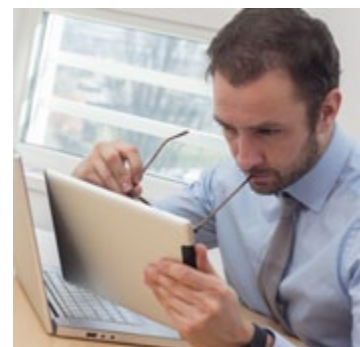




WORKING FOR A HEALTHIER FUTURE

Ergonomics and Human Factors



Why Use IOM?



IOM is a leading international provider of health and safety solutions to industry, commerce, public sector and professional bodies.

Everyone in the IOM Ergonomics and Human Factors team are members of their associated bodies; the ergonomists are members of the Chartered Institute of Ergonomics and Human Factors, for which IOM is a registered consultancy and the psychology professionals are members of the British Psychological Society.

We aim to offer:-

- Advice that is evidence-based on current research knowledge;
- Practical and pragmatic solutions;
- Best practice guidance from our research

Some examples of our work

- Systematic review of osteoarthritis occurrence in specific occupational groups
- Systematic review of workplace interventions to improve workplace wellbeing
- Home worker and office based DSE assessments
- Evaluation of lifting aids
- Evaluation of two shift designs



Our Company

Working for a Healthier Future

At IOM (Institute of Occupational Medicine) we deliver the broadest range of workplace health services in the UK today. We have over 100 specialist staff strategically located across three UK locations. We work for thousands of organisations and our clients are reassured that with IOM they can access some of the most experienced, independent health and safety experts in the country.

IOM helps employers deliver world class workplace practices:

- We understand the factors that affect human health in the workplace and the wider environment.
- We identify and promote practices which can improve the health of workers and the wider population.

We support companies in diverse industries in dealing with risks from established workplace hazards such as noise, chemicals, asbestos, heat, dust or vibration. Emerging risks from new technologies such as those involving nanomaterials are also assessed. Our support also extends to Expert Witness services.

Good health means good business. As experienced consultants and scientists we understand what organisations need to do to protect their employees and their businesses. We therefore go beyond workplace compliance and establish true best practice and accurate insight into workplace health issues in your organisation.

Our clients benefit from some of the foremost experts in their fields. We have an international reputation for excellence in research, services and consulting activities across all industry sectors from high technology to heavy industry. An understanding of workplace health is critical to every business. At IOM we ensure your organisation is at the very forefront of this understanding, as we work together for a healthier future.

Ergonomics and Human Factors

Improving workplace health and wellbeing

Managing exposure to poor ergonomics design in the workplace and protecting worker health is at the heart of IOM's expertise. Our Ergonomics and Human Factors team at IOM is multidisciplinary, comprising ergonomists and psychology professionals, who frequently work with our occupational hygiene and safety team.

Ergonomic and psychosocial hazards are present in every workplace whether heavy industry, manufacturing, waste management, catering, retail or office based environments. There is a duty by employers to assess risks (both physical and psychosocial), manage the risks through risk reduction measures and develop control measures to improve health and safety.

When evaluating workplace, equipment or personnel problems we take an evidence-based approach to our work, drawing on the wealth of scientific research which underpins our ergonomics knowledge and expertise.

The same expertise is used to identify cost-effective solutions based on best practice and our extensive experience.

We will advise about how best to comply with relevant legislation or standards.

At IOM we cover Ergonomics and Human Factors in their broadest sense and our services include:

- Workplace Ergonomics
- Musculoskeletal
- Thermal Environment
- Ageing and Work Ability
- Stress and Psychosocial Risks
- Personal Protective Equipment (including Respiratory Protective Equipment) Evaluation





Workplace Ergonomics

There has been a long history of ergonomics research and consultancy at IOM, beginning with work carried out with coalminers in the 1960s and 70s. The IOM has employed professional ergonomists since its inception in 1969 and continues to do so.

The mixture of research and consultancy work carried out by IOM ergonomists helps to ensure that the advice given is drawn from a strong evidence base, particularly important when spurious assertions about 'ergonomic' products provide good advertising copy. Our work in the office environment provides a good example of this, where the advice provided to employers (and individual employees) is derived from research knowledge fuelled by scientific studies into office health issues.

Over the years, IOM ergonomists have worked on a wide variety of problems, in an extensive range of industries. Just a few of our main topic areas have been singled out for specific attention in this brochure but, if you have a particular workplace challenge you think ergonomics might be able to address, we will be able to help you.

Musculoskeletal

Musculoskeletal disorders (MSDs), is the term used to describe a variety of conditions including back pain, upper limb disorders and lower limb pain. They continue to be a significant problem for employers and employees alike in both industrial and office workplaces. Therefore assessing the risks of MSDs to which those employees may be exposed is an essential aspect of the risk management process.

Our expertise in this area includes:

- Manual handling assessment and provision of solutions to reduce risk;
- Display Screen Equipment risk assessment;
- Work and workplace evaluation at design stage to improve fit to workforce;
- Workplace evaluation of existing environments to provide solutions.

Thermal Environment

Heat stress is not just a potential problem in the hot working conditions found in industries such as smelting and glassmaking. Any work involving the use of chemical protective clothing can present challenges, especially where the clothing isn't vapour-permeable.

We can provide advice and guidance to industrial clients on the assessment and management of the risk of heat stress including:

- the application and interpretation of international standards;
- development of safe systems of work;
- physiological monitoring of heat strain;
- practical measures to reduce or control any risks.

Ageing and Work Ability

In the UK, the removal of the default retirement age and the push to extend working life requires us to have a better understanding of the effects that age-related change can have on our ability to work and how best to support our older workers.

Our research in the area of ageing and work feeds into our consultancy service. We have been involved in the collation of research evidence and the development of guidance for managing older workers, and the evaluation of the research evidence in relation to the physical capabilities of emergency service workers.

Our expertise in this area includes:

- Workplace assessment to identify specific risk factors for older workers;
- Recommendations on workplace and work organisation re-design to accommodate older workers;
- Evaluation of objective physiological evidence in relation to work requirements and capabilities;
- Use of the Work Ability Index and age profiling tools

Personal Protective Equipment

Personal Protective Equipment (PPE) covers very many items – ranging from fall-arrest harnesses to rugby gum-shields. Perhaps the most common items used at work are safety boots, hi-vis clothing, other protective clothing (e.g. chemical protective clothing and gloves), respiratory protective equipment (RPE), and hearing defenders.

Wearing PPE can create additional physical strains on the wearer, impair a wearer's ability to carry out their work and create significant levels of discomfort.

Any item of PPE imposes a barrier between the wearer/

user and the working environment. From our research and consultancy experience we can:

- Help manufacturers develop more acceptable PPE;
- Assist employers in selecting PPE which, as well as being technically appropriate is as wearable and acceptable as possible.
- Assist employees in ensuring that PPE provided is as fit for purpose as possible – not just technically suitable (which is vital)



Stress and Psychosocial Risks

Work-related stress is defined by the Health and Safety Executive as “a harmful reaction that people have to undue pressures and demands placed on them at work”. The most frequently reported causes of work-related stress include pressure from work, lack of managerial support and work-related violence and bullying. At an organisational level this can cause lost working days, low morale and reduced performance, at an employee level it can impact on physical and mental health, relationships and work performance.

IOM ergonomists and psychology professionals can advise on:

- The use of the HSE Management Standards to identify and solve local problems;
- The use of online surveys to assess the levels of organisational stress while maintaining complete confidentiality for participants;
- Advise on work organisation to maximise wellbeing at work;
- Development of Guidance.

Rapid and Systematic Reviews

Our consultancy work is evidence-based to ensure that advice we give is good practice and up-to-date. To enable us to do that, we are skilled in systematic, narrative and rapid reviews that enable us to identify previous research or reports that feed into our consultancy work.

Our work has included large scale reviews of interventions for mental wellbeing, the health of health practitioners and the occupational health needs of firefighters.

We have also undertaken reviews for legal cases with regard to the possible work-relatedness of specific musculoskeletal disorders.



Training

Ergonomics and Human Factors issues are widely recognised as playing a key role in workplace health and safety. However, although there are times when you need the help and guidance of a professional, there is much that occupational health and safety professionals, such as Health and Safety Advisors or Occupational Hygienists, can do themselves.

Recognising this, IOM Ergonomics and Human Factors specialists offer a variety of off-the-peg and tailored courses (even our off-the-peg courses usually include some tailoring). Courses range in length from an hour or two to a full week. We can offer courses on all of the topics covered by our web pages including:

- Workplace Ergonomics
- Manual Handling
- DSE
- Thermal Environment
- Ageing and Work Ability
- Psychosocial Risks and their Assessment

Expert Witness Service

At IOM, our dedicated team of experts have provided evidence over many years in civil litigation cases across all parts of the UK. Our ergonomists, safety specialists and occupational hygienists have provided the courts with independent and authoritative evidence in a range of occupational health and safety disciplines.

Cases addressed by our professional ergonomics and human factors staff have included ones relating to:-

- Back injury from manual handling;
- Upper limb disorders from both office and industrial work;
- Fork lift truck accidents;
- Workplace stress;
- Product safety;
- Excessive heat exposure.

**IOM – working for a healthier future across
a wide range of workplace health needs.**

- Specialist Hospital Ventilation
- Occupational Hygiene (COSHH and LEV)
- Nanotechnology Safety
- Environment and Public Health
- Expert Witness Services
- Lab Services
- Human Factors
- Research
- Asbestos in Soils
- Training



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