To address this, Scotland’s Health at Work (SHaW) introduced a national award scheme for promoting health in the workplace. The scheme rewards organisation’s efforts and achievements in building a healthy workplace and a healthy organisation and is available at three levels of award: bronze, silver and gold.

The cost of absence through ill-health in SMEs can be greater than in larger organisations and as a result, a toolkit was launched designed to ease SMEs through the scheme towards the bronze award. Specifically, the toolkit helps SMEs to understand their health and safety obligations, how to address these, where to go for help and what is required to achieve an award.

Delivery of model

The toolkit was developed in consultation with the HSE and the Federation of Small Businesses and takes a step by step approach to health and safety requirements and explains how SMEs can work towards achieving the SHaW bronze award. It is delivered in the form of an interactive CD-ROM or glossy A4 leaflets in a ring binder and provides a step by step approach to guide organisations through the bronze level of the scheme.

The toolkit provides a description of each of the bronze criteria and guidance on how the criteria can be met. The core criteria at the bronze level are:

- **Working together.** The introduction of health and safety committees and enabling employees to discuss health and safety matters on a regular basis.

- **Health and safety.** The implementation of relevant health and safety procedures.

- **Information.** Provision of information on risks and hazards in the workplace and health topics such as back care, smoking and sensible drinking.

- **Activity.** Going beyond providing information and encouraging employees to get involved.

- **Smoking.** To develop written statements and policies on smoking ensuring all employees are treated in the same manner. There should also be measures to protect employees from passive smoking and provide assistance to those who wish to stop smoking.

- **Additional criteria.** One of the following criteria needs to be met to achieve the bronze award:
– Provide employees with the opportunity to have a health check
– Promote physical activity, alcohol awareness or stress prevention among staff
– Provide healthy food/facilities in the workplace
– Take action to assess staff health needs

Further to the toolkit, to have access to the free advice and support offered by SHaW, the SMEs are required to register their details.

**Evaluation and Benefits**
Although an evaluation has been conducted of SHaW’s Mental Health & Wellbeing Project, there is no mention of an evaluation being conducted of their SME toolkit.

**Primary source**
[www.shaw.uk.com](http://www.shaw.uk.com)
A.13 NHS PLUS

Background
NHSPlus was launched in November 2001. It is based on the NHS’s own internal occupational service and the objective was to roll out a paid for OH service for industry and commerce, drawing on the resources available within the NHS, in particular the occupational health service in hospitals. The NHS would have first call on the resources but revenue earned by external work would be reinvested within the service to ensure that it could expand capacity to meet demand. Some of the NHS occupational health departments are very large and the wealth of experience they have gained makes them an obvious source of advice and help for companies who are looking for an occupational health service. There is a particular emphasis on providing a service to small and medium size organizations.

Delivery
NHSPlus provides a broad range of services from 90 occupational health units around the country. The services can be provided in the unit, usually a major hospital, or on the premises of an employer. These services include:

- Occupational health needs assessment, risk assessment and pre employment assessment & screening,
- Health Surveillance (health checks) for Control of Substances Hazardous to Health, other statutory and non-statutory surveillance
- Immunisation, including for travel, occupational needs and needle stick management
- Various procedures including: audiometry, vision screening and lung function testing
- Medical advice for: sickness absence management, return to work / rehabilitation / disability assessment, ill health retirement assessment
- Occupational disease management, counselling, drug and alcohol screening
- Training (Health & Safety, Manual Handling, First Aid)
- Insurance medicals and Industrial Injury Assessments
- Ergonomic Advice / Life style screening and advice & Health Promotion.

As mentioned above the costs of the service are met by the organisation which recruits NHSPlus. Obviously, the costs depend on the type of service required but the Website does give examples of the cost of various services. For example, a visit by an OH nurse to a premises to examine and test each worker for reaction to a respiratory sensitiser would cost £32.00 per worker seen while basic OH support to an organisation with 60 employees would cost about £2,500 per annum.
Evaluation and benefits.
Hence, in principal, NHSPlus provides a comprehensive range of professional OH services for employers. Despite that it has been difficult to find data on the use made of NHSPlus e.g. the numbers of organisations which have used or the number of individuals covered. We understand that reports on the operation and future direction of NHSPlus were to be covered at 2nd National NHS Occupational Health and Safety Conference to be held on 25th/26th January 2005. The results from that conference were not available at the time of writing but we gather they will be posted on the website of Thames Management services (an NHS Consultancy) in early February 2005. (www.thames.clara.net)

Searches of the literature revealed only one other reference to NHSPlus. A study on the charging policy by the Business School at Loughborough University suggested that it was charging external businesses less than the internal NHS clients. Even if true there might well be good business reasons for charging at different rates, particularly during a business build up stage, and it is probably not significant. However, it does indicate that NHS is charging realistic prices, not dissimilar to the cost of providing the service.

The absence of mentions of NHSPlus in the research literature was particularly surprising, given that it offers the prospect of providing a comprehensive nationwide OH service for SMEs. Nor was it mentioned in the section of the Department of Health White Paper published in November 2004 which sets out policy on work and health.
APPENDIX B

EUROPEAN PROJECT RESULTS
B. INTRODUCTION

This section presents the results of the review of existing occupational health and safety support schemes for SMEs in the European countries, primarily those in the EU.

To address the issue of occupational health and safety in SMEs, the European Agency for Safety and Health at Work is undertaking a wide range of SME-oriented activities. One of these activities included the preparation of an information report about how support to SMEs can be provided in a successful way by presenting an overview of initiatives and programmes that exist in EU member countries. These initiatives and programmes are outlined in the following sections.

The projects covered in this section include one from the UK. That has been retained in this section to aid comparisons.

B.1 AUVASicher: A Programme to Provide OSH Assistance to SMES – Austria

Background
In Austria the induction of a provision for dealing with occupational health and safety services has become mandatory for all companies. AUVA is an organisation which assists businesses in all questions related to occupational safety issues. Specifically, the organisation helps companies to adapt working processes and the design of the work environment, to government rules for individual protection. AUVA also helps organisations to conform to other aspects of legislation, regulations and government standards.

AUVA set up an assistance programme in 1999, for dealing with occupational health and safety risks for SMEs. The programme was designed for those organisations with fewer than fifty employees. The main objective of the programme, entitled AUVASicher, was to achieve a substantial reduction in the number of workplace accidents and occupational illnesses. Their aim was to cover two-thirds of companies involved within five years and to achieve a high level of customer satisfaction, amongst those companies surveyed.

Delivery of model
For the organisational model of the AUVASicher programme, software was designed for the entire system. This has the following variety of functions; it allowed a risk assessment of the company and its facilities to be made, it took into account the criteria needed for company visits, it provided an immediate print-out of data that had been collected, it provided lead times required to generate reports. The software also reduced administrative costs and provided a centralised database for personnel that was also compatible with the internet.

AUVASicher set up a prevention centre with close proximity to its member companies. In order to achieve quality of service, processes were standardised and the personnel involved (employees, contractors of AUVA, technicians or doctors) all had suitable training. The main administration centre arranged meetings with the various organisations and allocated various missions to follow up each month, thus ensuring that the programme was followed through.
Evaluation and Benefits
At the time of press, the system had been in place for too short a time to make an overall judgment of its success but the first results provided, have been encouraging. Since the induction of the programme, there has been a reduction in the number of occupational accidents amongst their member companies. There was a lower accident rate in 2001, after the scheme had finished, than in 1998 when it had started. Although not exclusively, the AUVA-Sicher programme is likely to have contributed to this reduction.

Despite the above, the advisory services themselves cannot be used as a panacea for the project’s success, especially if the customer not been satisfied with the project, or did not intend to take the actions recommended by the programme. For this reason, a customer satisfaction survey was conducted which indicated that over seventy percent of the Austrian SMEs surveyed, indicated that their expectation regarding care had been fulfilled.

The programme captured a large number of companies employing twenty-one to fifty employees. A significant part of the market was captured for companies employing eleven to twenty employees. In contrast, the results are less good for companies with one to ten employees. The difficulty with capturing the later market was that most of these companies only have one or two employees, making them difficult to engage.

In terms of proximity, AUVA-Sicher provided a service which was close at hand, reliable and recognised throughout the country. The flexibility of the model used allowed service adaptations to be made, via means of specialist provisions. Further to this, regular measures of customer satisfaction were also incorporated into correction measures made, thereby responding closely to the needs of the consumer. The programme is still running and was provided free of charge to businesses. Contributions paid by all Austrian enterprises enabled them to be insured against occupational accidents by AUVA.
B.2 RISK MANAGEMENT FOR SMES – FINLAND

Background
Studies of SMEs in Finland have suggested that they require a holistic tool set that deals with different risks in a coherent manner rather than concentrating on specific risk types. To address this a ‘Risk Management for SMEs’ project was implemented which could be usefully applied to a variety of risk areas faced by these companies, as opposed to focusing on specific risk types\textsuperscript{18, 19}. The project included the creation of a toolkit for SMEs to support the management of risk in the workplace such as hazard identification; evaluation of magnitude of risks; planning of control measures; and follow up.

A wide range of organisations including research institutions, insurance companies, social partners and authorities participated in the project.

Delivery of model
An overall system of procedures and methods was developed to encourage participation in the risk management process. At the heart of the model, employees were considered a valuable resource in risk management and were also trained and motivated to participate in risk management. In addition, measures were implemented such that individuals not only had access to, but became aware of, how to improve operational pre-conditions.

The Basic Toolkit contains the following.

- **Booklets**: Providing background material for the topic in questions and allowing a more in-depth examination of the risks.
- **Work Cards**: Helping implement particular areas of risk management, including checklists, risk charts and topical information.
- **Information Cards**: Including two short summaries on specific areas of risk management and used as a means of familiarising oneself with the subject.
- **Trainer’s Guide**: Containing cards and instructions for risk-management training within SMEs.

Evaluation and Benefits
The project’s success was measured by the number of people trained during the project. The project has reached eighty two percent of the original goal set. In total six hundred and twenty two trainers were trained and the toolkit has been distributed to their clientele. In terms of the model’s potential for the future, experts have been commissioned to take the toolkit further into the Finnish society.

Another success factor was the development of a risk management toolkit and its publication in both printed and electronic format. A risk management forum was also introduced, providing a network of organisations in the field. The forum promotes the risk management toolkit and monitors and maintains its further development and has been operational since 2001.
B.3 AGREEMENTS ON OBJECTIVES AND PREVENTION CONTRACTS IN THE CONCRETE PRODUCT MANUFACTURING INDUSTRY - FRANCE

Background
The concrete manufacturing sector in France is a high risk industry. As a result, a two tier system has been introduced to try to encourage small and medium sized enterprises to implement prevention measures. Firstly, the concrete industry federation and the National Health Insurance Fund for employees have signed an agreement defining the prevention goals to be attained and the priority measures to be undertaken, at a national level. Secondly, at a regional level, any enterprise within the sector, which signs the contract and agrees to make specific investments or carry out certain measures, will receive funding from the Regional Health Insurance Fund. Since the implementation of the scheme four national agreements have been signed, 224 prevention contracts have been established and the French social security system has devoted more than €7m to the campaign.

Delivery of model
The sector has tried to create an exemplar, in order to help small and medium organisations to undertake a programme of investment designed to combat occupational injuries, by granting them financial aid to compensate for expenditure involved. This has been achieved via a number of methods.

- The model stipulates that information must be provided for the training of employers and employees, in order to prevent both injuries and illnesses.

- An inter-company safety agency or subscription to a counselling organisation must be made available.

- Safety must be integrated into workplace design and products, with particular reference to the manufacturing, storage, in-plant maintenance and handling on the building site.

- Improvements must be made to operating methods, during product manufacture, to personnel safety during maintenance operations and to product handling conditions.

- There must be an elimination or reduction of physical risk involving particular types of noise.

A number of other priority measures have been listed to achieve the defined goals and examples include:

- Increased prevention awareness.

- Redesign and layout of workplaces to eliminate or reduce the risks relating to automated systems, electrical work, harmful nuisances and layout of production equipment.
• Improvements in handling conditions of mechanical devices, reduction in loads and packaging.

**Evaluation and Benefits**
The scheme is voluntary in nature and the number of prevention contracts that have been established year upon year has been quantified. There has been a gradual trend of smaller organisations signing up to the agreement and it is estimated that between eleven and fifteen percent of employees in this sector have been covered by the assistance scheme.

The model itself provides a transferable set of guidelines, which can be applied to organisations of all sizes however; there has been a trend in the number of frequently implemented measures as a result of the agreement as follows:

• Installation of mechanical systems (hoists and lifts grabs).
• Development of work platforms with guard rails.
• Repairs of floors.
• Modification of equipment with mechanical risks.
• Installation of collection system for solvent fumes.
• Dust removal systems.

Although no impact study was specifically conducted to evaluate the effects of prevention contracts, an evaluation at a national level demonstrated that the implementation of the measures resulted in a net reduction in the number of occupational injuries, among signatory organisations. Prevention contracts have also helped to heighten awareness amongst personnel in the trade.

The very nature of signing a contract with the Regional Health Insurance Fund, although voluntary, implies awareness by the organisations concerned to improve their organisational risk criterion (the major benefit of which has been the financial aid granted to each enterprise by the regional fund). The involvement of trade unions and various other associations has allowed the revision of key texts, and identifying the goals to be reached. It has also helped in the implementation of measures designed to reduce occupational risks. The Regional Fund, as well as performing the initial assessment, also performs a yearly follow-up of progress on the contract.

As a result of the prevention measures, the following has been conducted research has been conducted in the area:

• Ergonomic studies and improvement in manufacturing processes to reduce repetitive strain injury (RSI) risks (since 2002)
• A study of the exposure of employees to road risks and measures to reduce the risk to such hazards (since 2002).
The model itself provides a transferable set of guidelines and recommendations which is now being extended to firms belonging in other sectors of industry, notably farms and hospitals.
B.4 ‘WORK POSITIVE’: PRIORITISING ORGANISATIONAL STRESS - IRELAND

Background
The Work Positive scheme commissioned by the Health Education Board for Scotland (HEBS) and the Health and Safety Authority, Ireland (HSA) is part of a nationwide programme on workplace stress risk management in Ireland and Scotland. The scheme itself is aimed at assisting SMEs to manage the risks associated with work induced stress\(^1\),\(^2\). The premise behind the model was that when compared with larger organisations, smaller businesses would not have the time and resources to effectively manage hazards within the workplace. As a result, a systematic number of measures including a resource pack were formulated, as part of a nationwide programme.

Participation in the scheme is voluntary and copies of the resource pack are made available to SMEs through an established network of relevant professional bodies, employers’ association’s trade associations and relevant stakeholders.

Delivery of model
Within the resource model, step-by-step guidelines were included, which were applicable to SMEs in a wide range of sectors. The core approach was to develop a self-assessment toolkit, designed to be administered by SMEs with limited technical knowledge, which could assist them in assessing and controlling risks associated with work-induced stress. Highlighted below is an outline of the model and its implementation:

- **Step 1**: Raise staff awareness by demonstrating organisational commitment to the reduction of stress within the workplace.
- **Step 2**: Benchmark the companies existing stress risk management practices and controls (i.e. absence records and company leavers).
- **Step 3**: Identify the risks via means of a survey.
- **Step 4**: Interpret data with a view to the management of solutions.
- **Step 5**: Evaluate solutions by reviewing the residual risks, benchmarking exercise and also by consulting the employees involved.

Evaluation and Benefits
There were a number of problems encountered with the implementation of the model itself. Firstly, the information pack was designed to be self supporting; however a number of organisations required extra assistance with the interpretation of the results generated by the initial assessment. Secondly, there were more difficulties in identifying and enrolling participants in Ireland than in Scotland which was attributed to the presence of a more established communication network between companies and health promoting agencies in Scotland. Thirdly, a number of organisations reported scepticism regarding the project itself. Fourthly, a number of managers felt that their managers did not provide sufficient feedback of the results from the survey, when it was initially conducted.
To date there has been no formal evaluation of the package; however the information pack was evaluated at an iterative process at each stage, which has been an integral part of the project’s success. For example, following a revision of the measures based upon stage one, the sample packs was piloted to a sample of ten SMEs. Usability issues from the sample were evaluated, resulting in a detailed number of improvements being made, thus, helping companies to devise meaningful action plans.

The active involvement of representatives of personnel in developing the risk material highlights good practice for future studies since user/target audience consultation is frequently overlooked by risk communicators.
B.5 CAMPAIGN FOR THE IMPROVEMENT OF WORKING CONDITIONS IN THE CERAMIC INDUSTRY- PORTUGAL

Background
The Portuguese ceramic industry has experienced substantial transformation over the last decade particularly since a process of industrial restructuring has increased its volume in business terms by 140%\textsuperscript{23}. While this has completely changed the production process, the technology used and the composition of the labour force it is still almost wholly made up of SMEs who represent nearly 95% of the total companies in the industry. Health and safety hazards in the industry are mainly associated with machinery and ergonomic problems, organisational issues due to patterns of shift work and the monotonous nature of the work, and risks associated with the inhalation of raw material particles, dusts, metals and toxic chemicals.

The aim of the campaign was to foster improvements in the conditions of those working in the ceramics industry, in accordance with the legal guidelines outlined by the Portuguese Framework Directive. A secondary aim of the project was to incorporate the modernisation of companies with occupational hazard prevention.

Delivery of model
The division consisted of four sub-programmes (campaign promotion, information and dissemination, training, and research and investigation), as highlighted below.

- Sub-programme 1: Campaign Promotion. Publicising the campaign, via the mass media, the scientific and technical community.

- Sub-programme 2: Information and Dissemination. Creating tools to disseminate information on prevention techniques, helping to exchange information and experience and raise awareness about the relationship between health and safety. There was also the aim of making students and teachers aware of the importance of hazard prevention and promoting the inclusion of these in course work and teaching programmes.

- Sub-programme 3: Training to develop and advance the training of health and safety officials, top management among employers, work and professional organisations.

- Sub-programme 4: Research and Investigation. The fourth category was aimed at providing incentives for carrying out research and investigating areas for prevention in the ceramic sector, thus proving support for top-level research.

Evaluation and Benefits
Although there is not yet any data concerning the results, the campaign has allowed for the spreading of information by means of the media, publicity and safety manuals for each of the sub sectors in the ceramics industry. Training of officers, heads of organisations and increased awareness among the school community have also been achieved as a result of the measure introduced.
Some of the problems encountered were that at the end of the submitting period, an additional period was needed for the presentation of projects. It is their intention to carry out quantitative and qualitative analyses at the end of the period, taking into account the potential for ripple effects.

The authors acknowledge that the methodology outlined allows for a social dialogue to be established, contribution to occupational risk prevention and to productive business management. The actions themselves can be transferred to any other sectors, involving social partners pertinent to institutions, definition and implementation.
B.6 GOOD NEIGHBOUR SCHEME – UNITED KINGDOM

Background
The Good Neighbour scheme is a UK national programme designed to operate at a regional level. The scheme was launched in 1997, and was financed and organised by the HSE, together with key partners and operated on a voluntary basis. The aim of the project is to improve the dialogue between larger and smaller businesses when managing health and safety with the use of forums. Particular emphasis is placed on improving existing relationships between large firms and the smaller businesses that are contracted to supply them with goods and services.

The forums last for half a day and are held at a range of geographical locations. They are arranged by HSE in conjunction with one of the larger participating organisations (the key partners) in each geographical location.

The aim of the Forums are as follows

• To allow larger firms to make a public commitment to helping smaller ones.

• To make SMEs aware of the advice and support that is currently being offered to them.

• To stimulate interest among businesses, not participating in the scheme.

• To change attitudes towards health and safety.

Delivery of model
Potential candidates for the scheme are first identified, with the help of the key partners involved. Representatives of the participating larger organisations are encouraged to hold and prepare presentations about how they endeavour to manage health and safety in their organisations.

Under the scheme, half day discussion forums are held at a range of geographical locations. The forums are designed to encourage open ended discussions and guidelines are provided by the HSE. The details encompass how to contact participants, guidelines for preparing an outline for the program and example topics to be addressed.

The forums are organised by the HSE, however the partner makes key arrangements for the events. The HSE provide advice and funding for the venue, where necessary. A facilitator from the HSE encourages interaction between the various stakeholders.

Evaluation and Benefits
An evaluation of the scheme was conducted by the Health and Safety Laboratory, by means of qualitative analysis, in order to gain opinions from the participating businesses on the usefulness of the forums. The aim was to extract the useful information that the SMEs had taken to improve their systems. Information as to the sustainability of these initiatives and recommendations for the future was also obtained.

Overall participants considered that the scheme was well adapted to helping SMEs improve the communication of health and safety initiatives in their organisations. However, it was acknowledged that the HSE regulator would need to take a more forth coming approach in
future seminars to maintain the momentum of the initiative. Another surprising finding was also that the evaluation found little evidence to suggest that attitudes towards health and safety in smaller firms had improved.

As a result of the findings a number of recommendations have been made. Firstly, there should be more time for discussion between smaller and larger contractors. Secondly, there should be fewer participants in each of the forums. Thirdly, the roles of each of the parties involved should be made clearer from the outset and fourthly, that follow-up meeting are required as mentioned previously.

One of the main benefits of the scheme was that the HSE had played a major role in its funding. HSE representatives also provided useful background information for the organisers of the forum and also literature. A number of bigger organisations developed their relationships with their counterparts as a result, providing relevant support and advice. Those involved were able to increase their understanding of health and safety.
B.7 WORKSHOP ON RISK ASSESSMENT FOR SMES - BELGIUM

Background
The Well-being of the Workers Act implemented in 1996 requires all employers, including SMEs, to carry out a risk analysis. The legislation allows employers to tailor the policy according to the company situation. To address this legal requirement, PreBes, the professional association of prevention advisors in Belgium have developed a tool to enable small businesses to undertake their own risk survey and evaluation\(^2\). The tool consists of a questionnaire that runs through the legal requirements and is linked to good practice guidelines and its aim is to provide smaller companies with the opportunity to carry out their own risk assessment avoiding the need to contract external consultants.

Delivery of model
The risk-management system is based on a Plan-Do-Check-Act-Model used in quality systems for continual improvement. The system emphasises the needs to focus on core activities, determine target results and take corrective actions. The policy was based on the following principles:

- Drawing up a policy, describing objectives and how to meet them.
- Outlining a policy programme including the resources that are required, requirements of the assignment and a method.
- Implementing and defining responsibilities of the parties concerned.
- Evaluating the system against key criteria.

The results of the risk analysis and the various measures are set out in a five year general prevention plan and an annual action plan.

Evaluation and Benefits
PreBes have not collected any data regarding the distribution of the tool, however over one thousand five hundred copies of the risk-evaluation system, have already been sold. The evaluators, however, envisage carrying out a systematic risk evaluation in this area and the system itself is thought to inspire the principles of total quality management. Although it has been designed with smaller companies in mind, the method used can be easily transferred to the larger organisation. The risk-evaluation tool has fulfilled a number of criteria, as outlined in the benefits section.

The major benefits of the tool are as follows.

- The employer can use the tool themselves, without the need for any formalised training.
- The tool is easy to use and not time consuming.
- It provides the employer with an overview of the risks facing the company.
• The tool corresponds with the existing Belgian employment legislation.

• It provides a tool for implementing prevention plans.
B.8 DEVELOPMENT OF OCCUPATIONAL HEALTH SERVICE TAILORED TO SMES – DENMARK

Background
The Danish Working Environment Act of 1998 states that all enterprises are required to affiliate with an occupational health service and undertake a workplace assessment. As a result, the occupational health services are regarded as a preventative service whose objectives it is to support affiliated enterprises. The specific aim of the project was to develop a profile suitable for smaller enterprises, which could be included in daily operation. The centre itself received funding from the National Working Environment Board from (1999-2000). An additional goal was to establish a special membership pool for the smaller enterprise, to ensure they receive a better service from the occupational health services unit membership fee.

Delivery of model
The occupational health services established a project group of four people assisted by two researchers and divided into a number of different phases as outlined:

- Interviews with SME owners in order to clarify future expectations.
- Development of method and service offers.
- Introductory visits.
- Internal mid-term evaluation.
- Introductory visits and provision of services.
- Internal and external evaluation.

Specific consultations were conducted and a number of other elements were included in the project, as highlighted below.

- Contact persons to pay visits to specific companies.
- Telephone duty watch for ‘here and now’ responses.
- Specific workplace assessment method developed for small enterprises.
- Seminars focused on the practical exchange of experience between SMEs.
- Contact between small enterprises, local employers’ associations and organisers of joint activities.
- Information strategy tailored to each target group, including a newsletter for the companies in the local journal.
Evaluation and Benefits

Internal evaluations were carried out by two project groups. The results were assessed and the learning points and corrections of future activities discussed. In addition, an external evaluation was undertaken which involved collating written information from the project, interviewing members of the project group and interviewing five owners of SMEs.

Virtually all of the companies contacted prior to the project commencing, accepted an offer of a visit to their company and only a few companies declined. Many of the company owners also requested extra help in solving particular problems within their organisation and a number of people also participated in the seminars that were organised.

In terms of the organisation of the project, a number of issues emerged. Some organisations that assigned themselves to a seminar failed to turn up, resulting in a waste of resources. Secondly, some of the earlier meetings with SMEs resulted in a heavy workload for the consultants involved. Overall, however, the project was considered to be a success, with positive feedback given in most instances.

At the time of publication, it was deemed too early to extract and analyse the results, however a number of preliminary findings can be seen. It was found that smaller companies are more likely to contact the occupational health services, create a purchasing plan and consult an occupational expert. Some companies have also created guidelines as a result. The project has also improved relations between the OHS and small enterprises.
B.9 INTER-ENTERPRISE SAFETY COORDINATOR - FRANCE

Background
The meat-processing sector is characterised by a large number of occupational injuries and the majority of accidents within the sector relate to lifting and handling (46% of accidents). To address this, the regional health insurance fund of the Loire region undertook a two year experiment that consisted of encouraging regional businesses to implement a global prevention policy with the assistance of an inter-enterprise safety coordinator.

The main motivation for taking on the project were the high frequency rates of occupational injuries, high costs of accidents, difficulty in hiring new employees in the event of absenteeism due to sickness leave, financial benefits of taking on the project and the desire to change attitudes with in the sector.

Delivery of model
The regional health fund of the Loire region (CRAM des Pays de la Loire), was designed to assist SMEs in putting together safety principles, through arranging a sub series of meetings over a one year period. Central to this process was the role of the safety coordinator.

By signing the agreement, the union agreed to the following:

- To hire a safety coordinator, for a period of one year. Sharing between organisations is encouraged.
- Businesses agreed to sign a membership contract, to define the modes of interventions.

The professional federation, agreed to the following commitments:

- To promote the global prevention approach among regional businesses.
- Maintain an assessment of experimental action and ensure that the findings are distributed amongst representatives of the firm.
- Support the safety coordinator by providing additional training.

In terms of the method, a letter is sent to all the businesses in the region, within the meat processing industry. The businesses then agree to sign membership contracts within the first. Defined in the contract are a series of actions that the coordinator agrees to undertake, which are highlighted below:

- An assessment of the situation and identification of priorities.
- Participation in the implementation of a safety contract in each business.
- Awareness-increasing actions aimed at all staff members
- The development of prevention tools and practice of accident analysis with identification of several different causes.
- Design of training courses and in particular, a welcoming procedure for newly hired staff.

**Evaluation and Benefits**
An evaluation was carried out by CRAM des Pays de la Lorie at the end of 1999. The second year of the project consisted of:

- An evaluation by the coordinator of the actions carried out by member companies.
- An evaluation by means of questionnaire.

As a whole the experiment was thought to be highly successful. The purpose of the study however was more far reaching. A specific model for accident analysis was formulated, which enabled operators to build up an awareness of how to implement organisational change within SMEs. Progressively the responsibility for the implementation of changes was passed back to the companies themselves, as the level of awareness rose amongst employees.

Although the experiment proved to be highly successful, some companies did not want to carry on participating in the scheme after the first year. This was because they viewed the whole exercise as time consuming, too general and requiring too much financial commitment. The project was discontinued after two years, in part, due to the mad cow disease ‘crisis’ and also due to the induction of new regulations regarding working hours in France.
Background
The German program project is a regional programme for providing future SMEs with consultancy services on occupational safety since many companies see regulations as obstacles and, thus, do not fully realise the extent to which health and safety measures could provide return on investments within organisations. The project is a scheme introduced by the Düsseldorf Chamber of Commerce, the Environment and Energy Centre and the ASER Research Industry and is based on the need to ensure that investments are made in compliance with occupational safety requirements, using specific forms of assistance and advice to entrepreneurs. In this way, notions of prevention can be given long term support and any new innovation or competitiveness is reinforced by integrating labour protection from the onset. The scheme’s objectives, as outlined, were more qualitative than quantitative in nature and thus the aim is not to reduce the number of occupational accidents per se, but to make company managers aware of the importance of prevention and investment in occupational safety.

Delivery of model
The project is divided into three phases: a feasibility study; general analysis; and final launching. The immediate objectives are to create a concept on advice and a network capable of meeting the following requirements:

- Be close to companies that benefit from the service
- Possess a single concept for advisory service
- Coordinate consultants.

The feasibility study was divided into the following three tasks:

- Analysing the existing situation within the companies.
- Developing and validating a suitable tool that enables entrepreneurs to take ‘safety’ aspects into account when planning investments.
- Designing a possible network for providing advisory services on safety.

The general analysis consisted of defining the content of the advice to be given via researching the indirect effects of health and safety, the methods used for calculating profitability, identifying safety factors, drawing up checklists for entrepreneurs and evaluating the checklist in terms of quantity and quality.

The final launch consisted of developing a consultancy network, designing advice, identifying partners to provide the advisory services, defining the advisory content, editing support and defining a concept for groups of consultants.
Evaluation and Benefits
The second phase of the project, the general analysis, involved drawing up a checklist for SME owners to enable them to evaluate risks related to safety. To date, this checklist is the only part of the project which has been evaluated. This was attained through quantitative and qualitative methods and involved giving each area of the checklist a score from one to five. The main criteria used were the simplicity of the checklist, its intelligibility, graphic presentation and clarity, use and relevance and effectiveness in risk prevention and this was evaluated by eight SME employers. The qualitative evaluation involved two SME owners and two consultants who were questioned at different dates to check whether the list was understandable and whether it served a useful purpose. Both the quantitative and qualitative analysis indicated the checklist to be useful and well designed.
B.11 INTEGRATING APPROACH FOR SPREADING SAFETY CULTURE: THE COMPANY TRAINING/INFORMATION OFFICER FOR SAFETY - ITALY

Background
The approach for spreading safety culture was an initiative set up by the Employers Organisation in the Province of Lucca, Tuscany. The launching of the programmes was part of the 1994 Legislative Decree No 626, which follows the European directive on improving health and safety in the workplace. Specifically the aim of the project was to fulfil such criteria, encourage and enhance the development of the safety work culture by means of the creation of a safety training/information officer position within each company, which was compulsory for those enrolled.

Delivery of model
The specific role of the information officer is to act as a main reference point for the company and also, to train others to identify any major hazards in the workplace. The Officer must work to collaborate with others and different partners and encourage dialogue within the company. A three tier training system was introduced.

In phase one, a training needs analysis was undertaken via means of a questionnaire and interviews. Directors, Safety Representatives, Department Coordinators, Team Leaders and Heads of Prevention were all included in the process. Three courses were then conducted, covering cultural, psychological and communication aspects of safety which encompassed both practical and theoretical aspects of safety management.

A set of educational material was also designed, following on from the preparatory survey and discussion with participants. The CD-ROM was designed to include information on legislation, work accidents, practices, statistics, risk evaluation and prevention. The later was also used in conjunction with booklets, manuals and video cassettes.

For the second and last phases of the programme, meetings were held with local businesses, to measure the extent to which the programme addressed the company needs and a steering group was organised to discuss the needs of the various sectors.

Evaluation and Benefits
The Technical Scientific Committee carried out the evaluations for the project in order to compare trainee satisfaction with their expectations, via means of a questionnaire and this was carried out during and after the training courses. The evaluations assessed satisfaction with the course content as well as the quality of the methods and the teaching. The results of the evaluation were as follows:

- Eighty nine percent of the participants believed the wide variety of positions and companies among the attendants was an enriching factor
- Seventy six percent stated that meeting and exchanging points of views with other participants increased their general work safety awareness in their specific work sectors
- Half the participants considered the length of the courses (at 32 hours) to be very short
A few future safety/information officers were sceptical about whether they will be able to apply the methods and teachings to their companies without encountering some form of resistance from the employees.

A number of problems were encountered throughout the project. It proved to be difficult to enlist the support of SMEs in the area and to extract information from the various sectors and some resistance was found, with some companies expressing their doubts.

It had not been possible to compare the effects of the project, against the number of work accidents that occurred in the province. However, the organisers do further intend to measure the project’s efficiency in the future. The success of the scheme to date lay in the increased communication made by those responsible.
B.12 ALLIANCE FOR WORK SAFETY IN THE HAMBURG DRY CLEANING INDUSTRY - GERMANY

Background
The Hamburg Occupational Health and Safety Office adopted a new policy in 1997 of promoting occupational health and safety in SMEs. Of the 120 dry cleaning companies in Hamburg, 80 are members of the Professional Association for Environmental Protection in the Dry Cleaning Industry (VUT) and all are small enterprises employing between one and fifteen people. In 1999 the Hamburg Occupational Health and Safety Office collaborated with the VUT to form an alliance with the aim of getting SMEs to set up their own self-monitoring systems for accident and occupational disease prevention. By encouraging SMEs to follow a voluntary approach of quality control in terms of environment and occupational safety, Germany’s Occupational Health and Safety Office can move away from acting as an overarching inspection body and let the businesses take charge of self-control.

Delivery of model
The alliance is oriented towards the prevention of risk and delivers the model through the following activities:

- The exchange of ideas and experiences
- The provision of technical support
- Assisting companies with devising their health and safety reviews.

These activities have the intention of enabling SMEs in the dry cleaning industry to accept the need for having uniform and appropriate occupational safety standards.

Evaluation and Benefits
In order to be awarded a quality plan, members of VUT are evaluated by the Technical Centre for Energy, Water Treatment and Environment which is under the authority of the Hamburg Chamber of Commerce. However, there is no knowledge of formal evaluations of the alliance and whether it is successful in enabling SMEs to set up self-monitoring systems for accident and occupational disease prevention.

Despite, the lack of evidence of an evaluation, a number of benefits have been identified which may or not be attributed to the alliance:

- The awareness of health and safety problems has risen in the dry cleaning profession with a reduction in the use of solvents, the introduction of technical equipment and the introduction of new work procedures
- An occupational safety and health policy has been introduced in SMEs specifying prevention plans, the training of employees and the training of managers
- The number of inspections of dry cleaning premises has decreased suggesting that the SMEs are becoming increasingly effective at occupational accident and disease prevention.
Primary information sources
Improving occupational safety and health in SMEs: examples of effective assistance. European Agency for Safety and Health at Work.
B.13  TECHNICAL ASSISTANCE IN THE GREEK PRINTING SECTOR

Background
Over the course of the last 10 or 15 years, the Greek printing industry has upgraded its technological capabilities by introducing new machinery and computerised systems. While this has led to an increase in productivity and quality, there have been less commensurate increases in working conditions with extended working hours, the misuse of chemical solvents, and the accumulation of large items of machinery, frequently in inappropriate places, culminating in a working environment that is hazardous to the health and safety of employees.

In order to improve the risks to health and safety in the printing industry a project was devised by the Hellenic Institute of Occupational Safety and Health (Elinyae) and the Athens Labour Centre (EKA). The project’s aim was to provide an assessment of occupational risks, enable the dissemination of information for better working practices and the promotion of a safer and healthier work environment in the printing industry. Greek SMEs were particularly targeted since they make up the bulk of businesses in the printing sector. In addition, active participation of the employees in the project was deemed especially necessary since they are both the exposed group and those who are most familiar with the working environment and work procedures.

Delivery of model
The delivery of the project was conducted as a pilot scheme with four volunteer SMEs located in the Greek region of Attica and involved a number of different stages:

• The first stage involved the assessment of risks in the workplace through measurement of physical and chemical parameters (e.g. solvents, metals, dust, noise, lighting etc.)

Once the initial risk assessment was completed, the following actions were undertaken as appropriate:

• Promoting awareness to the employers and employees of risks in the workplace and adopting better working practices such as the substitution of solvents with less dangerous alternatives, improvements in ergonomic conditions, decreasing levels of noise and humidity etc.

• Providing information to the companies to help them comply with existing legislation

• Providing methodological tools to occupational physicians and safety professionals

• Raising interest in other enterprises that did not participate in the project

• Disseminating information through the distribution of leaflets and pamphlets

• Organising seminars for the conduct of good working practices within the sector.
Evaluation and Benefits
No formal evaluation has been conducted for the project, but preliminary findings indicated that a number of problems emerged in relation to health and safety in the plants. Thus, there is a requirement to extend the project to beyond the pilot sample of four SMEs in order to determine whether the same pattern of results is repeated. It is intended that this will be achieved by increasing awareness of the risks for all those involved in the industry, thus, encouraging their participation in the next round of the study.

Benefits of the project include:

- The publication of pamphlets and leaflets which contain information on the hazards investigated ways to address them and minimise risks

- The publication of information on good practices required to improve the health and safety of workers, e.g. substituting dangerous solvents for safer alternatives, improved ventilation to reduce dust and solvent levels, and safety mechanisms to reduce spills and cuts.

- The identification, for the first time, of the diverse physical and chemical parameters in the dry cleaning industry and the pinpointing of those areas that have the greatest consequences for the health and safety of workers.

Primary information sources
Improving occupational safety and health in SMEs: examples of effective assistance. European Agency for Safety and Health at Work.
B.14 RISK ASSESSMENT AND PREVENTION IN THE LUXEMBOURG CONSTRUCTION SECTOR

Background
The construction sector in Luxembourg is almost exclusively made up of SMEs and two items of legislation have been introduced over the last five years which have been specifically aimed at SMEs. The first relates to the need for SMEs to obtain an operating licence which is only provided when a minimum level of safety rules and standards have been satisfied. The second item of legislation is the implementation of the European directive on temporary or mobile construction sites in Luxembourg law and the subsequent need to appoint a safety coordinator and draw up a safety plan.

These changes in operating practice led to the Government department responsible for the legislation, the Ministry of Labour and Mines, collaborating with a body which represents and defends the interests of SMEs (Fédération des Artisans) and the Work Accident Insurance Association to develop a project which supplied SMEs in the construction sector with information on legislation and the safety rules that need to be applied. In addition to the legislation, priority attention was given to the construction sector because it is almost exclusively made up of SMEs and has experienced an increase in the use of subcontractors and temporary workers making it difficult to determine who is responsible for safety issues.

Delivery of model
The model was delivered to SMEs through the use of a CD-ROM and via the Internet. The contents of the CD-ROM and Internet were determined by members of the Fédération des Artisans who requested information which is illustrated with tangible examples and practical advice. On this basis, short, simple, illustrated texts about basic safety rules formed the core of the information providing advice on legislation, training of staff and increasing their awareness, and the need for safety plans.

The information is divided into the following four parts:

- A model risk evaluation form which can be used to determine the relevant risk categories and the actual risks requiring assessment at a construction worksite
- A self-assessment form providing guidance in worksite safety monitoring
- A database on safety risks and accident prevention with simple illustrated screens summarising common worksite risks
- A questionnaire on good practice models

The Fédération des Artisans disseminated the details of the project by means of an advertising campaign and organised briefings where the CD-ROM was distributed free of charge.
Evaluation and Benefits
Between 600 and 800 SMEs have acquired the CD-ROM so far from a potential group of 23,000 SMEs in the construction sector. However, there has been no systematic evaluation of the project, and feedback from users of the tool has been gained in a disparate manner.

A number of benefits have been identified with the project and these include:

- The use of multimedia learning techniques enables users to learn in an interactive manner rather than with the use of traditional didactic techniques

- SMEs were involved from the initial stages and by helping to define the content of the material in the CD-ROM and web site, this ensures the tools are relevant and are addressing the right issues

- The electronic nature of the medium chosen means it is simple, modular and easy to use. Furthermore, it allows adaptations and updates to be made easily

- The concept can be transferred to other sectors

Primary information sources
Improving occupational safety and health in SMEs: examples of effective assistance. European Agency for Safety and Health at Work.
B.15 BRANCH CODES FOR SKILLED TRADERS IN THE NETHERLANDS

Background
The increase in the number of SMEs and the deregulatory role of the Dutch Government has led to a need among small traders for clear guidelines regarding operational management and professional practice. This is particularly important since the need to operate in an increasingly competitive environment means SMEs frequently focus on their own activities at the expense of occupational health and safety.

The Central Industry Board for Skilled Trades (HBA) is an organisation representing entrepreneurs and employees in the skilled trades. The need to address health and safety for SMEs led to HBA collecting together all guidelines, standards and recommendations in each industry in a clearly organised, convenient tool. This tool is known as a sector code and refers to a brief reference work in the form of a booklet containing a series of points for attention in the areas of quality, hygiene, energy, occupational health and safety, and the environment for a particular industry.

The SMEs use the sector codes to check how far their business complies with legal requirements and how it scores in relation to industry standards and other recommendations. Rather than being intended as a method of surveying and evaluating the risks in a business, the sector code offers a checklist of processes which can be improved and the SME then decide for themselves whether and how to tackle these points. In addition the use of the sector codes is supported by training sessions which are provided by the HBA.

Delivery of model
The sector codes are developed, distributed by and updated with the sector organisations with support from the HBA. As part of a consultation process, the various risks are mapped out on a centralised basis in each sector, and guidelines for managing each risk defined. The sector code is then converted into a checklist for risk surveying and evaluation. From the checklist SMEs can determine how they score with respect to legal requirements, sector standards and other recommendations.

The development of the sector code consists of the following three phases:

- **Determining standards.** An initial set of guidelines is devised via the analysis of documents and business visits. A working group of relevant stakeholders checks the guidelines for accuracy, relevance to the sector, technical applicability and financial feasibility. The SMEs and HBA then decide on the sector code, after which a checklist is drawn up using the sector guidelines.

- **Integrating the sector code into sector training and introducing it to businesses.** The sector code is introduced and tied in with training where the SMEs learn how to use the code. They learn how to map out the situation in their business using a checklist, and how to arrive at a score. They then learn how to set up and implement an approach plan with annual evaluations. On completion of the training a certificate is issued.
- **Company certification.** The codes form the basis for company certification. At present, the relevant structures are being established and the certification scheme being determined. A central college for experts will act as the implementing body and monitor the certification system across the sector.

**Evaluation and Benefits**

By January 2002, the codes were in use in around 11,000 businesses with the take up ranging from 10% of hairdressers to 75% of chiropodists. There appears to be no formal evaluation of the project, however, the HBA claim the sector codes have been successful when compared with other projects. This is attributed to the fact that the codes reflect current needs on the part of traders since they are involved in the development of the codes. Another benefit of this approach is that it offers benefits to both traders and stakeholders in the sector in that SMEs are given a concrete means of fulfilling their social responsibilities and engaging in sustainable business practices.

Although there is no formal evaluation of the project, possible drawbacks have been identified which include the fact that he code is sector specific rather than business specific. If an SME requires information relating to the specific characteristics of their business, then they are advised to seek additional support. Furthermore, support is not provided for checking and monitoring the application of the code.

**Primary information sources**

Improving occupational safety and health in SMEs: examples of effective assistance. European Agency for Safety and Health at Work.
Background

Small farms are renowned for their high accident rates due to the wide range of occupational hazards arising from the use of machinery, agrochemicals and the enormous variety of tasks that farmers have to perform. However, despite the frequency of work related accidents, they are often unreported for a number of reasons. Firstly, a number of countries (including Spain) adopt ‘the cover for contingencies’ programme provided for farmers by the national security scheme. Under this scheme, self-employed farmers are not encouraged to report their work-related injuries since they get no compensation for the first period of sick leave. Secondly, many people that work in agriculture are occasional farmers such as farmers’ family members, the retired, and short term contract workers who will lose time and money if they report accidents.

Navarre is a small region in Spain which has 5,500 registered companies, 4,900 of which are agricultural companies. When the number of family members working on specific occasions during the crop year is included, it is estimated that 25,000 people are affected by occupational health hazards in agriculture. The implementation of conventional prevention plans is difficult in Navarre for a couple of reasons:

- The seasonal nature of the work means there are different levels of risk at different times of the year
- The precariousness of the working conditions with the use of contract workers and migrant workers working illegally without work permits

To address the issue of making farmers aware of occupational health and safety, the Navarre Regional Government’s Sectoral Commission analysed priorities for action and formulated a series of instruments known as the ‘Strategic Plan’ with the intention of creating a situation where risk prevention becomes the norm rather than the exception with small firms and farmers become aware of their responsibilities in relation to health and safety.

Delivery of model

Due to the high levels of work-related accidents and ill health in small farms and the lack of impact on the sector that the Labour Risk Prevention Act had achieved, three principal types of measures were conceived:

- The design of programmes to achieve the adoption of specific corrective measures in risk situations on small farms. The use of machinery, particularly tractors, had been identified as a cause of occupational ill health among small farms in Navarre. Thus, a programme was drawn up to facilitate compliance with the obligation for technical inspections by setting up mobile inspection units and taking them to various locations in Navarre. This was undertaken in conjunction with promotional campaigns focusing specifically on the locations chosen. The farmers then attended the nearest inspection unit and had their vehicles inspected.
Various measures were introduced which focused on introducing preventive management on small farms. Under the assumption that poor conditions on farms are due to an absence of preventive action, the objectives set were to convey the need for day-to-day prevention along with both principles for action and guidance in day-to-day work. This assisted farm owners and self-employed workers to conduct the risk evaluation by themselves, to determine the most suitable prevention measures and then to plan and implement them. On this basis a training/counselling strategy was designed offering the following:

- A ‘trainer training’ course for experts providing advice on the prevention of accidents and ill health on small farms and suitable training materials published.
- Specific training for farmers was planned and specific materials developed for that purpose.
- A guide for adaptation and risk assessment on farms was devised and published as a practical complement to the occupational hazards in farming manual.
- The publication of a textbook entitled ‘Course on Prevention of Occupational Hazards in Farming’.

The design of a set of actions to have a long term ripple effect. This includes dissemination, farmers training and specialised training for experts. The dissemination activities involved the publication of articles in magazines, information on specific themes, and of stickers, posters and other training materials. Training was promoted through measures such as the use of technical prevention cards aimed at preventing accidents with hazardous farm machinery. In addition, teaching materials were developed for advanced students at the local university (Universidad Pública de Navarra) providing information in areas such as the structural safety of farm machinery and safety in the use of farm machinery.

Evaluation and Benefits

The success of the Strategic Plan was evaluated by analysing the number of vehicles inspected through the initiative and the degree of participation. A total of 16,000 vehicles were inspected (80% of all vehicles affected by the regulations). In relation to the degree of participation, as of 2003, 130 hazard evaluations were undertaken by the farmers while 320 requests for advice and information were later received by the trainer/counsellor about technical doubts. The number of farmers participating in the Strategic Plan was attributed to the cooperation of professional organisations that represented small farms in the scheme. These organisations explained the initiative to the small farms and helped to assuage any doubts or uncertainties they may have had in participating.

One of the main benefits of the Strategic Plan was the use of a wide variety of stakeholders in Navarre Regional Government’s Sectoral Commission when devising the Strategic Plan. The stakeholders included professional associations representing small farmers, technical experts, Government authorities, business associations and trade unions. Using the stakeholders in this way enabled a participative process of analysing needs with those who directly work with small
farms and are aware of the issues that surround them in relation to occupational health and safety. Furthermore, the use of different stakeholders allowed them to advertise the Strategic Plan through a variety of methods, thus, increasing the potential to make small farmers aware of it.

Another benefit of the Strategic Plan is that it enabled continual improvements as requirements that need to be addressed were identified. For example, one of the professional associations that participated in the project decided to hire a prevention expert in order to promote its own programmes and is considering implementing a joint implementation service for its members.

**Primary information sources**

Improving occupational safety and health in SMEs: examples of effective assistance. European Agency for Safety and Health at Work.
B.17 MAINTAINING WORK ABILITY – FINNISH NATIONAL PROGRAMMES

Background
Maintaining Work Ability (MWA) is an umbrella project established by the Finnish Government’s Ministry of Social Affairs and Health policy statement formulated in the early 1990s. The driver was a trend towards early retirement in Finland and a high level of work related disability in an ageing workforce. The aim was to promote a broad set of measures targeted on improving the employability of the individual and the quality of the workplace in the full range of firms, from SME to major enterprises.  

Delivery of model
The delivery model for change is that individual enterprises should build a strong occupational health dimension into the company culture, with a particular focus on the following topics:

- Individual health
- Environmental safety
- Organisational function and its impact on health
- Individual competence, developed by experience and training.

The basic message at the individual enterprise level was that the various workplace participants (employers, employees, occupational safety and health specialists and HR specialists) should operate in an active partnership to improve occupational health. The closest analogy is with the “quality circles” established in Japan in the 60s and 70s to optimise the quality of product production – in effect it is building an occupational health dimension into the enterprise culture. These partnerships developed their own work programmes, to fit the needs of the organisation, but also addressed problems with a national dimension, such as negative attitudes to older (over 45) workers.

A key component of the MWA programme is a self-assessment questionnaire used by workers to generate a Work Ability Index (WAI) and to explore the capabilities of workers in relation to employment. An evaluation of the effectiveness of the questionnaire revealed that it did provide stable, repeatable WAIs when reapplied to workers with a test-retest gap of four weeks.

The occupational pension insurance companies were very active in the marketing of MWA concept to their client organisations. Between the years 1995 and 1998 the Central Organisation of the Finnish Pension Insurance Institutions (TELA) organised a comprehensive and diversified training programme to promote MWA concepts and practices in workplace health services and in the workplaces themselves. A total of 23,000 people participated in the training, which comprised of seminars to workplace representatives (13,400 people), health service personnel (5,000 physicians) and occupational health services (4,900 physicians, nurses, physiotherapists and psychologists). A new disability pension application form was also introduced in co-operation with the Social Insurance Institution (which is responsible for the assessment and treatment of disability) to include information about occupational safety and health, work ability, and questions to assess the remaining resources and competencies and rehabilitation potentials of the applicant. In this way, the main actors dealing with workplace
health problems (prevention, treatment and rehabilitation services, employers and employees) were involved this nation-wide initiative.

**Evaluation and Benefits**

In 1998 the National Age programme funded a nation-wide telephone survey of MWA activities at company level (The First National MWA Barometer). A total of 991 workplaces, both private and public sector, participated in the survey. Questions were asked about MWA activities such as recognition of the term and understanding of its content. Further questions were asked on topics such as health promotion, work environment improvement, organisational development and competence strengthening activities. It was found that MWA was very well known, understood and judged to be useful, particularly in workplaces with over 100 employees. Only in micro-enterprises (less than five employees) was the term not so well known - only 50% recognised the concept.

The Finnish Institute of Occupational Health also conducted an assessment of the impact of MWA activities on the organisational climate within the SME sector. Productivity and MWA activities both increased over a four year period but a causal relationship could not be established. Furthermore, the introduction of the MWA programme has coincided with the average age of retiring from the workforce and moving on to benefits increasing by one year. Although it is not possible to attribute this change solely to the MWA activities, it is nevertheless believed by the Finnish Government that MWA had a positive influence on this measure.

The evaluation research also revealed a number of key problems which limited the effectiveness of the MWA approach:

- Occupational health services and professionals are too often over focused on the promotion of physical health. Yet many occupational health problems have a psychological or social dimension. If that is not addressed the service will only be partially successful.

- The competence of occupational health professionals in organisational development and process development is often limited.

- Despite considerable effort it still proved very difficult to engage less economically successful sectors and less well-resourced enterprises, especially SMEs, in the MWA activities.

**Primary information sources**

B.18 INTEREST GROUP AGREEMENTS IN RISK SECTORS – THE NETHERLANDS

Background
In 1998 the Netherlands launched the “Arbo Covenanten” programme in the Netherlands. In many ways that parallels the UK’s “Revitalising Health and Safety” agenda, but from the start included a significant occupational health dimension. The targets apply to all size of enterprise. The core objectives are that over the next few years the Government wants fewer employees to:

- lift heavy weights;
- experience a high level of work pressure;
- run the risk of RSI (Repetitive Strain Injury);
- be exposed to hazardous noise;
- be exposed to solvents;
- be exposed to allergenic substances and
- be exposed to quartz.

The Government has set national targets for lifting, work pressure, RSI and hazardous noise. These figures indicate in percentage and absolute terms by how much the number of workers that are confronted with a particular work related risk must fall. They are:

- the total number of employees who regularly lift heavy weights must be reduced by 30%, or 390,000 people, within 7 years;
- the number of people with a high level of work pressure must fall by 10%, or 170,000, within 5 years;
- the number of VDU workers with RSI must be reduced by 10%, or 100,000 people, by 2001;
- the number of employees that work unprotected in environments with a hazardous noise level must be reduced by 170,000 within 5 years

For solvents, allergenic substances and quartz no targets have been set.

Delivery of model
The State-Secretary for Social Affairs and Employment makes these “Arbo Covenanten” agreements with the employers and employees of sectors in which the seven work-related risks arise most frequently. The agreements supplement existing policy measures, such as occupational safety and health regulations, financial incentives, public information campaigns and tax breaks. They enable sectors and individual firms to tailor occupational safety and health
policy to suit their specific needs. For example there is an agreement for the care sector, which includes, amongst other things, targets to reduce lifting.

A well-drafted agreement contains clear elements that can be easily tested. The parties to it support its content and make every effort to implement it. The objectives can consist of standards for exposure or the extent to which companies plan to take precautionary measures or measures at source according to either the present or future status of technology. The ultimate goal of the agreement is to reduce the number of employees who are exposed to a specific work-related risk. This number will, where possible, be specified as a percentage.

An agreement always runs for a specific period and is linked to a specific timetable. The agreement contains deadlines by which various parts of the plan of approach must be executed. Monitoring and progress checks are performed to determine whether the parties are complying with the agreements.

**Evaluation and Benefits**

Inevitably, the “Arbo Covenanten” approach is most successful with large organisations or with smaller organisations, including SMEs, with a strong central body where it is possible to have a degree of individual engagement between Government and the enterprise representatives. Quantified outcome results are not yet available.

**Primary information sources**

B.19 JOB REDESIGN IN LOCAL AUTHORITY WORKERS – GRONINGEN, NETHERLANDS.

Background
This is an example of a local scheme which is now being accepted in a range of local authorities in the Netherlands. Although not specifically about occupational health delivery it has impacted on the health of workers and has been well evaluated. Hence, it illustrates some key issues.

Groningen is a municipality in the northern part of Holland with more than 171,000 inhabitants. The Groningen Department of Public Works has about 250 employees, of which about 60 work in public spaces. That includes working as gardeners, road maintenance crews or maintaining traffic signs. The road crew job is particularly heavy and physical work. In the past, there was little variation in the tasks associated with each job.

The average age of these 60 workers was more than 47 years. The road crews were the oldest group with an average age of more than 50. The main problem seen in the group was that very few of the road crews remained in work to the pensionable age of 62. An associated problem was that there was considerable public dissatisfaction with backlogs of maintenance and repair of damage caused by vandals.

Delivery of model
Groningen addressed these problems by establishing multi-disciplinary teams of workers able to do more than one job. These teams would work quite independently and with more responsibility. Each team became responsible for the maintenance of roads, traffic signs and green spaces in specific areas of the city. Although the initial intention was to give these teams considerable autonomy after trials it was found still to be necessary to plan some work and set priorities at the centre.

There were two main objectives. The first and most important aim was to prevent early retirements and reduce high sickness absence figures, which resulted from a range of physical problems and low job satisfaction. Variation in tasks and more individual responsibility were important methods of achieving this objective. The second objective was that Groningen wanted to improve the performance and the image of the Department of Public Works and its workers. Making a team responsible for the maintenance of roads, traffic signs (and other street furniture) and green spaces in specific areas, would contribute to a closer relationship between neighbourhood residents and the workers. The ambition was also to solve all maintenance problems and repair damages within 24 hours of it being reported.

These multi-disciplinary teams of all-rounders were established without a preparation period of retraining. Given the age and previous levels of education of these workers individual retraining was not considered to be the right ‘tool’ for learning new skills. Instead, the workers began to work in the multi-disciplinary teams - they were expected to exchange experiences and teach each other the specific skills of their professions on the job. At the same time, all workers received practical training in communication skills to improve their teamwork and the communication with the residents. All of the workers received the same new job description – “district maintenance employee”.
Evaluation and Benefits
Evaluation of the initiative revealed the following results:

• Most workers were very satisfied about the broader scope of their work and the improved options for mobility and their career.

• The total figure of sickness absence dropped from 15% in 1989 to 7% in 1999.

• The Department experienced an almost complete reduction of early retirements since the initiative was undertaken. However, changes in legislation (which included a more rigid control of disability criteria) probably also influenced this. Retaining an individual in the workforce for one extra year is estimated to save the local authority 50,000 Euros.

• The initiative also resulted in improved relationships between public workers and residents.

An unforeseen negative finding was a small rise in the rate of psychological causes of absence, which has partly been ascribed to the problems some workers experienced in changing their work.

Primary information sources
B.20 WORKPLACE HEALTH PROMOTION IN BAKERIES IN GERMANY

Background
Bakeries and the baking sector in Germany are characterised by a large number of small establishments both in the production and the retail sector. This sector has a number of well recognised health and safety risks, including exposure to flour dusts, lifting and heat. Although the risks can be controlled relatively easily, the necessary skills are in short supply within the bakeries themselves.

The project addressed this issue by developing a training programme and network which focused on improving the general health of employees as well as dealing with health and safety hazards, thus, integrating the methods of health and safety with those of workplace health promotion. The training programme was developed by the Federal Institute for Safety and Health and was delivered by network partners which offer training for bakeries.

Delivery of model
The main objective of the project was to develop and test a health and safety toolkit of “products” which could be used by employers, workers and health and safety professionals. These included:

- A set of lectures on work and health for young bakers during their professional training (as apprentices) and for master bakers during their ongoing professional development.

- A workbook on health and work in the bakery trade which provides information on health hazards and risks and their control

- A report on sickness leave in the bakery trade, and measures which might be adopted by employers to manage it better.

- Various checklists for self assessment of potential risks.

Evaluation
This project conducted a number of studies before and during the development of the toolkit to identify the underlying problems and attitudes to health and safety in the bakery workplace. The results of this series of studies indicated the following:

- Sickness leave does not appear to cause a problem for SME employers or employees since they work around absences. Moreover, accidents and occupational diseases are not perceived as problems that must be solved with any priority.

- Employers are sceptical about any work and health institutions and regulations. The vast majority are only willing to act on their own view of the problem, and after they have identified problems as being crucial for the financial welfare of the enterprise and/or the welfare of the personnel.
• Employees mainly identify workplace problems as due to poor and/or unjust work organisation, seemingly unjust staff management, unsocial working hours and lack of clarity in the work objectives.

• More than one third of the employees reported poorer level of health at the time of the study in comparison with their health condition 12 months previously.

• Almost forty percent of the apprentices were very dissatisfied with their situation and willing to take up a different job.

Unfortunately, there is no information available on follow up studies to determine whether the toolkit improved matters.

**Primary information sources**

APPENDIX C

PROJECTS FROM OUTSIDE EUROPE
C. INTRODUCTION

Many of the best documented occupational health and safety pilots and programmes originate in Europe, but a selection of projects from Australia, New Zealand, Canada, the US and Japan have been included. In general, the projects identified in these countries do not have specific funding and evaluation is primarily focussed on stakeholder satisfaction rather than specific health and safety outcomes. Nevertheless, they are likely to be of interest.

Australia and New Zealand have been given particular attention. Often there are parallels between the institutions and approaches followed in those countries and in the UK; for example both have recently launched a national occupational health and safety strategy. There are also significant differences and some understanding of the regulatory context is useful in understanding these projects. An outline of the Occupational Health System in Australia and how it links to small business is included.

C.1 THE EFFECT OF FIRST AID TRAINING ON CONSTRUCTION WORKERS' OCCUPATIONAL HEALTH AND SAFETY MOTIVATION AND RISK CONTROL BEHAVIOUR - AUSTRALIA

Background
Construction is a high risk in Australia and accounts for approximately 30 per cent of all workplace injury accidents\textsuperscript{42}.

Delivery of model
The delivery agent in this case was first aid training for workers. A 24 week experiment was conducted to assess the effect of first aid training on the motivation of small business construction industry employees to avoid occupational injuries and illnesses and their occupational health and safety behaviour. A simplified multiple baseline design across workplace settings was used to evaluate the effects of first aid training. Participants' motivation to control occupational safety and health risks was explored during in-depth interviews before and after receipt of first aid training.

Evaluation
Objective measurement of occupational safety and health behaviour was conducted by a researcher directly observing the workplace, before and after participants received first aid training. The observations at participants' worksites suggested that, for the most part, the first aid training had a positive effect on the occupational safety and health behaviour of participants. First aid training appeared to reduce participants' 'self-other' bias, making them more aware that their experience of occupational safety and health risks was not beyond their control but that their own behaviour is an important factor in the avoidance of occupational injury and illness. First aid training also appeared to reduce participants' willingness to accept prevailing levels of occupational safety and health risk and increase the perceived probability that they would suffer a work-related injury or illness. Participants expressed greater concern about taking risks at work after receiving first aid training. It therefore appears that first aid training enhances participants' motivation to avoid occupational injuries and illnesses.
Primary information sources
NOHSC Research Database
C.2 OCCUPATIONAL HEALTH AND SAFETY ISSUES FOR SMALL BUSINESS IN THE HOSPITALITY INDUSTRY: A COMMUNICATION ANALYSIS – AUSTRALIA

Background
The hospitality industry has a relatively poor occupational health and safety record, compared with the ‘all industry’ level of permanent and severe injury. This calls into question the effectiveness of current preventative strategies and highlights the need for effective communication of occupational health and safety issues to small businesses in the industry.43

Delivery of model
This research project was designed to assess the changes in occupational health and safety performance over a 12 month period using two different communication strategies. The first strategy used an interpersonal approach which involved conducting an audit by an OHS professional; the second strategy used printed materials.

Evaluation and Benefits
In comparison with a control group, both approaches were found to improve occupational health and safety performance, however, the interpersonal approach (the audit) appeared to be more effective than the more limited printed media intervention. It was concluded that a variety of strategies is required to improve occupational health and safety performance and that strategies need to accommodate businesses which are at different stages of development. Such strategies specifically need to target the strategic and management levels of small business in the hospitality industry.

Primary information sources
NOHSC Research Database
C.3 THE WORKSAFE SMALL BUSINESS SAFETY PROGRAM – VICTORIA, AUSTRALIA

Background
One of the key problems in improving the health and safety of small business in Australia is to overcome suspicion of formal regulation/inspection and persuade business owners to engage with health and safety professionals. This programme was aimed at overcoming that suspicion, by giving the proprietor control of the process.44

Delivery of model
The first part of the process was that employers in companies with up to 20 staff were invited to register with their Industry Association and undertake a self-assessment of their workplace using either an industry specific checklist or a generic version, where an industry specific one was not available. The checklists were developed in plain English and were trialled in small businesses as part of their development. Specific checklists are available for the travel industry, the automotive industry, the farm industry (dairy sector), licensed clubs, the civil construction industry, the hotel and motel accommodation industry and the forestry industry.

Small businesses that returned a completed checklist were then qualified for the 3 hours of “free” safety advice from an independent Health and Safety consultant, paid for by Worksafe Victoria. The assistance was specific to the workplace and includes a simple safety action plan.

Evaluation and Benefits
This programme has been evaluated by Sweeney Research and a full report is available on the Worksafe Victoria website. It appears to have been a victim of its own success – one consultant who had been given funding for 50 consultations had received 350 requests. There were residual concerns about the wording of the checklists and whether they were appropriate for small business. There was also unease about the results being fed back to Worksafe Victoria, and potentially prompting an inspection visits.

Despite these reservations just under eight in ten respondents (77%) claimed that since receiving a visit from the health and safety consultant, the health and safety performance of their business had either improved ‘a little’ (55%) or ‘a lot’ (22%). One in five claimed the OH&S performance of their business had remained the same, most of whom worked in the gardening and plumbing industry. The businesses that were most likely to have improved a lot operated within the transport, plumbing, building/construction and manufacturing industries. The most prevalent reason for the improvement to the health and safety performance of the business was a better awareness of what was required to enhance their performance in this area (mentioned by 40%). A third (33%) said they became more safety conscious as a result of the visit from the health and safety consultant.

The Program has also encouraged small businesses to take the next step and implement changes to enhance their occupational health and safety performance. For example:

- 92% of respondents claimed their business had made improvements to their occupational health and safety as a result of receiving health and safety assistance.
• 62% of respondents planned to make changes to their occupational health and safety in the future

• 71% had undertaken expenditure to improve their occupational health and safety performance. On average, small businesses spent A$2,012 on health and safety improvements.

It was also encouraging that the efforts taken by small businesses to improve their performance in this area have been filtered down from top management to lower level employees. Nearly nine out of ten respondents (86%) claimed that their business involved their employees in making improvements to occupational health and safety.
C.4  PARTNERSHIP IN SAFETY PROGRAM – VERMONT, AMERICA

Background
Health and safety is regulated in the US by the Occupational Safety and Health Administration (OSHA). There are more than 2200 who have safety and health jurisdiction over more than 100 million workers at 6 million work sites. The Labour departments in individual states also have occupational health and safety delivery responsibilities. The numbers of people involved are relatively small and there is the common difficulty of reaching large numbers of relatively small employers. Nevertheless, health and safety is taken seriously. For example although the Occupational Safety and Health Administration (VOSHA) of Vermont (population 601,000) only has 15 inspectors, with five who concentrate on small business, any company with under 250 employees can apply for a “free” comprehensive health and safety assessment, funded by the state, by a health and safety professional under the WorkSAFE program.

Vermont is also sponsoring the Partnership in Safety programme, aimed at encouraging small businesses to pool expertise and resources, with support from the Small Business development centre.

Delivery of model
VOSHA, Green Mountain Coffee Roasters Foundation, and the Small Business Development Centre have formed a Partnership in Safety to improve workplace safety in Vermont for small businesses. The Partnership provides a series of free programs, which focus on a variety of safety and health issues for small employers. The meetings are held, approximately quarterly, at the Green Mountain Coffee Roasters "Java University" and have focused on areas such as electrical safety, how to develop and implement a safety and health program, and ergonomics in the office.

Each partner brings unique resources and talents to the program. The VOSHA consultative staff brings expertise in safety and health. The Vermont Small Business Development Centre uses its close connections with the business community to plan and market programs that reach small businesses. Green Mountain Coffee Roasters provides free space for the training at its Waterbury worksite and financial backing for promotional materials and mailings. The company also adds credibility to the program, setting a good example for other small businesses with its strong safety and health effort.

What makes the partnership innovative is that a private-sector company is playing an active role in promoting government safety and health programs to other businesses. As a result, the quarterly training sessions have helped VOSHA’s consultative staff educate a broader spectrum of employers than they would otherwise reach.

These seminars are provided at no charge to the participants. It is done on a first come first serve basis. Participation is generally limited to 50 persons. VOSHA consultation staff are always available at the seminars to answer questions for participants and to offer any other service necessary.

Evaluation and Benefits
The partnership has been judged a resounding success with a steady increase in workshop participation since 18 people attended the first session in February 2000. By the end of the year, that number had increased to 141, and in 2001 it was 224 people—mostly small business
owners, managers, and safety personnel. Participants help select many of the training topics. Presented in a cooperative environment, each workshop provided the opportunity for positive interaction among safety and health professionals from state and private organizations and small employers. The workshops have resulted in the candid exchange of information in a setting that encourages finding workable solutions to safety and health issues identified by small employers. This cooperative atmosphere helped many small employers overcome their initial reluctance to become involved with a division of state government. The partnership also provided an excellent forum for small businesses to share information on safety and health programs among themselves. At one of the first sessions, for example, staff from Green Mountain Coffee Roasters explained to participants the benefit of the engineering controls they introduced to reduce back injuries. They praised VOSHA’s consultation services and encouraged other participants to take advantage of them.

Regardless of the specific topic, VOSHA uses the workshops as an opportunity to market its consultation services to employers, as well as the benefits of establishing and maintaining a safe and healthful work environment. The interaction of regulatory staff, consultation program staff, managers, and safety and health practitioners provided a balanced and proactive approach toward safety and health education.

Feedback is sought from the participants at each workshop. Ninety-nine percent of participants rated the workshops as "very helpful" on evaluation sheets handed out at each session. A further survey of attendees revealed that 95 percent have made safety improvements in their workplace, 89 percent say they have a better understanding of the regulations that affect them, and 79 percent said they were now in compliance with more regulations than before they attended the sessions.
C.5 THE SMALL BUSINESS HEALTH MODEL-CANADA

Background
Many of the pilots outlined in this section have not unbundled Health and Safety. The Small Business Health Model (SBHM) in Canada does so, and links health in small business, defined as 100 employees or fewer, to health in the community. The SBHM is part of Health Canada's Workplace Health System. This System is a comprehensive approach to health promotion programming and rests on the following five principles:

- Meet the needs of all employees, regardless of their current level of health;
- Recognize the needs, preferences and attitudes of different groups of participants;
- Recognize that an individual's "lifestyle" is made up of an interdependent set of health habits;
- Be adaptable to the special features of each workplace environment; and
- Support the development of a strong overall health policy in the workplace.

The Workplace Health System brings together three factors that influence how well people say they feel:

1. **Environment or surroundings**: Factors in the home or work environment that affect employee health, such as air, noise and light conditions, the quality of machinery and equipment, the type of work, responsibilities at work, relations with supervisors and co-workers, and relations with family at home.

2. **Personal resources**: The sense of influence employees feel they have over their health and work, how much social support they feel they receive from others, and the degree to which they actively participate in improving their own health.

3. **Health practices**: Practices that affect health, including exercise, smoking, drinking, sleeping and eating habits, as well as the use of medication and other drugs.

Delivery of model
The first step in delivery is that local individuals and organisations hear or read about the Model and decide to apply it in their community. Once a local nucleus, a coordinating agency, is in place a local representative of Health Canada will attend meetings and discuss the range of health issues that affect workplaces. The next step is a needs assessment via a questionnaire with 37 standard and a few industry specific questions which are offered to employees in the participating employers. That is normally analysed by an outside organisation, to guarantee confidentiality; that was thought essential to ensure buy in by the employees. The analysing agency generates a general report for the small businesses in the area and special reports on particular risk factors i.e. Stress, Health and Safety Concerns at Work, Physical Activity, Weight, Smoking, Drinking and Medication Use and the relationships between them for the
The Coordinating Agency then draws up a long term strategic plan.

The small business health plan determines what health issues the community of small businesses will take on together. To be effective, the plan will address all three of the previously mentioned avenues of influence on a person's health: their environment, their sense of influence over their health and work, and their health practices. Each company is encouraged to carry out in-house activities for their own employees as part of the small business community health promotion programs. Regardless of the size of the business, there are many practical inexpensive activities that can be carried out at the workplace.

The last phase of the Small Business Health Model is the ongoing task of ensuring that the health programming set up is effective and remains relevant. To help the organization with this review, Health Canada provides evaluation tools and guidelines.

**Evaluation and Benefits**

The Small Business Health Model was developed through testing in five communities across the country. The following sites represented a variety of community settings, structures and environments:

- Berwick, Nova Scotia
- St Henri (Montreal) Quebec
- Cornwall, Ontario
- Portage la Prairie, Manitoba
- Old Strathcona, Alberta

Health Canada has informed us that there are no specific evaluation results for this programme. However there is strong interest in occupational health. For example the Canadian Workplace health System, the framework of OHS documents and guidance produced by Health Canada, having received over 300,000 website hits, 217,000 document views and 76,000 downloads since established.

**Primary information sources**

Health Canada Web Pages and e-mails.
C.6 WORKER HEALTH PROJECTS – THE DANDELION PLAN – JAPAN

Background
It is often useful to examine organisations and structures in Japan. It has a fully developed industry based economy, in many ways resembling that of the UK, but there are differences in the national culture. Formal responsibility for health and safety in the Workforce rests with the Industrial Safety and Health Department but delivery depends on establishing structures and support systems at the local level. Delivery depends more on these than on “inspecting in” occupational health and safety. Formal recognition of achievements, by awards such as certificates or medals, is still a significant motivator, at both the individual and company level.

In Japan the law requires that workers have access to occupational health support. Employers with 50 or more employees are required to appoint occupational health physicians for advisory services. Companies with fewer than 50 employees are allowed to use the services of a regional health services. Since 97 per cent of enterprises in Japan, which employ 60 per cent of all workers, have fewer than 90 employees that is the most common mode of access for the workforce. A variety of organisations, funded primarily by hypothecated taxes, support the process by providing advice for employers and training materials. That includes the Occupational Health Promotion Centre and The Japan Industrial Safety and Health Association (JISHA) These organisations also promote research and programmes. Much of the research is reported in the Japan Journal of Occupational Health, available freely on the web.

Delivery of Model
The “Dandelion Plan” is an example of a JISHA project. That has been developed to meet the needs of groups of small businesses in an area with 50 or fewer workers. In Japan these are often subcontractors to the large manufacturing companies and operate in a fiercely competitive business environment. It is easy for business proprietors to give inadequate attention to occupational health and safety. The key components of the Dandelion plan are:

- Seminars for the proprietors of the businesses on safety and health issues.
- Risk assessment check lists which can be applied by the business owners.
- A certificate scheme, offered to companies which have a zero accidents record over the past year.
- Special, free, health screening check ups for the workers.
- Promotion of a Senior Safety Leader System – this gives identified workers basic training in health and safety. They remain in their usual job but also lead “safety circles”, worker discussion groups which consider how to improve safety and health in their workplaces.

Evaluation and Benefits
Evaluation in the western sense is unusual in Japan. Programmes emerge from a thorough consensus building process, which has the advantage that it promotes strong buy in from the partners but then has the disadvantage that it is counter cultural to criticise, or even appear to
criticise, what has been done. The result is that even ineffective programmes may persist for long periods.

No evaluation results appear to have been produced for the Dandelion project but that is not unexpected.
C.7 ALL TERRAIN VEHICLE (ATV) ACCIDENT REDUCTION PROGRAMME – NEW ZEALAND

Background
New Zealand has a population of just over 4 million people, approximately 7 per cent of the figure for the UK. Each year the Occupational Safety and Health service of New Zealand investigates over 60 fatalities to workers, approximately 25 per cent of the UK figure. Hence, at first sight the risk of being involved in a fatal accident is significantly higher than for UK workers. The figures are not directly comparable, because New Zealand includes some work related road accident deaths in the total. Nevertheless they are a reminder of the massive financial and social cost of workplace deaths.

Agriculture and Forestry are key industries in New Zealand and are responsible for about one third of all workplace fatalities. In turn about one third of these deaths are linked to the use of ATVs.

Delivery of model
The ATV accident reduction programme is an emergent programme. The seed was the issue of Guidance, entitled “The Safe Use of ATVs on New Zealand farms” issued by the Agricultural Health and Safety Council. That attracted considerable interest and over 100,000 copies were issued. It also generated controversy; for example, as in the UK, ATVs are often used by children from an early age and a recommendation of a 15 year minimum age limit was not universally popular. Perversely, however, the controversy may have helped publicise the guide and promoted a social dialogue involving a range of agricultural associations, trades unions and other interest groups. That probably helped the guidance to be read and applied widely. There were also practical spin offs, including a new standard for ATV helmets.

Evaluation and Benefits
In common with other projects it is statistically difficult to isolate the effect of a programme from all of the other influences on accident rates and the normal statistical variability. Nevertheless there is a downwards trend in fatal accident rates in New Zealand and it possible that the focus on ATV accidents has aided that process.
OCCUPATIONAL HEALTH AND SAFETY IN AUSTRALIA – AN OVERVIEW

The National Occupational Health and Safety Commission (NOHSC) regulates occupational health and safety in Australia. It is chaired by the Federal Minister for Employment and Workplace Relations and the members typically include Ministers responsible for employment and industrial relations issues in the various states, a representative of the Australian Chamber of Commerce and a Trades Union representative.

The NOHSC is responsible for providing strategic leadership on OHS and for coordinating the national efforts to improve OHS performance. It was responsible for developing the National OHS Strategy 2002-2012, launched in May 2002. That sets out the national OHS vision “Australian workplaces free from death, injury and disease” and contains two key targets, namely:

- sustain a significant, continual reduction in the incidence of work-related fatalities with a reduction of at least 20 per cent by 30 June 2012 (with a reduction of 10 per cent being achieved by 30 June 2007); and
- reduce the incidence of workplace injury by at least 40 per cent by 30 June 2012 (with a reduction of 20 per cent being achieved by 30 June 2007).

The national OHS strategy stems from considerable national concern about the levels of injury and accident in the workplace. As in the UK there is thought to be substantial under reporting of incidents. The most reliable figures are believed to be those which stem from the WorkCover compensation schemes, outlined below. Key figures are:

- there were 120,000 accepted workers’ compensation claims requiring five or more days off work in 1999-2000; that represents a 20 percent reduction in the incidence of work-related injuries in the five years from 1995-96,
- there were 205 compensated fatalities in 1999-2000 resulting from work-related injuries, compared to 267 in 1995-96.
- no reliable data exist on deaths arising from occupational disease but it has been estimated that over 2,000 people die per year from past occupational exposures to hazardous substances.

Five national priorities have been identified to bring about short and long-term occupational health and safety improvements, as well as longer-term cultural change. They are to:

- reduce high incidence/severity risks;
- develop the capacity of business operators and workers to manage occupational health and safety effectively;
- prevent occupational disease more effectively;
• eliminate hazards at the design stage; and

• strengthen the capacity of government to influence occupational health and safety outcomes.

Much of the NOHSC strategy has close parallels with the HSE Revitalising Health and Safety strategy and the HSE/HSC vision and mission set out in 2003. One key difference is that NOHSC has no executive arm or direct responsibility for enforcing its policies. That falls to the WorkCover organisations, one for each State. These are public corporations which:

• Pay compensation to those who are absent from work through injury or ill health directly attributable to their employment.

• Derive income from a levy on employers. The levy is weighted according to risk and number of employees.

• Sponsor education and research projects to improve OHS

• Conduct inspections. However there also other inspectors, notably those employed by the unions.

The role of small business in the Australian economy is widely recognised. One widely used definition threshold is 20 employees: it is estimated that businesses with 20 or fewer employees account for over 80 per cent of the ventures and 70 per cent of the workers in Australia.

As in the UK there are tensions and challenges to be faced in improving the health and safety of these employees. There is widespread buy in to the concept of improving OHS but the managers and owners of businesses are conscious of the costs and overhead it implies, which are proportionately greater in a small business. In a survey of 1685 employers conducted by the ACCI (Australian Chamber of Commerce and Industry) held before the 2004 election it was found that:

• Occupational health and safety regulations and inspections rated fourth and fifth highest in the level of business concerns about government regulation; -

• Over 60% of employers were concerned at the level of OH&S regulation; -

• 50.8% of employers regarded workplace health and safety inspections as a major or moderate problem; -

• Workers compensation was the dominant workplace issue of concern; and –

• Union OH&S inspections caused greater concern amongst employers than industrial action.
The results were discussed by employer and business organisations at a national ACCI meeting in Adelaide in July 2004 which concluded:

“Employer bodies have concluded that the poor quality of OH&S regulation in Australia is tying employers up in process driven compliance, and impeding the capacity of employers and employees to make workplaces safer. Many employers, especially small and medium businesses, find the system of OH&S laws and regulations to be complex, bureaucratic and difficult to understand, let alone implement.”

Hence there does appear to be a developing reaction against formal regulation and inspection as a means of improving OHS. Nevertheless, as in the UK, there is national concern about the direct and indirect costs of work related injury and ill health. The recent NOHSC Report “The Cost of Work related Injury and Illness for Australian Employers, Workers and the Community” estimated a total cost (direct economic cost plus pain, suffering and early death) of A$ 82.8 billion (approximately £33 billion). That is approximately twice the UK figures calculated in “The Costs to Britain of Workplace Accidents and Work Related Ill Health in 1995/96”; despite a population little more than one third of the UK figure. One partial explanation may be the inclusion of work related road casualties in Australia. The methodology in the NOHSC report is described clearly. Detailed comparison with UK figures would be possible and interesting but is beyond the scope of this report.
APPENDIX D

REFERENCES FOR APPENDICES
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1. http://whig.org.uk/groups/whn/bradford
display_single_project_from_browse.php?Project_ID=128
   Policy and Practice
8. http://www.sohas.co.uk/
   Care. HSE Research Report 242
     Care. HSE Research Report 242
     Care. HSE Research Report 242
     Uptake of Health and Safety Interventions aimed at Small Businesses. *Health
     Education Journal*. 59, pp.157-165
13. http://www.sahw.co.uk/
15. SME Toolkit – A Simple Step by Step Guide. Scotland’s Health at Work
     Based on the Internal Provision of Occupational Health Services within the National
     Health Service. Occupational Medicine. 54, pp.165-171


http://www.hebs.com/workpositive/

Improving Occupational Safety and Health in SMEs: Examples of Effective Assistance. (2003) European Agency for Occupational Safety and Health at Work. Section 2.5, pp. 47

http://www.hse.gov.uk/events/goodn1.htm

Improving Occupational Safety and Health in SMEs: Examples of Effective Assistance. (2003) European Agency for Occupational Safety and Health at Work. Section 3.4, pp. 78
30 Improving Occupational Safety and Health in SMEs: Examples of Effective Assistance. (2003) European Agency for Occupational Safety and Health at Work. Section 3.5, pp. 84


32 Improving Occupational Safety and Health in SMEs: Examples of Effective Assistance. (2003) European Agency for Occupational Safety and Health at Work. Section 4.2, pp. 104


34 Improving Occupational Safety and Health in SMEs: Examples of Effective Assistance. (2003) European Agency for Occupational Safety and Health at Work. Section 4.4, pp. 114


44 http://www.workcover.vic.gov.au

45 http://www.state.vt.us/labind/projectws.htm

Occupational health and safety support systems for small and medium enterprises: A Literature Review