The impact of health and safety management
– on organisations and their staff

www.iosh.co.uk/impmanagement

Research summary
IOSH, the Chartered body for safety and health professionals, is committed to evidence-based practice in workplace safety and health. We maintain a Research and Development Fund to support research, lead debate and inspire innovation as part of our work as a thought leader in safety and health.

In this document, you’ll find a summary of the independent research we commissioned from Loughborough University: ‘Occupational safety and health – promoting good health and good business’. This report forms part of a research series to look at the impact of expert safety and health advice.

The opinions expressed in this report are not necessarily endorsed by the Institution of Occupational Safety and Health. Permission to reproduce any part of this work will not be withheld unreasonably, on condition that full attribution is given to the publication and to IOSH.
The impact of health and safety management

What’s the problem?
Some organisations don’t give the protection of their workforce the priority it deserves. This could be down to a lack of knowledge, skills and motivation, or limited staff resources. We know from previous research that cost is also an important factor. Some organisations consider they don’t have the capital to make a proper investment in health and safety – and they fail to appreciate how critical this investment is.¹ And few organisations measure or understand the costs of health and safety failures and miss out on valuable opportunities to make improvements.² We believe this is partly because of the challenge of establishing exactly how effective health and safety management is related to a wide range of performance measures, from profit to staff turnover.

More and more research shows the economic value and effectiveness of good health and safety management – there is much less information about the impact it has on employees, their health and wellbeing.

So what difference does investing in health and safety management make to an organisation’s performance – its profit margin, staff turnover, days lost because of accidents and ill health – and the health and wellbeing of its staff?

We commissioned Dr Jane Ward, Professor Cheryl Haslam and Professor Roger Haslam at Loughborough University to research this complex issue. We asked them to look at a range of sectors and different sized organisations, and to focus specifically on how proactive health and safety management affects organisations – and the people who work for them.

The research had four key goals:
- find out how different sized organisations, and organisations in different sectors, vary when it comes to their performance (for example profit margin, turnover and sickness absence) and the attitudes, health and wellbeing of their staff
- look at the impact of different approaches to health and safety management on the organisation and its staff
- compare organisations in the same sector having different approaches to health and safety management
- identify examples of best practice.

What did our researchers do?
The team at Loughborough University recruited 31 organisations to take part in the research, representing small (fewer than 50 employees), medium (50 to 250) and large (more than 250) organisations and a variety of sectors.

The team carried out the project in two stages:
- structured interviews with key people in the organisations
- a survey of staff in the organisations.

The team interviewed a senior manager or board representative to get a strategic view on health and safety, a health and safety practitioner or someone whose role incorporated a substantial amount of health and safety, to get an operational perspective, and a trade union or staff representative to get a perspective from the workforce.

Small organisations were typically only able to provide one interviewee. In total, the research team interviewed 78 people: 35 senior managers, 27 staff with operational health and safety responsibility and 16 trade union or staff representatives.

The interview questions covered 10 themes relating to health and safety management:
- background and personnel
- attitudes
- priorities
- management commitment
- stakeholder involvement
- training and communication
- future improvements
- management systems
- monitoring health and safety
- auditing and benchmarking.

<table>
<thead>
<tr>
<th>Small (&lt; 50 staff)</th>
<th>Medium (50–250 staff)</th>
<th>Large (&gt; 250 staff)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biotechnology consultancy</td>
<td>Asbestos management company</td>
<td>City council (North of England)</td>
</tr>
<tr>
<td>Ceramics manufacturer</td>
<td>Ceramics manufacturer</td>
<td>City council (South East of England)</td>
</tr>
<tr>
<td>Dental practice</td>
<td>Clay and synthetic additives manufacturer</td>
<td>Facilities management company – defence and logistics</td>
</tr>
<tr>
<td>Electronic components manufacturer</td>
<td>Construction company</td>
<td>Facilities management company – nuclear</td>
</tr>
<tr>
<td>Hairdresser</td>
<td>Construction component manufacturer</td>
<td>Fire and rescue service</td>
</tr>
<tr>
<td>Scaffolder</td>
<td>Electrical power supply manufacturer</td>
<td>Further education college</td>
</tr>
<tr>
<td>School</td>
<td>Housing association</td>
<td>Police force</td>
</tr>
<tr>
<td>Site mixing company</td>
<td>Housing developer</td>
<td>Students’ union management company</td>
</tr>
<tr>
<td>Wind power developer</td>
<td>Leisure centre</td>
<td>University</td>
</tr>
<tr>
<td></td>
<td>Polymer manufacturer</td>
<td>Utility company</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste recycling company</td>
<td></td>
</tr>
</tbody>
</table>

The 31 organisations involved in the research, shown by size and type
A total of 2,067 staff responded to the survey (8,071 questionnaires were distributed). The team gathered information on:

- their attitude to their job, including commitment to the organisation, job satisfaction, whether they were planning to leave, and job motivation
- absenteeism and performance
- work-related ill health
- health and wellbeing – general health, mental health and ‘vitality’
- safety climate, covering perceptions of nine aspects: management commitment, communication, priority of safety, safety rules and procedures, supportive environment, involvement, personal priorities, personal appreciation of risk and physical environment.

The researchers also asked the organisations involved to give information based on the previous 12 months on:

- profit margin – as a percentage of turnover
- staff turnover – the number of leavers as a percentage of total staff
- number of reportable accidents (more than 3 days’ absence from work)
- number of non-reportable accidents (up to 3 days’ absence from work)
- total number of accidents
- number of days lost because of accident or injury
- total level of sickness absence.

The team compared information on how organisations performed and staff attitudes, perceptions, health and wellbeing in the public and private sector and in different organisation sizes. The researchers also checked for differences based on industrial sector.

To find out whether a proactive approach to health and safety management was linked to benefits for both the organisation and the people who worked for it, the researchers used the information from the interviews, together with the information on performance and staff attitudes, perceptions, health and wellbeing. The team categorised different health and safety management approaches using the Continuous Improvement Cycle (CIC) model. This model describes three main types: ‘yet to be fully engaged’, the ‘complier’ and the ‘very good’ (the most proactive).

The team chose this model as it was designed by health and safety practitioners and academics from across different industries and aims to differentiate how organisations approach health and safety management. Although not fully road-tested, the team further developed the model through the interview analysis, identifying drivers and indicators of the three management approaches.

Five organisations were categorised as ‘yet to be fully engaged’, 13 were ‘complier’ and 13 were ‘very good’.

---

What did our researchers find out?
When the research team looked at the differences in organisation performance, staff attitudes, perceptions, health and wellbeing, sector and organisation size they found that:
- People working in the public sector report lower levels of vitality, less positive safety climate perceptions and more work-related illness than those in the private sector.
- People working in large organisations report better mental health and vitality, a lower likelihood of leaving their job, and less work-related illness than those in small and medium sized organisations.
- On three aspects of safety climate, people working in large organisations report poorer perceptions than those in smaller businesses. They feel that safety rules are less important, they are less involved in health and safety management, and working safely is less of a priority.
- Large organisations report higher total sickness absence rates per employee than small and medium sized organisations. But based on the staff survey, people in large organisations report less work-related illness than those in small and medium organisations. This apparent contradiction could be explained by the provision of wide-ranging sickness management policies in large organisations. Smaller organisations are less likely to have such comprehensive systems, potentially encouraging staff to come to work when they may otherwise stay at home. This could lead to a dual effect – an increase in work-related ill health, as people work when they may not be fit enough, but also a cut in the level of sickness absence.
- People working in construction, property development, renting and business activities, and electricity, gas and water sectors consistently report significantly higher levels of wellbeing than other sectors. These sectors make up the bulk of the private sector staff surveyed so this result underlines the differences between public and private sectors.
- Construction workers scored the highest on four out of the six staff wellbeing factors, with higher levels of general health and commitment to their organisation, as well as the most positive safety climate perceptions and top rated overall self-reported performance. The construction sector was represented almost entirely by one organisation, categorised as ‘very good’, so this finding could reflect its approach to health and safety management rather than representing the industry as a whole.
- People working in electricity, gas and water, and property development, renting and business activities sectors also consistently report job and safety attitudes and levels of health and wellbeing that were in the top half of the sector rankings.
- People in health and social work, education and public administration and defence sectors all report consistently lower averages for staff wellbeing.
Our researchers compared organisation performance and staff attitudes, perceptions, health and wellbeing for organisations that were ‘yet to be fully engaged’/’complier’ and those that were ‘very good’.

In terms of organisation performance there were no significant differences between the two categories, but the research team found some interesting trends:
- profit margins increased with a more proactive approach to health and safety management
- reportable accident performance improved and ‘days lost’ totals were cut with a more proactive approach to health and safety management
- total sickness absence increased with a more proactive approach to health and safety management. This may be due to a lack of sickness absence policies in ‘yet to be fully engaged’ organisations.

In terms of staff job attitudes and perceptions of safety there were some significant differences between the two categories:
- people working in ‘very good’ organisations had more positive perceptions about safety in eight out of nine aspects of safety climate
- people working in ‘very good’ organisations are more committed and more satisfied with their job than people in organisations that are ‘yet to be fully engaged’/’complier’
- self-reported work-related illness is slightly higher in ‘very good’ organisations.
There were no significant differences in health and wellbeing between the two categories. But the research team found that when they tested the relationship between workers’ attitudes to their job and their perceptions of safety and general health, mental health and vitality, there were some predictors of health and wellbeing:

- higher levels of general health were linked with greater job satisfaction and greater personal appreciation of risk
- higher levels of mental health were linked with job satisfaction, a lower likelihood of leaving their job, more positive safety climate perceptions in terms of safety rules, personal appreciation of risk and a supportive work environment
- higher levels of vitality were linked with higher job satisfaction, a greater personal appreciation of risk and more positive perceptions of the physical work environment.

The team also found that when it compared organisations from the same industry, people working for organisations that were proactive in health and safety management generally report more positive safety climate perceptions and job attitudes and experience better health and wellbeing.
What does the research mean?

- A proactive approach to health and safety management is good for staff! Feeling more positive about your organisation’s safety climate, job and the organisation itself is linked to better health and wellbeing.
- Organisations with a proactive approach to health and safety management tend to perform better in terms of profit margins, number of accidents and days lost because of accidents. But more research is needed to establish significant relationships.
- People’s attitude to their job and their perceptions of safety climate can be predictors of their health and wellbeing.
- Good practice examples show proactive health and safety management in action (turn to page 09 for case studies).
- The Continuous Improvement Cycle framework used to categorise different approaches to health and safety management provides a useful tool for health and safety professionals and others to determine the current status of health and safety management and to use as a platform for planned improvement.

Don’t forget

Like most studies, this one had some limitations. Although the organisations that were involved covered a wide range of sectors and different sized organisations, some industry groupings were made up of one organisation whose staff dominated the survey responses for that sector (as with construction) or were represented by a single organisation (as with health and social work). Findings are more robust for the larger groupings, such as utilities and property development.

The research team found some interesting trends in organisation performance with increasingly proactive approaches to health and safety management – the lack of statistically significant differences may be down to the relatively small sample size. Involving more organisations in a future study may reveal significant differences.

You also need to bear in mind that the study used a selection of organisation performance measures, which was not exhaustive.
What’s next?
This project is the second in a research series commissioned by IOSH to focus on the impact of health and safety on performance.

The first report in the series looks at the effect of investing in health and safety advice on performance in the construction sector (Glasgow Caledonian University). The third research project looks at the links between health and safety culture, advice and performance (Cardiff University).

Backing up our arguments for higher standards in health and safety
This research shows the benefits of a proactive approach to health and safety – not just on people’s health and wellbeing, but on the business’s profit margins too.

For more information on these and related topics, download our guides on ‘Setting standards in health and safety’ (www.iosh.co.uk.standards) and ‘Reporting performance’ (www.iosh.co.uk/performance).

Our summary gives you all the major findings of the independent project report by Loughborough University. If you want to read about the study in more depth, you can download the full report from www.iosh.co.uk/impmanagement.
Integrating occupational health with safety
Nurturing a positive occupational health culture

Organisations with a proactive approach to health and safety management sometimes not only provide occupational health services, but also try to nurture a positive culture around health. This was demonstrated by one of the organisations from the public sector and defence industry in the research sample, whose occupational health staff have worked hard to ‘embed’ their function in the consciousness of managers and staff as a positive support for both work- and non-work related physical and psychological health issues. The senior occupational health representative described how this was manifested:

“If I ring them when they’re off sick, when I first started here they thought I was a spy for the company and why would the nurse possibly be ringing them. Now if I don’t ring them in a week I normally get a phone call saying, ‘I’ve been off all week and I haven’t heard from you.’ It is much more accepted. Because we’re out as well, what you find is that someone with a problem may not approach you in the big group but they will usually offer to carry your bags on the way out or find some way of speaking to you while you’re in that venue. … They don’t see us as being part of that kind of ivory tower scenario. They know us by name; they know how to get in contact with us.”

When asked to describe how this positive attitude towards occupational health had been achieved, she went on to outline a programme of health promotion and health checks for operational staff and more office-based people:

“I don’t just sit in this office. We go to every station and we undertake health screening. We undertake health promotion talks. We hold regular clinics. We contact people by telephone, by letter when they’re off sick. So we see them very regularly. … We just recently held a training day for admin staff where we … had the things like personal safety, action at work. We had groups and we had things like stress awareness, relaxation. … We spoke about that. We had cholesterol testing during the lunch break. We had body composition analysis. That was just on the kind of average day that we put together. So we hold those once a year.”
Good practice in action 2

Health and safety training and communicating information

Behavioural safety – the big training challenge

A number of organisations in the study highlighted behavioural safety as a key focus in their health and safety training. An electrics, gas and water company described how it was training managers through ‘Safe and unsafe act’ (SUSA) discussions, facilitated by external consultants. One health and safety manager outlined how training line managers was backed up by basic behavioural safety training for staff:

“All our managers are trained in the SUSA technique now, the ‘Safe and unsafe act’ but we’re also putting every single one of our operators through a mini SUSA between now and April as well so they can start to understand what the hell the manager is talking about when he’s got this little blue book out and he starts to talk to him.”

Another organisation also reported employing outside consultants. This company wanted external help to introduce a behavioural safety approach as a way to change culture. A senior manager from a construction company said:

“We are dealing with a company at the moment … and they deal with a different approach to health and safety – rather than a policing aspect, it is changing culture, where they have done a lot of work on oil rigs, and had a lot of success where if something has gone wrong, you go out and meet people on the job and rather than giving them a bashing if they are doing something wrong, finding out why they are doing wrong. It is basically a different approach, so we are actively dealing with [outside consultants] at the moment, who are specialists in that sort of field. So it is culture-based, trying to get a step changing culture.

A different approach to behavioural safety was demonstrated by a medium sized manufacturing company. This example highlights how a focus on behavioural safety techniques doesn’t necessarily require the use of expensive external consultants. The company described its process of staff observation by in-house assessors – trained in behavioural safety – to identify ‘unsafe behaviours’ before they become ‘unsafe acts’:

“We’ve been running the behavioural safety process now since 2000. … The reason why is that our health and safety performance went through a little bit of a shaky patch for a year or two and we realised that you can have procedures and systems but you also need to be doing other things. And the processes are very proactive – you’re actually watching people doing jobs and giving feedback. So, you’re watching them do things before there’s any chance of getting hurt really. If you think about accident investigation and near-miss reporting, they’re things that you do after the event. The observations of behaviour are while people are doing tasks normally…”
Management commitment and planning
Partnership working

Across the key indicators in the further developed CIC model, where organisations were categorised as ‘very good’, there was often an emphasis on the importance of partnership working. This was manifested in a number of ways. For example, in some organisations the occupational health function was firmly embedded within the safety function. For other organisations it was the alignment of health and safety with human resources, allowing a proactive approach to managing potential health and safety issues. The health and safety adviser in an educational establishment explained how through working with human resources the organisation had developed a ‘health flag system’, which identifies potential health issues with each job role, and allows proactive management of these issues:

“It’s something that we’ve developed here ... an Occupational Health Flag system which, how it works is, any new member of staff, the job description is passed on to our office. We look at the job description and then see what sort of activities they’re engaged in and discuss it with the school or unit in which they’re going to work. We try and identify the hazards and largely the health hazards associated with a particular job. So, for instance ... if it was one of our campus service attendants, porters by another name, that the job identifies they have to do a lot of manual handling then we’d identify that there could be a health risk as far as musculoskeletal issues are concerned.

Someone else may be identified as working with respiratory sensitisers, so we would identify the job as being a job in which the hazard could be that they’re exposed to these respiratory sensitisers. Once we’ve identified these, we literally give them a tag, an identification code for those particular hazards. And then looking at all that as one, we then put a flag on them and the flag would be a red, an amber, or a green.

The red, amber and green flag identifies the level of need for assessing individuals before starting work, and on an ongoing basis, in order to manage each role’s occupational health needs:

“If it’s a red flag, then that individual would be seen before starting work. So these are largely those that are going to be engaging in working with respiratory sensitisers etc. That enables us to have a base level for them so we can monitor them then through health surveillance. If it’s an amber flag, this could be somebody that perhaps is working with display screen equipment. Then the occupational health nurse would make contact with that member of staff within four weeks of them starting work to make sure that the display screen equipment risk assessment is being conducted, for instance. And then, by and large, a lot of the jobs would be green flag in which it would be that the hazards have been identified however, there’s no direct need for them to be seen by the occupational health nurse unless there’s a specific issue identified.

continued on next page
The flag system is managed collaboratively between the job description and recruitment systems in the human resources team and the health and safety function:

“[the health flag] is then attached to the job description. Then the health questionnaire and the job description is sent out to the individuals applying for the job. When they return the questionnaires, the health questionnaire can be read in conjunction with those flags by the occupational health nurse so that she can identify if there are any issues which would then mean that she needs to see them before they start work or follow the programme, as I say, see them within a month or whatever’s required.”

When asked if the ‘flag system’ that was developed collaboratively with HR had brought about benefits for the organisation, the adviser outlined how the alignment with a ‘business function’ allowed him access to increased information and the ability to influence management more widely as a health and safety professional:

“In simple terms, the flag system that I’ve mentioned, I don’t know how that could have worked as effectively if we weren’t working closely with them. Training needs, because staff development is within HR ... we work closely with staff development. As an occupational health and safety professional, I think my role is to sell the fact that occupational health and safety is good business. HR is about the business and so, being able to work closely with other HR professionals means that I can influence them ... so it raises my profile. It also gives me a better indication of what the important issues are as far as the business is concerned so that I can then promote health and safety and the best way to improve the health and safety management and improve health and safety in the organisation. So, I’ve seen lots and lots of benefits. There have been various discussions within my professional body about where health and safety should be aligned. Some people don’t think that it fits in nicely with HR and I can understand why because perhaps it’s down to individuals within HR, perhaps in other organisations, but I can certainly say, as far as our organisation is concerned, it’s a model. It’s worked really well.”

One further instance of positive partnership working was where organisations had developed productive and supportive working relationships with trade unions or staff associations. This was evidenced strongly in some of the public sector organisations particularly, which generally experience a more unionised environment. This support for union input into health and safety management did appear to follow through into active joint working with the unions in some organisations. A senior manager in the public administration and defence sector explained how in his organisation, health and safety professionals worked alongside union representatives as part of the monitoring and inspection process:

“We also have joint inspections with the trade unions on a regular basis. We will walk around the site and see what is happening on the site alongside the trade unions, and we’ll pick up things that should be done.
IOSH is the Chartered body for health and safety professionals. With more than 44,000 members in over 120 countries, we’re the world’s largest professional health and safety organisation.

We set standards, and support, develop and connect our members with resources, guidance, events and training. We’re the voice of the profession, and campaign on issues that affect millions of working people.

IOSH was founded in 1945 and is a registered charity with international NGO status.