

MAINSTREAM RESEARCH NEWS



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□ NEW ONLINE NEWSLETTER - 'SCIENCE & RESEARCH OUTLOOK' - REPLACES MAINSTREAM RESEARCH NEWS AND OFFSHORE RESEARCH FOCUS

In Autumn 2004, HSE will launch a quarterly on-line newsletter 'Science and Research Outlook,' providing information on the breadth of HSE's science and engineering activities. Science and Research Outlook will replace the existing HSE quarterly science newsletters, Mainstream Research News and Offshore Research Focus. Users of the newsletter's interactive website will be able to search and print articles relevant to their discipline, receive regular email notifications of newly published articles and customise output to their specific needs. The site will also allow users to provide important feedback to HSE on its science and research activities.

To access the newsletter site go to: <http://www.hse-scienceoutlook.com>

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□ MUCH MORE THAN A PIECE OF PAPER

Dr Paul Davies, HSE's Chief Scientist, and Professor Mike Depledge, Head of Science at the Environment Agency (and an external adviser to HSE's Science Strategy Committee), took the opportunity in June to re-energise joint collaborative activities on science by agreeing and signing a new Memorandum of Understanding (MoU). A copy can be accessed on the HSE website at: <http://www.hse.gov.uk/aboutus/framework/f-mour&d.pdf> HSE and the Environment Agency are very similar organisations, both operating as non-departmental public bodies with regulatory responsibilities and sharing a number of common interests within the environmental field. For a number of years we have worked together, exchanging information and good practice and providing each other with advice and support as required. Formalising our collaboration on science activities through the new MoU enables the operation of simple and consistent mechanisms to identify and address issues of joint interest and allows us to better recognise and realise the benefits from such joined up working. Exchanges of information will be coordinated either via a 'matchmaker' (a single point of contact in each organisation responsible for utilising existing knowledge networks to identify the most relevant interested parties for a particular topic or area of interest), topic champions (responsible for developing inclusive collaborative approaches for identified joint high priority topics) or a mix of both approaches, as appropriate.

In addition, HSE, the Environment Agency and the Health Protection Agency are currently planning a joint workshop, to be organised and facilitated by the Health and Safety Laboratory. The workshop will focus on a number of topics including communications, the many facets of risk (assessment, education, communication, etc) and human factors and will consider the way in which elements of these topics relate to how we are perceived by and interact with our stakeholders.

Those HSE staff who would like to engage with the Environment Agency on a particular topic, or those who would like further information or details on our existing collaboration on science matters, **please contact:**

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Dr Paul Davies and Prof. Mike Depledge
signing the EA/HSE MoU

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□ WHAT'S NEW?

□ GATHERING COST/BENEFIT STUDIES THAT SUPPORT TACKLING MUSCULOSKELETAL DISORDERS (MSDs)

(Contractor: Hu-Tech Associates Ltd)

HSE has developed a new research agenda for its Musculoskeletal Disorders Priority Programme. One element that has been highlighted as requiring attention is the need to better publicise information such as evidence based cost/benefit studies that clearly demonstrate the financial or health implications of successful ergonomic interventions within the workplace. It is thought that such information will be a powerful tool in helping to persuade employers to consider ergonomic interventions to help prevent the onset of MSDs in their employees.

In order to address this, this research project has been commissioned. It aims to provide 25 to 30 cost/benefit case studies. These will cover ergonomic interventions that have proved to be successful, both financially to the company and to the health of the individual. The suite of case studies will cover a variety of industrial sectors and will include examples that are specific to upper limb, lower limb and lower back disorders.

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□ SAFE SITES: DRIVER PERCEPTIONS

(Contractor: Partnership Sourcing Ltd)

The frequency of accidents to delivery drivers whilst they are involved in activities on delivery or collection sites has been identified by HSE as a source of serious concern. Safety procedures on sites vary and it is felt that there would be great value in obtaining the views of drivers about what they feel constitutes a safe site.

The project will involve a small, targeted survey, using a customised, structured questionnaire, of approximately 20 drivers in several companies. Face to face interviews will be conducted at the drivers' depots.

The survey will elicit the drivers' opinions and suggestions as to what makes a site safe or unsafe from their perspective. If appropriate, the results will be grouped according to size, location or type of site. Anecdotal evidence will be collected to help identify areas of greater or lesser concern. The discussions with drivers will also aim to collect material that might lend itself to be used as part of an HSE awareness campaign, drawing attention to potential dangers and highlighting the good points/aspects of on-site transport management.

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□ FIRE SAFETY IN HYPERBARIC CHAMBERS

(Contractor: Health and Safety Laboratory)

Between 1996 and 2000, HSE commissioned a number of practical tests to examine the effects of fire in hyperbaric environments (where the pressure is raised above normal atmospheric levels). This work supported the Approved Code of Practice associated with the 1996 Compressed Air Working Regulations and later, the introduction of oxygen decompression in compressed air working. However, hyperbaric working environments also occur in diving and for medical treatment. HSE initiated a series of meetings to which interested parties from all parts of the hyperbaric industry were invited to discuss fire safety issues. These meetings highlighted some differences in practice across a range of users, together with a lack of hard evidence with which best practice could be justified. The aim of this project is to develop a sound, physically-based understanding of fires in (and a protection methodology for) all types of hyperbaric chamber. Appropriate guidance for chamber builders, operators and regulators will also be produced.

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□ EVALUATION OF HSE'S FIELD OPERATIONS DIRECTORATE'S TOPIC-BASED INSPECTION APPROACH

(Contractor: Risk Solutions)

In April 2002, HSE's Field Operations Directorate changed the way in which inspections were carried out. Instead of the traditional approach of inspecting all machinery/processes present, inspectors targeted their efforts on specific areas that reflected HSE's priority topics – MSD, stress, falls from height, workplace transport and slips, trips and falls. This approach was adopted to make sure that most of HSE's efforts were focused on the areas where it was felt that the greatest impact would be made to reduce the number of injuries and incidence of work-related ill-health. This project will evaluate HSE's new approach to inspection to assess: how inspections are actually carried out; if the new system has led to better practice by employers; if there has been an increased level of enforcement action on priority topics; and whether risk control indicators show that standards of compliance have improved. Overall, the evaluation will judge whether the move to topic-based inspection has had the impact that was intended.

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□ WHAT'S NEW?

□ DATA ON FIRST AID AT WORK COURSES AND TRAINEES IN GREAT BRITAIN

(Contractor: Health and Safety Laboratory)

The effectiveness of the first aid regulatory regime (The Health and Safety [First-Aid] Regulations 1981) is currently being evaluated. Views were sought on the future regulation of first aid at work via a discussion document, which attracted considerable interest and over 500 comments were received. These responses have been evaluated and from this, advice and recommendations for action will be presented to the Health and Safety Commission.

Recent research findings have suggested that people with first aid training, as well as being trained to manage injuries and illness in the workplace, may actually contribute to preventing accidents and to the promulgation of positive health and safety messages. This is very relevant to the evaluation of first aid regulation and highlights the potential for HSE's wider strategic aims of reducing illness and accidents at work to be aided through the training first aiders receive and their approach to their responsibilities.

Further research may be required on this topic. However, in the first instance, this project will collect basic information on the number of trained first aiders in Great Britain to provide a snapshot in time about training courses and trainees. Although HSE approves the organisations that train first aiders, and those organisations must advise HSE when they intend to run courses, there is currently no obligation to provide statistics on the number passing through the courses.

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□ RESEARCH ON METHODS OF ASSURING THE SAFETY OF CRITICAL SYSTEMS DEPENDING ON COMPUTATION AND HUMAN ACTIVITY

(Contractor: Safety Systems Research Centre (SSRC), University of Bristol)

Since 1998, a consortium of industrial partners (British Energy/BNFL, Lloyds Register and HSE) has funded the SSRC to develop integrated methods of assuring the safety of critical systems, particularly those where safety depends primarily on computation and human activity. Attention is focused on systems providing essential or safety critical functions and where there is concern about how reliability may be assured. Of particular interest are: programmable electronic systems, where exhaustive functional testing is not achievable, that are pervasive, complex and increasingly integrated e.g. communication and control systems; and component-based systems developed from reusable hardware and software components, which pose additional challenges for assessing dependability.

Within the SSRC's work programme, HSE has interests in: statistical software testing to estimate the reliability of complex industrial software; assurance of commercial, off the shelf (COTS) – based systems to construct reliable software programs from reliable components; geographical probability methods to expose the logical structure of complex safety arguments for international safety standards, such as IEC 61508; software fault tolerance; and human fault tolerance in system designs that incorporate human activity in safety systems.

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□ EVALUATION OF THE MORCAMBE BAY PRIMARY CARE TRUST FARMERS' HEALTH INITIATIVE

(Contractor: Institute of Rural Health)

People working in agriculture are recognised as a 'hard to reach' group, not only in terms of occupational health support, but also with regards to general health care. They have the highest incidence of self-reported work-related ill health of any industry and HSE, in meeting its Revitalising Health and Safety targets and new commitments on occupational health, needs to establish viable models for improving the provision of occupational health support in the farming community.

HSE was previously involved in a health outreach project (The Farmers Health Project) conducted by the Morcambe Bay Primary Care Trust and funded by NHS North West and the North West Development Agency. This work researched new pathways to meet the health care needs of farmers in Cumbria and considered physical and socio-cultural barriers to access. A new initiative now seeks to build on the work of this previous project. HSE's Agriculture and Food Sector has seen this as an opportunity to establish the extent to which such an initiative may serve as a model for the delivery of occupational health support to the farming community.

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□ WHAT'S NEW?

□ RELIABILITY OF WELL CONTROL EQUIPMENT

(Contractor: Higoose Ltd)

Continued development of the UK oil and gas reserves presents a number of technical challenges. These high pressure, high temperature (HPHT) reservoirs may, as the name suggests, contain hydrocarbons at high pressure (>1000 bar) and high temperature (>130°C) and may also contain toxic substances, such as hydrogen sulphide. The materials, equipment and procedures used to safely manage the extreme conditions encountered in HPHT developments are often at the leading edge of technology. The industry has experienced a number of potentially hazardous events during the drilling, completion and production phases of HPHT field development, with the consequential loss of hydrocarbon containment. Much of HSE's knowledge on the technical challenges from HPHT developments has been gleaned from such events. Through this project, HSE wishes to: review current knowledge for HPHT wells and identify areas for improvement through the lifecycle of the well (drilling, construction, completion, production and maintenance); consider operators' experiences and reflect on the continuing challenges from HPHT developments; and assess and decide upon the potential for a joint industry project to address and remedy and areas of significant uncertainty identified.

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□ LOAD SECURITY INVESTIGATION

(Contractor: Tarmac Ltd)

Both workplace transport and falls from height have been identified by HSE as priority topics for action, targeted to help achieve significant improvements in health and safety performance. This project, which is jointly funded by Tarmac, the Concrete Block Association and HSE, will review issues associated with the transportation of heavy loads, particularly in the concrete block manufacturing industry. The work will consider the underlying science on load stability and restraint systems to allow mechanical roping/sheeting devices to be designed and fitted and for best practice in their use to be identified. The work also aims to reduce or eliminate driver access to loads when loading or unloading to prevent or reduce the risk of falls from height.

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□ PUBLIC PROTECTION CONSULTATION – A PILOT STUDY

(Contractor: People Science and Policy Ltd)

Section 3 of the Health and Safety at Work etc, Act 1974 can be interpreted as placing a wide-ranging duty of public protection on HSE. However, there are other bodies that might have greater expertise in specific areas in relation to this. Often the division of responsibility between HSE and these other bodies is unclear. Because this duty of public protection is very broad, it has the potential to divert HSC/E away from its agreed priorities. HSC's new strategy commits HSE to consult on its role regarding public safety issues by the end of 2004, to encourage wider debate across Government with the aim of achieving greater clarity of responsibilities for agencies involved in public safety issues. This will also enable HSC to be clear about its priorities to best target its limited resources. However, it is currently not clear what the public expects in terms of protection and enforcement. HSE considers that, as a first step, a better understanding of public expectation is required before it consults more widely. This project aims to help deliver this. A number of sessions involving members of the public will be set up, providing a focus to obtain views and develop a better understanding on a variety of issues pertinent to public protection, such as health, education, transport and services. The work will also look at the effectiveness of this approach.

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□ THE COMMERCIAL CASE FOR APPLYING CONSTRUCTION DESIGN AND MANAGEMENT (CDM): CASE STUDIES

(Contractor: Habilis Ltd)

HSE has previously funded a pilot study, which showed that the application of the principles of CDM would provide significant savings on the contract price of construction projects. However, the pilot study did not consider issues such as the up-front costs of implementing CDM at the design stage, the increased material/component costs or the lifecycle costs and how CDM could affect them. This project is intended to look at the bigger picture, to evaluate whether CDM does provide overall savings for construction project clients, through in-depth investigation of a number of medium to large scale construction projects where CDM principles are known to have been applied.

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□ EXAMPLES OF RECENTLY COMPLETED PROJECTS

□ THE EVALUATION OF OCCUPATIONAL HEALTH ADVICE IN PRIMARY HEALTH CARE

(Contractor: The University of Central England)

The aim of this evaluation was to investigate whether the provision of occupational health advisory services in general practice settings would result in improvements to workplace environments and workers' wellbeing.

Data was collected from workers attending 12 general practices in England. Half of the participants were offered occupational health advice almost immediately. At follow-up, 4-6 months later, workplace environment, procedures and organisation and symptom reports were again measured in participants and compared with their original baseline data. A second group of participants who received no occupational health advice until 6 months later were also measured on the same range of workplace factors and compared with those workers at follow-up who had received advice interviews.

Some workplace improvements were evident for those workers who had received immediate advice when compared with those who had not. At follow-up, advised participants reported significantly fewer overall hazards in their workplaces and fewer symptoms than they had reported at the outset, when the baseline measurements were made. Compared with unadvised workers, the advised workers reported more physical hazards in their workplaces, which may be an indication of their increased awareness as a result of receiving such advice. Measures of worker satisfaction and ratings of how useful the advice interviews were demonstrated that such advice was positively received.

In summary, the evaluation concluded that such advisory services can be associated with tangible benefits to workers' wellbeing, in terms of equipping and empowering workers to address the problems they encounter in the workplace, which leads to reductions in workplace hazards and symptom reports and increases awareness of some hazards.

The study also concluded that there is a need for occupational health services to go beyond such outreach advisory work in order to assist workers in implementing occupational health advice, and to sustain such positive changes. The report from this evaluation has been published in HSE's Research Report series as RR242.

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□ MAPPING HEALTH AND SAFETY STANDARDS IN THE UK WASTE INDUSTRY

(Contractor: BOMEL Ltd)

This study was carried out to scope the size and nature of the UK waste industry and to identify its health and safety standards and performance. The UK generates about 50 million tonnes of commercial waste, along with 30 million tonnes of industrial and 30 million tonnes of household waste, each year. Around 160,000 are employed in the UK waste industry, of which around 120,000 are employed in the private sector. The sewage/refuse disposal standard industry classification (SIC 90) includes around 135,000 workers involved in waste management activities, whilst recycling includes around 15,000 workers and wholesale waste around 10,000 workers. Whilst the largest employers in the waste industry are a small number of large integrated waste management companies, the waste industry is composed primarily of SME's. The waste industry typically reports around 4000 accidents per year. Of these, private companies report 45% and local authorities report the remainder. The overall accident rate in 2001/02 was estimated to be around 2,500 per 100,000 workers – around 4 times the national rate of 559 per 100,000 workers; the fatal injury accident rate in 2001/02 was estimated to be 10 per 100,000 workers – 10 times the national rate of 0.9 per 100,000; and the major injury accident rate in 2001/02 was estimated to be 330 per 100,000 workers – more than 3 times the national rate of 101 per 100,000 workers. Accidents predominantly occur during refuse collection and 85% of these are over 3-day injury accidents, typically as a result of handling or sprain injuries. Around 60% of accidents were associated with workplace transport, most commonly being struck by a refuse collection vehicle or a car.

Two Influence Network workshops were held with a wide range of delegates representing the key stakeholders for waste collection and landfill/treatment. Analysis of the delegates' views indicated that there is a need to influence company culture, ownership and control, organisational structure and health and safety management in relation to companies' head offices. Head offices need to influence training and management/supervision to influence workforce competence, team working (where appropriate), communications and compliance.

The report from this work has been published in HSE's Research Report series as RR240.

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□ EXAMPLES OF RECENTLY COMPLETED PROJECTS

□ THE DEVELOPMENT OF CASE STUDIES TO DEMONSTRATE THE LINK BETWEEN EFFECTIVE MANAGEMENT OF HEALTH AND SAFETY AND SHAREHOLDER/BUSINESS BENEFIT

(Contractor: Greenstreet Berman Ltd)

HSC, as part of its Revitalising Health and Safety strategy, has a range of initiatives to explore and employ new levers for influencing senior managers and directors and to engage with other agents to bring about change. Previous organisation-specific case studies have focused on the costs of accidents and work-related ill-health, rather than the business benefits of health and safety, and many figures produced are either for the UK economy as a whole or they are deduced from such figures. The work on this project has explored the reality of specific business cases for health and safety in a range of organisations in order to provide material for use by a range of stakeholders to engage with decision makers to help persuade them of the business case for improved health and safety.

A total of 19 case studies have been collected across a variety of industrial sectors, including the public sector. A key finding of the research is that in each of the cases described, whatever the original motivation, the organisations believed that improving health and safety was integral to business risk management. Examples include: £11 million saved due to absence management (Rolls Royce); Costs of flu vaccination recouped in one month (Barts and The London NHS Trust); manual handling injuries eliminated and lost hours reduced to zero (MFI); £12 saved for every £1 spent on manual handling improvements (British Polythene Industries); and almost 70% reduction in staff absence rates (Port of London Authority). The organisations have improved aspects of health and safety because their business cases showed the benefits to the organisation. Benefits included a mix of both tangible and intangible benefits, such as maintenance of brand and reputation, client requirements and staff morale as well as health and safety.

The research also showed that in these cases the organisations considered their own business cases so compelling that they did not need a fully quantified cost benefit analysis. Common to other research experience, it was also found that organisations rarely systematically or comprehensively track the costs and benefits of undertaking a particular initiative, particularly where health and safety is integral to management. The report from this work has been published in HSE's Research Report series as RR249.

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□ STRUCTURAL DETERIORATION OF TRACTOR SAFETY CABS WITH AGE

(Contractor: Silsoe Research Institute)

This work aimed to determine the prevalence, structural severity and practical implications of tractor safety cab/roll-over protective structures (ROPS) structural deterioration with age within the UK. A detailed survey of approximately 400 used tractors (manufactured in the period 1970 to 1990) was carried out at major UK vehicle auctions. Following their purchase at auction, the cabs of 7 example tractors, exhibiting representative levels of deterioration, were partially dismantled to enable detailed inspection of corrosion/deterioration. Five of the vehicles were subsequently subjected to a recognised (OECD Code 4) safety cab/ROPS structural testing procedure, to determine if the structures were still capable of providing adequate protection. Given comparable operating environments and in-service care, initial susceptibility to deterioration, subsequent rate of deterioration development and ability to provide effective roll-over protection were found to be extremely dependent on safety cab/ROPS design and method of construction. Of the tractors surveyed, 13 % exhibited sufficient levels of deterioration to be graded 'poor' and to bring into question the protection they would offer to operators during a roll-over incident. The deterioration of non-structural components (fenders, mudguards, etc) increased with age and the sheet metalwork of older tractors was predictably in poorer condition. However, the deterioration of cab structural components did not follow this trend. Structural deterioration was found to be most prevalent on tractors manufactured in the 1981 to 1985 period, followed by those built 1976 to 1980. Advances in cab design over the period 1970 to 1985 saw the transition from simplistic, thick-walled structural members, supplemented by non-structural sheet metalwork, to designs where role demarcation between thick-walled structural members and thin-walled non-structural members became less distinct. The latter designs are more sensitive to corrosion, particularly if embodying dirt or water traps and/or ineffective cab sealing, structural member internal drainage and anti-corrosion treatments.

A full report from this study can be found published in HSE's Research Report series as RR251

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□ PROJECT LISTING

NEWLY COMMISSIONED PROJECTS: APRIL – JULY 2004		
Project No	Project Title	Project Officer
Block 1 - Priority Programmes		
R33.119	The commercial case for applying CDM: Case studies	Mr P Wallis. Tel: 0207 717 6243 paul.wallis@hse.gsi.gov.uk
R54.094	Action, awareness and occupational stress	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R55.109	Gathering cost benefit studies that support tackling MSDs	Mr R Sanger. Tel: 0207 717 6457 ross.sanger@hse.gsi.gov.uk
R58.066	Evaluation of the Morcambe Bay Primary Care Trust farmers' health initiative	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R64.109	Evaluation of HSE's Field Operations Directorate's topic based inspection approach	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R68.097	Safe sites – Driver perceptions	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R73.029	Load security investigations	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
Block 2 - Work in the Major Hazards Industries		
R32.110	Atmospheric storage tank integrity – magnetic flux floor scanning	Dr S Welsh. Tel: 0151 951 4784 shaun.welsh@hse.gsi.gov.uk
R32.111	OCTAP – Collation and interpretation of rig movements from the MCA	Ms P Stenhouse. Tel: 0151 9513888 pauline.stenhouse@hse.gsi.gov.uk
R34. 009	Development of a unified metocean criteria for UK waters	Mr D Shuter. Tel: 0151 951 2375 danny.shuter@hse.gsi.gov.uk
R34.010	Scoping study on the effects of extreme sea states on FPSOs	Dr S Welsh. Tel: 0151 951 4784 shaun.welsh@hse.gsi.gov.uk
R39.002	Reliability of well control equipment	Mr C Ransome. Tel: 0151 951 3866 charles.ransome@hse.gsi.gov.uk
R69.002	Fast rescue craft recovery by installation cranes – Phase 2 study	Ms P Stenhouse. Tel: 0151 9513888 pauline.stenhouse@hse.gsi.gov.uk
R72.091	Development of generic risk assessment tool for petroleum distribution facilities	Dr S Welsh. Tel: 0151 951 4784 shaun.welsh@hse.gsi.gov.uk
Block 3 - Compliance		
R04.097	Fire safety in hyperbaric chambers	Mr R Moss. Tel: 0151 951 3302 richard.moss@hse.gsi.gov.uk
R45.082	Further analysis of whole body vibration exposure data measured on the seats of 13 quarry machines	Dr C Elliott-Minty. Tel: 01519514217 celia.elliott-minty@hse.gsi.gov.uk
R68.095	Workshop to develop tree climbing training guidance	Mr A Hodkinson. Tel: 02476 698350 adrian.hodkinson@hse.gsi.gov.uk
R74.011	Assessment of major accident potential due to failure of safety critical parts of amusement devices	Mr R Schofield. Tel: 0151 9514587 roger.schofield@hse.gsi.gov.uk
Block 4 - Mandatory Activities		
R38.039	Research on methods of assuring the safety of critical systems depending on computation and human activity	Mr P Wallis. Tel: 0207 717 6243 paul.wallis@hse.gsi.gov.uk
R45.081	Development of whole-body vibration exposures in British industry	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R51.250	The development of a publicly available standard by the BSI for equipment used for the controlled removal of asbestos	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R53.209	Analysis of contract medical adviser's records of principal examinations made under the Work in Compressed Air Regulations	Mr R Moss. Tel: 0151 951 3302 richard.moss@hse.gsi.gov.uk
R56.104	Feasibility study into the establishment of a respective cohort study of workers in the British semiconductor industry	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk
R56.107	Lung content analysis for prospective case control study of younger mesotheliomas	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk
R58.065	Data on first aid at work courses and trainees in Great Britain	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R63.071	Further development of a health and safety performance management index for use by business, investors, employees, the regulator and other stakeholders: Validation of the index	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk
R64.122	Public protection consultation – A pilot study	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk

□ PROJECT LISTING

NEWLY COMMISSIONED PROJECTS: APRIL – JULY 2004		
Project No	Project Title	Project Officer
Block 4 - Mandatory Activities (Cont.)		
R65.007	Comparative implementation of the framework directive in EU member states	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R68.090	HSE On-line Science & Innovation Newsletter	Mr A Whitehead. Tel: 0151 9513064 tony.whitehead@hse.gsi.gov.uk

RECENTLY COMPLETED PROJECTS: APRIL – JULY 2004		
Project No	Project Title	Project Officer
Block 1 - Priority Programmes		
R32.098	Structural deterioration of tractor safety cabs with age	Mr D Butter. Tel: 01159 712800 david.butter@hse.gsi.gov.uk
R33.088	Comparisons of safety levels implicit in structural codes	Mr B Neale. Tel: 0151 951 4632 brian.s.td.neale@hse.gsi.gov.uk
Z33.105	A technical guide to the selection and use of fall prevention and protection methods when working at heights – Extension to include safety decking	Mr A East. Tel: 0207 5562196 andrew.east@hse.gsi.gov.uk
R33.111	Peer review of ladder research	Mr C Wilson. Tel: 0114 289 2095 carl.wilson@hse.gsi.gov.uk
R36.197	Development of a theoretical model for simulating FLT overturn – rate of steering response for fixed geometry vehicles	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R45.072	Lowest achievable whole-body vibration emissions (and estimated exposures) in agricultural vehicles using the latest vibration control technology	Mr D Butter. Tel: 01159 712800 david.butter@hse.gsi.gov.uk
R46.086	Preliminary investigation into fall-arresting effectiveness of ladder safety hoops	Ms D Brown. Tel: 0207 717 6037 dorothy.brown@hse.gsi.gov.uk
R55.105	Risk perception in relation to musculoskeletal disorders	Mr R Sanger. Tel: 0207 717 6457 ross.sanger@hse.gsi.gov.uk
R64.118	Evaluation of slips roadshow training seminars – railway personnel	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R68.066	Ignorance is not bliss. Investigating practices in communication and information exchange amongst CDM Duty Holders	Mr D Lamont. Tel: 0151 951 4818 donald.lamont@hse.gsi.gov.uk
R68.075	Investigation into health and safety planning in construction	Mr T Allan. Tel: 0207 556 2211 trevor.allan@hse.gsi.gov.uk
R68.082	The development of case studies to demonstrate the link between effective management of health and safety and shareholder/business benefit	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk
R68.085	Measuring the effectiveness of competency-based education and training programmes in changing the manual handling behaviour of healthcare staff	Ms D Brown. Tel: 0207 717 6037 dorothy.brown@hse.gsi.gov.uk
Block 2 - Work in the Major Hazards Industries		
R05.085	Explosives in demolition: Blasting practice and protection	Mr I McKay. Tel: 0151 951 4861 ian.mckay@hse.gsi.gov.uk
R31.092	Design and integrity of monitoring of mobile installation moorings	Mr C Ransome. Tel: 0151 951 3866 charles.ransome@hse.gsi.gov.uk
R33.097	Novel mobile and portable methods for detecting rock failures	Mr J Arthur. Tel: 0114 291 2300 jim.arthur@hse.gsi.gov.uk
R33.098	Rock reinforcement and testing	Mr J Arthur. Tel: 0114 291 2300 jim.arthur@hse.gsi.gov.uk
R43.087	Diesel fumes/particulates in mines – Phase 4	Mr M Williams. Tel: 0151 951 4866 mansel.williams@hse.gsi.gov.uk
R64.112	Maintenance system assessment guidance document	Ms P Stenhouse. Tel: 0151 9513888 pauline.stenhouse@hse.gsi.gov.uk
R71.059	Pilot study to evaluate the effects of HSE's development control advice around major chemical hazard installations and notified pipelines	Dr S Welsh. Tel: 0151 951 4784 shaun.welsh@hse.gsi.gov.uk
2924	Valve user consortium	Mr R Sharma. Tel: 0207 717 6925 ravi.sharma@hse.gsi.gov.uk
3461	Fatigue performance of girth welded joints	Mr A Stacey. Tel: 0207 717 6774 alex.stacey@hse.gsi.gov.uk

□ PROJECT LISTING

RECENTLY COMPLETED PROJECTS: APRIL – JULY 2004		
Project No	Project Title	Project Officer
Block 2 - Work in the Major Hazards Industries (Cont.)		
3823	Machinery and rotating equipment integrity – Inspection guidance	Mr P Dua. Tel: 0207 717 6736 prem.dua@hse.gsi.gov.uk
3824	Effect of platform robustness on inspection planning	Mr A Stacey. Tel: 0207 717 6774 alex.stacey@hse.gsi.gov.uk
3852	Reliability analysis of deepwater anchors	Mr A Moyse. Tel: 0207 717 6778 andrew.moyse@hse.gsi.gov.uk
3898	Crane information data project	Mr J Macfarlane. Tel: 01224 252602 jim.macfarlane@hse.gsi.gov.uk
3955	Growth of through wall fatigue cracks in brace members	Mr A Stacey. Tel: 0207 717 6774 alex.stacey@hse.gsi.gov.uk
3990	Diving examination system support and development	Mr D Tee. Tel: 0207 717 6923 david.tee@hse.gsi.gov.uk
3998	Human factors guidance for selecting appropriate maintenance strategies in the offshore oil and gas industries	Mr R Miles. Tel: 0207 717 6685 bob.miles@hse.gsi.gov.uk
4023	Offshore research focus 2002 - 2003	Mr P Sumner. Tel: 01603 828003 phil.sumner@hse.gsi.gov.uk
4048	OCTAP extension of database upkeep package	Ms P Stenhouse. Tel: 0151 9513888 pauline.stenhouse@hse.gsi.gov.uk
Block 3 - Compliance		
R33.114	SMART database for failures in structures and buildings	Mr B Neale. Tel: 0151 951 4632 brian.s.td.neale@hse.gsi.gov.uk
R53.201	Excursion tables in saturation diving – decompression implications of current UK practice	Mr R Moss. Tel: 0151 951 3302 richard.moss@hse.gsi.gov.uk
R53.202	Yo-yo diving and the risk of decompression illness	Mr R Moss. Tel: 0151 951 3302 richard.moss@hse.gsi.gov.uk
R63.067	Mapping health and safety performance in the UK waste industry	Mr P Harvey. Tel: 02920 263000 paul.area11.harvey@hse.gsi.gov.uk
R68.084	Occupational health and safety enforcement strategies to promote concordance in the hospitality industry	Mr G Broughton. Tel: 0207 717 6828 gareth.broughton@hse.gsi.gov.uk
R68.095	Workshop to develop tree climbing training	Mr A Hodkinson. Tel: 02476 698357 adrian.hodkinson@hse.gsi.gov.uk
Block 4 - Mandatory Activities		
R36.191	Data acquisition for assessing laser guards	Mr S Walker. Tel: 0151 951 4723 steve.td.walker@hse.gsi.gov.uk
R41.128	Determine a methodology for using flue gas analysers to assess the combustion performance of domestic gas appliances	Mr A Jones. Tel: 0151 951 3273 allyn.jones@hse.gsi.gov.uk
R45.071	Saw and file vibration: Correlation between vibration emission and vibration during real use	Mr P Brereton. Tel: 0151 951 4824 paul.brereton@hse.gsi.gov.uk
R45.076	Correlation between vibration emission and vibration during real use: Impact wrenches	Mr P Brereton. Tel: 0151 951 4824 paul.brereton@hse.gsi.gov.uk
R51.237	Evaluation of currently used exposure models to define a human exposure model for use in chemical risk assessments in the UK	Dr J Delic. Tel: 0207 717 3593 julian.delic@hse.gsi.gov.uk
R53.189	Assessment of hand-arm vibration risks in woodworking	Mr M Lee. Tel: 01159 712800 martin.lee@hse.gsi.gov.uk
R53.198	Unmanned testing of open circuit 'octopus' systems	Mr C Sherman. Tel: 0207 717 6759 chris.sherman@hse.gsi.gov.uk
R67.157	Focused intervention strategies targeting occupational health in SMEs	Mr P Kelly. Tel: 0151 951 4070 peter.kelly@hse.gsi.gov.uk
R67.164	Establishment and management of focus groups to establish the optimum methods of communication with a view to encouraging changed behaviour on chemical related health and safety issues	Ms L Jones. Tel: 0207 717 6263 louise.jones@hse.gsi.gov.uk
R68.058	The evaluation of occupational health advice in primary health care	Ms M Smith. Tel: 0207 717 6897 monica.smith@hse.gsi.gov.uk

□ RECENT PUBLICATIONS

Series No.	Research Report: Title
RR 191	Integrity of repaired welds (Phase 1)
RR 213	Human factors guidance for selecting appropriate maintenance for safety in the offshore oil and gas industry
RR 214	Yo-Yo diving and the risk of decompression illness
RR 216	A methodology for the assignment of safety integrity levels (SILs) to safety-related control functions implemented by safety-related electrical, electronic and programmable electronic control systems of machines
RR 218	Peer review of analysis of specialist group reports on causes of construction accidents
RR 219	Design and integrity management of mobile installation moorings
RR 220	Ship collision and capacity of brace members of fixed steel offshore platforms
RR 221	Review of the occupational health and safety of Britain's ethnic minorities
RR 222	Tests for the ignition and flame spread of clothing fabrics subjected to angle grinder sparks. Results from ten generic fabrics and variants
RR 223	Mathematical modelling of the stability of passenger-carrying, tandem seat all terrain vehicles
RR 225	FPSO response to fast transient dynamic events
RR 226	Development of a method for the determination of on-site ignition probabilities
RR 228	Review of risks associated with the pushing and pulling of heavy loads.
RR 229	Safe application of mine roadway support systems
RR 230	Co-ordinated investigation into the possible long term health effects of diving at work. Examination of the long term health impact of diving: The ELTHI diving study
RR 231	Improving health and safety in construction – Phase 2 – Depth and breadth – Volume 1 – Summary report
RR 232	Improving health and safety in construction – Phase 2 – Depth and breadth – Volume 2 – RIDDOR accident data analysis tool.
RR 233	Improving health and safety in construction – Phase 2 – Depth and breadth – Volume 3 – Construction transport accidents underlying causes and risk control
RR 234	Improving health and safety in construction – Phase 2 – Depth and breadth – Volume 5 – Falls from height underlying causes and risk control in the construction industry
RR 235	Improving health and safety in construction – Phase 2 – Depth and breadth – Volume 6 – Generic model for health and safety in construction
RR 236	Improving health and safety in construction – Phase 2 – Depth and breadth – Volume 7 – Analysis of HSE mechanisms
RR 237	Maintenance system assessment: Guidance document
RR 238	A review of carbon monoxide incident information for 2002/03 produced from the full investigation of incidents, which had resulted from the use of piped natural gas and LPG within GB
RR 239	Improving the reach of health and safety information dissemination using ICT
RR 240	Mapping health and safety performance in the UK waste industry
RR 241	Rock reinforcement and testing
RR 242	The evaluation of occupational health advice in primary health care
RR 243	Summative assessment supported by the internet: The professional diver competency theory assessment system (DCTAS)
RR 244	Excursion tables in saturation diving – decompression implications of current UK practice
RR 245	Stress redistribution in platform substructures due to primary member damage and its effects on standard reliability
RR 246	Effect of platform robustness on inspection planning
RR 247	Competencies of occupational physicians: The customer's perspective
RR 248	Novel mobile and portable methods for detecting rock failures
RR 249	The development of case studies that demonstrate the business benefit of effective management of occupational health and safety
RR 250	Active pendulation control systems
RR 251	Structural deterioration of tractor safety cabs with age
RR 252	Controlling and monitoring exposure to diesel engine exhaust emissions in non coal mines

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