

PEROSH news

New chairman for PEROSH

As from January 2011, Prof. Didier Baptiste, Scientific Director



*Prof. Didier Baptiste,
new Chairman of
PEROSH*

of the INRS has taken over from Dr. Palle Ørbæk, Director General of NRCWE, as Chairman of the Partnership for European Research in Occupational Safety and Health (PEROSH) for a renewable term of two years.

Didier Baptiste will be assisted, on the Executive Committee, by Palle Ørbæk, Vice-Chairman, by Dietmar Reinert from IFA, who chairs the Scientific Steering Group, and by Marc de Greef from Prevent.

The network currently has thirteen members from twelve European countries. Its aim is to conduct joint research projects involving member institutes, and to improve the extent to



*Dr. Palle Ørbæk,
new Vice-Chairman*

which occupational safety and health is taken into account in European policies. Nine research projects are currently being conducted jointly and they will continue for the next two to three years (nanoparticles, ageing, PPE, well-being at work, etc.). The new Chairman wants to continue to develop the network. A meeting between the leaders of the research projects and the General Directors of the 13 member's organisations is planned at the autumn in Paris. The idea is to foster the development of the research projects and discuss the future deliverables of the projects.

The new Chairman has also set priorities for its future action:

- Increasing the relations with the European Institutions, in particular through involvement in drawing up the 8th Research Framework Programme.
- Producing joint papers, for example white papers on key occupational safety and health research issues.
- Initiating a watch and perspective planning approach aimed

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at better anticipating future risks. A new "Future group", led by INRS, has already been set up for contributing to thinking in this field.

The PEROSH members congratulate the chairmen on their functions and wish them the best of luck. The members wish to thank Palle Ørbæk for the excellent work during the past 4 years in developing and stabilizing the PEROSH network.

Report of the PEROSH seminar to remove the gap between research and practical prevention

On 25 November 2010, European researchers and policy-makers came together to reflect on how to improve the transfer of evidence-based research with regard to the working environment and the practical implementation at the workplace. The seminar was organised by PEROSH and part of 'The Quality of Working Life' Event, prepared by Prevent within the framework of the Belgian EU Presidency. It concerned a series of seminars, network events and a closing colloquium, organised from 24-26 November 2010 at the European Parliament in Brussels.

The theme of the seminar was inspired by an earlier seminar organised by the Danish working environment authority and PEROSH in September 2009 in Copenhagen. During this seminar the participating researchers concluded that more attention should go towards action and implementation of research to test the effectiveness of preventive solutions. More collaboration between researchers at the international level could improve the consideration of these topics.

The seminar was introduced by Marc De Greef, member of the Executive committee of PEROSH and chaired by Chairman Dr. Palle Ørbæk and Chairman - elect Prof. Didier Baptiste.

The seminar started with two keynote speakers setting the frame of the seminar by focusing on the drivers for applied research on the one hand and on the other hand elaborating on how the link between corporate competitiveness and occupational health and safety can be enhanced.

A number of strong case examples proved that the implementation of research driven results at the work floor is possible. To conclude, the PEROSH seminar sought the visions and expectations of the European social partners and government with regard to the transfer between research and practice and on how the interaction between research and policy could be improved.

The proceedings can now be downloaded on the PEROSH website. They contain a summary of the presentations at the seminar as well as a number of papers drafted by the speakers.

More info: <http://www.perosh.eu/p/PROCEEDINGS-RIA>

Well-being and Work: a perspective from eight European countries

The PEROSH 'Well-being and Work' group has now published 'A perspective from eight European countries on common areas of understanding, national drivers for progress, and research needs'. [1] This describes the outcome of a recent workshop which brought together players in the well-being arena from member institutes.

Key themes on the understanding of well-being include acceptance that it is not defined as only the lack of mental health, but rather incorporates social and physical functioning. Well-being has to be a positive, sustainable concept of optimal functioning, proactively promoted at work within a pragmatic approach that focuses on what is required, and what can actually be changed. At the heart of the well-being debate is the paradox that:

"good work is good for you, but work can also harm your health".

One important issue that needs to be addressed is to better establish the scientific evidence base for well-being interventions, including the challenges posed by changing worker demographics and rapid changes in work organisational structures and technologies. Key to this, is the need for a robust model of well-being. The PEROSH Well-being and Work group is now finalising the development of a model that captures the major contributors to well-being at the level of individuals, enterprises, and society, the consequences of delivering well-being, and the impact of major influencing factors such as the 'austerity measures' currently being introduced across Europe. This model will also be published.

[1] Fishwick et al., in 'Proceedings of the International Conference 10-12 February 2010, Helsinki, Finland, p118-127. ISBN 978-952-261-036-2
The proceedings are available from
http://www.ttl.fi/en/international/conferences/towards_better_work

PEROSH Clearinghouse of Systematic Reviews: First workshop for practical training

Systematic reviews on occupational safety and health topics summarize study results. They can be very helpful for research, practice and policy makers. A PEROSH workshop provided useful information about what is important on dealing with reviews.

The PEROSH working group Clearinghouse of Systematic Reviews organized its first workshop "Systematic Reviews to Inform Policy and Practice" at TNO in Hoofddorp, the Netherlands on January 17th, 2011. The participants were researchers and practitioners from different research and governmental institutions. They learned the new standard methodology developed by the Clearinghouse: How to find and select high quality reviews for topics in occupational safety and health (OSH) in order to facilitate the transfer of knowledge. A good exchange of information among the institutions was visible.

The main goal of the Clearinghouse is bringing together the results of good systematic reviews that have been conducted in the field of occupational health and safety. The collaboration of experts from PEROSH partner institutes brought the needed expertise together to realize this goal. A systematic approach for searching, selecting and evaluating systematic reviews was developed last year.

In this workshop the principles of this approach were presented. The participants from different institutions in the Netherlands, Germany, Belgium, Norway and Italy got to know the principles of the Clearinghouse in finding and selecting high quality systematic reviews on OSH topics. Members of the Clearinghouse presented the methodical procedures e.g. what are systematic reviews good for, what are the right search strategies for finding systematic reviews in literature databases, what are the adequate methods and criteria for quality assessment of reviews. Participants brought their own topics and had a practical training for searching and selecting reviews on their topics.

After an intense day a participant summarized "If I search for a review from now on I will do this in a different and better way next time. I have learned a lot today".

The webpage of the Clearinghouse was relaunched. Recommended reviews on new topics were added, the manual PEROSH Clearinghouse Methods was updated.

More information: see <http://www.perosh.eu/p/clearinghouse>

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The new PEROSH Safety Culture Group is targeting zero accident vision

The European Commission's Community strategy on health and safety at work (2007-2012) aims to improve quality and productivity of working life. Health and safety at work is considered as one of the most important aspects of EU policy on employment and social affairs. The overall objective of the strategy is to reduce by 25% the total incidence rate of accidents at work per 100,000 workers in the EU 27 during the strategy period.

An expert group within Perosh network was established in August 2010 in the Netherlands in order to enhance safety culture at the workplace according to European OSH strategy. This Safety Culture Group prepared a project plan entitled "Expanding Zero Accident Vision to European Context - Interlinking Research and Networking (EZAV)", where the aim is to promote the zero accident vision at work in EU Member States, to promote networking and exchange of knowledge in the field of occupational safety culture.

Potential research objectives are to identify and analyse good practices, to evaluate safety culture and safety leadership, identify bottlenecks in learning from incidents and from good practices, and monitor and evaluate the adoption of the zero accident vision in the EU. Finally, the ambitions are to develop a European Research Agenda, relevant for the Zero Accident Vision. The group is trying to raise external funds for its research ambitions.

Why zero accident ?

Zero accident vision provides an ethically sustainable basis for accident prevention activities. Already a large number of examples exist how the zero accident concept has been applied. Many companies and some governments have already adopted the zero accident vision. It is estimated that if all ILO Member States would use the best accident prevention strategies and practices that are already easily available, some 300,000 deaths and 200 million accidents could be prevented. In Finland, a special Zero Accident Forum has been active since 2003 with good results. The Forum is a voluntary network of Finnish workplaces, and it is open to any workplace, regardless of its size, field or level of occupational safety. Until today, more than 250 workplaces are members in the Forum employing 300.000 people (more than 10% of the working population).

What are we aiming at?

The project is targeted to exchange of information and to support cooperation in the field of occupation safety. As a result of the project, a wider European research agenda relevant for the realisation, development and implementation of the Zero Accident Vision will be developed. This topic has a high scientific as well as societal relevance as we do not know enough of success factors how to improve safety attitudes and safety culture at workplaces. There is a need to develop common methods how to organize and how to evaluate safety culture in companies. Safety culture comparisons are useful in order to understand national differences. The practical outcomes of the project would be:

- organisation of seminars of experts (number of seminars depends on available funds)
- network meetings of the project group
- scientific papers
- a European research agenda relevant for the zero accident vision
- internet pages
- papers presented by project participants in future conference (e.g. OHS Forum 2012, WOS 2012, ICOH 2012, 2011 Istanbul)
- project management reports.

[1] Takala J., *Introductory Report: Decent Work - Safe Work. Paper presented at the XVIth World Congress on Safety and Health at Work, Vienna, 27 May 2002.*

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Events

April 5-6-7, 2011, Nancy INRS Occupational Health Research Conference 2011: Risks associated to Nanoparticles and Nanomaterials

INRS launches a new series of international Health Research Conferences. Its first edition will be devoted to risks associated with nanoparticles and nanomaterials. The conference will take place in Nancy on 5-6-7 April 2011.

The conference is supported by the PEROSH network and will bring together researchers, experts and practitioners from different backgrounds with the aim of sharing the latest knowledge on nanoparticles and nanomaterials and discussing research needs on the following topics: health effect assessment, characterization of nanomaterials, exposure measurement and

assessment, emission control and protective equipments, risk assessment and risk management.

An issue of Annals of Occupational Hygiene will be devoted to the papers from the conference. The conference brochure as well as the programme are now available on the conference website: <http://www.inrs-nano2011.fr>

20-22 May 2012 2nd International Conference on Well-being and Work

Following the success of the 1st International Conference 'Towards Better Work and Well-being' in Helsinki in February 2010, the 2nd international conference will be held near Manchester, UK, in May 2012.

The conference theme is "Making the Case". The aim is to provide an environment where research, best practice and innovation can be shared amongst interested researchers from all relevant subject areas. Abstracts can be submitted from 1st March 2011 and the submission deadline is 31st of December 2011. Registration is also open from 1st of March 2011.

The international scientific steering committee will be inviting key-note speakers from around the world to provide a vibrant, informative and state-of-the art programme. The Local Organising Committee is at the Health and Safety Laboratory, a PEROSH member institute.

For further details see
www.hsl.gov.uk/health-and-safety-conferences.aspx
or email: wellbeing2012@hsl.gov.uk

News from the PEROSH members

Detecting the life span of adsorbent media



INRS has devoted various studies to the adsorbent media that equip, in particular, respiratory protective devices (RPDs) for protecting operators from chemical pollutants of the gaseous and/or particulate type. The quality of protection offered by RPDs is a major concern for the Institute.

The initial results of that work have shown that it is possible to determine the end of the life of a cartridge exposed to an organic pollutant. INRS has conducted two different and complementary approaches. The first has led to the development of a piece of predictive software. Unlike existing software, it will offer a wider scope to French OSH specialists.

In parallel, INRS has developed and validated the concept of a cartridge saturation indicator, in the form of an integrated chemical sensor. It is simple to use and warns the operator as of the beginning of breakdown.

The Institute is currently continuing its work with a view to optimising the predictive software so as to make it possible to take solvent mixtures into account, under various implementation conditions. It also wishes to develop an integrated sensor demonstrator with the aim of producing an industrial prototype.

For further information (in French):

<http://www.inrs.fr/publications/A.7-1.044.html>

<http://www.inrs.fr/publications/C.7-1.039.html>

Individual and occupational risk factors for knee osteoarthritis: results of a case-control study in Germany

Dr. Falk Liebers, Federal Institute for Occupational Safety and Health (BAuA), Germany



Suffering from musculoskeletal diseases is the most frequent reason for sick leave from work in the western world. The in-

ability to work as a consequence of diseases of the musculoskeletal system and the connective tissue resulted in 103.6 million days of absence (23.7% of all days of absence) in Germany in 2007. One of the frequent impairing disorders of the musculoskeletal system is knee osteoarthritis (OA). A large number of occupational and non-occupational risk factors are related to the development and progress of knee OA.

The aim of the research project was to find the most parsimonious model considering different occupational factors and other influencing factors to predict the occurrence of symptomatic knee OA. The study was designed as a case-control study based on patients with and without symptomatic knee osteoarthritis. In total, 739 cases and 571 controls were included in the case-control-study. In women and men, several individual and occupational predictors for knee OA could be described: obesity, kneeling/squatting, genetic predisposition, and sports.

The results suggest that a dose-response relationship exists between kneeling/squatting and symptomatic knee OA in men and - for the first time - in women, too. With regards to occupational health, prevention measures should focus on the reduction of kneeling activities and the lifting and carrying of loads as well as general risk factors, most notably the reduction of obesity. More intervention studies of the effectiveness of prevention tools and methods for reducing knee straining activities are needed.

The results of the study are published in:

- Klusmann A, Gebhardt HJ, Nübling M, Liebers F, Quirós Perea E, Cordier W, Engelhardt LV, Schubert M, Dávid A, Bouillon B, Rieger MA: Individual and occupational risk factors for knee osteoarthritis: results of a case-control study in Germany. *Arthritis Research & Therapy* 2010, 12:R88.

<http://arthritis-research.com/content/12/3/R88>

- Klusmann A, Gebhardt HJ, Nübling M, Engelhardt LV, Quirós Perea E, Liebers F, Bouillon B, Rieger MA: Fall-Kontroll-Studie zur Bewertung von beruflichen Faktoren im Zusammenhang mit Gonarthrosen - die ArGon-Studie. 1st edition. Dortmund: Bundesanstalt für Arbeitsschutz und Arbeitsmedizin 2010. http://www.baua.de/cln_135/de/Publikationen/Fachbeitraege/F2096.html

Smart work environment prevention packages for small enterprises in Denmark



Reduced physical wear and tear and improved well-being. This can be the result in small Danish enterprises in construction and elderly care if they choose to implement a pre-defined process for improving the working environment – a so-called prevention package within specific problematic fields. Interested enterprises can apply for a financial grant for the implementation of the package. It is a completely new way of putting research into practice, where the best available evidence about improvement of the working environment is used to create simple and effective interventions for small enterprises.

The prevention packages will improve the working environment and prevent physical and mental wear and tear among employees. They will be launched in sectors in which wear and tear is particularly prevalent. From 1 January 2011 the 'construction industry' and 'day care and domestic care' are offered the opportunity to apply for financial support to implement a prevention package.

The content of each package is pre-determined and reflects the most common occupational health and safety problems in the two sectors. The prevention packages are designed and developed by researchers from the National Research Centre for the Working Environment (NRCWE) in collaboration with the Danish Working Environment Authority, as well as the trade unions and employers' associations.

The prevention packages are based on documented scientific knowledge

Director General, Palle Ørbæk, from the NRCWE explains: "Our researchers at the NRCWE have developed the packages on the basis of documented knowledge about the working environment within the individual sectors. It is a completely new and interesting way to put our research into practice at the individual workplaces. We will also make a thorough study of the effects of this novel approach. This will be done by making a critical evaluation of the working environment of each workplace before and after the workplace has completed a prevention package."

Two prevention packages for small enterprises within the construction industry

The two packages for the construction industry are exclusively

for very small enterprises with a maximum of nine employees. Implementation of a package will typically last three to six months. Besides receiving financial support, the workplace is offered a supervisor from the Danish Working Environment Authority who will guide the employer and employees through the process. The prevention packages within the construction industry are aimed at:

1. Heavy lifting and use of technical assistive devices.
2. Improvement of planning in order to reduce injuries as well as physical and mental wear and tear.

Four prevention packages for day and domestic care

Workplaces within the day and domestic care sector can apply for support to implement one of four prevention packages spanning three to nine months. Workplaces with a maximum of 65 employees can participate. Besides receiving financial support, the workplace is offered a supervisor from either the municipality or the region who will guide the employer and employees through the process. The four prevention packages focus on:

1. Reduction of work-related strain with the three types of citizens demanding the most resources.
2. A future workshop aimed at improving the relationship with citizens and relatives.
3. Colleague supervision in order to improve the relationships with citizens and relatives.
4. Organisation of occupational 'health circles' in order to map and reduce physical and mental strain.

Prevention packages for other sectors

Over the next two years, researchers from the NRCWE will, in collaboration with the Danish Working Environment Authority, develop prevention packages for more than ten other sectors particularly vulnerable to physical and mental wear and tear. These sectors include, among others, transport, cleaning, child care, restaurants and a number of manufacturing subsectors. These sectors will also have the opportunity to apply for financial support from the Danish Prevention Fund.

For further information, please contact Peter Hasle, professor and project leader for development of prevention packages, pha@nrcwe.dk.

Do ORDERMAN hand-held ordering terminals present a source of exposure for employees?



Pad and pencil are increasingly disappearing from restaurants and cafés as waiting staff take and relay orders using mobile information technology (IT) equipment in the form of electronic order pads. These devices are operated by means of a stylus on a touchscreen, or the catering establishment may configure buttons on a touchpad for its own purposes. The system appears simple and has potential benefits for customers and waiting staff alike. But are these devices really as effective and suitable in practice?

The aim of the project was to assess these devices from an OSH perspective. The method used involved three stages: usability tests (face-to-face), questionnaires and interviews (face-to-face). Project partners were the Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA) and Fraunhofer-Institut für Angewandte Informationstechnik FIT.

Usability tests (FIT)

The study revealed several violations of the standards. Problems such as key assignments and display settings which are unsuitable for use were documented. These problems can generally be eliminated or corrected by configuration of the device, and typical problems relating to intuitiveness can be addressed by training.

Questionnaire study/interviews

The "dialog principles" of the devices were rated positively, and time savings confirmed. The majority of users would recommend the devices to others. The lack of facilities for personal configuration of the technology was a deficit referred to during the interviews. Some users would prefer their pad and pencil, in order to be able to use the abbreviations familiar to them. The feeling of having a working method dictated to them was raised as an issue. Typical problems of mobile IT-supported workplaces occur: poor display visibility and brightness control.

The use of technology was described in interviews as conflicting at times with the requirements of social conventions: it is an obstacle to attention, which customers perceive as impoliteness.

Besides the stresses caused by the devices themselves, the assignment of personnel in consideration of their abilities is the factor exerting the greatest influence upon their mental health, followed by the quality of leadership, mutual support between employees, and the independent organization of work. Use of the devices can be beneficial (only) as art of appropriate organization.

More information:

<http://www.dguv.de/lifa/en/pro/pro1/lifa1106/index.jsp>

Disability Management: a new methodology to support workplace reintegration in Belgium



During two consecutive research projects, named Intro_DM and DM@Work, Prevent has developed the methodology 'Disability Management' in Belgium. Disability Management had already been internationally recognised as a partial response to the problems to which the labour market is being confronted, caused by the ageing working population and the new work situations that cause new risks and challenges for workers and employers.

In Belgium, different actors experienced an insufficient focus on the target group of employees who are confronted with long-term health problems or disabilities. Employees that obtain long-term health problems and/or functional limitations during the course of their career, often receive benefits for extended periods, and are consequently excluded from the job market. This is partly due to the focus in the Belgian regulation which lays in the prevention of exposure to workplace risks but pays little attention to mechanisms to promote return to work in case of long-term health problems. However, it is one thing to be able to guarantee health and safety standards at work, yet quite another to deal with the longer-term consequences of accidents and health problems that do happen - especially in terms of having an established legal framework and specific company policies to promote the reintegration of the employees who are confronted with long-term health problems or disabilities.

Systematic and goal-oriented approach

The Disability Management methodology is a systematic and goal-oriented approach at the workplace which aims at simplifying the reintegration process of people with occupational

disabilities through coordinated efforts, taking into account individual needs and abilities, workplace conditions and the legal framework. Characteristic for this methodology is the two-fold approach: the coaching of employees who are faced with a prolonged absence from the job market due to health problems or disabilities and the structural implementation of a retention and reintegration policy within the company.

Key concepts in the frame of an effective Disability Management programme are: 1) ensuring that there is an early contact between the employer/company and the employee who had to leave work with an injury or illness, 2) providing accommodations at the workplace and in the work organisation, 3) stimulating the contact between the curative sector and the work floor, 4) mapping the characteristics of the job and 5) coordinating the process of reintegration by a Disability Case Manager. Companies that implement these interventions in a structural way, can reduce the length of the period of inability to work and the related costs (Franché, 2005b). The benefits from assisting people to return to work outweigh the costs and this consequently results in a financial profit for the company (Tomba, 2008).

Intro_DM: Introduction of Disability Management in Belgium

In order to introduce the Disability Management methodology in Belgium and to adapt it to the Belgian context, the Intro_DM project was launched in June 2005. It demonstrated that on micro level (level of the individual worker), a professional who coordinates and monitors the reintegration/job retention process from start to finish, was necessary. The methodology of Disability Case Management was developed and tested in 43 cases, and turned out to be a useful tool for this coordinating actor. At meso level (company level) the project showed that several actors could fulfil the role of disability manager who unites the employer, health and safety service, HR, trade unions, the management chain and other actors around the common theme of job retention and reintegration. Intro_DM also concluded that on macro level (institutional level), there is still vagueness about responsibilities. Political decision makers should be encouraged to opt for a more dynamic and integrated approach, as well as for a rationalisation of the existing systems and access to benefits and services.

DM@Work: roadmap for a DM policy in companies

One of the actions during the Intro_DM project was the development of a roadmap on how to build and implement a systematic approach. This roadmap was a good starting point for a company aiming at setting up a systematic policy regarding retention and reintegration. However, practice showed that companies need more specific tools such as standard procedures for sickness and reintegration, roles and responsibilities

of the different actors involved; a database with analysis of risks, jobs, tasks, possibilities of workplace accommodations; a communication strategy; a return-on-investment instrument,... and stressed that those tools should take into account the characteristics of the company's sector and profile. Furthermore, companies were also looking for a comprehensible overview of the different regulations concerning job retention and reintegration.

During the project DM@Work (April 2009-November 2011) tools have been developed for three sectors (construction, chemical and health sector) plus the public sector. Four pilot groups were formed, one for each sector, consisting of three to four companies (management, HR, health and safety officer), representatives of trade unions and sector federations and coordinated by a health and safety service. Over the course of 18 months these actors set up a job retention and reintegration policy in the companies involved, enabling them to test the different tools in practice and adapt them to the specific needs of the sector and company profile. The result of the pilot groups has been developed into a website www.disability-management.be and four manuals (free to use), one each for the construction sector, chemical sector and health sector and one for the private sector as a whole, targeting intermediary services such as health and safety services, trade unions, sector federations and of course company owners, HR and health and safety officers. DM@Work was chosen ambassador for the European Social Fund in Flanders on January, 28th and will receive extra support during 2011 to distribute the manuals and maximise the knowledge acquired during the project.

More info: Marthe Verjans, M., Rommel, A., Tijtgat, E., Bruyninx, K. (2010). Disability Management, New methodology to support workplace reintegration in Belgium, "Manuscript for Disability Management – Theory, History, Research, and Methods" (Edited Vol.), in publication.

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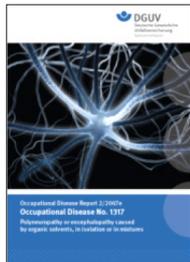
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- Franché, R.L., Cullen, K., Clarke, J., Irvin, E., Sinclair, S. & Frank, J. (2005b). Workplace-based return-to-work interventions: A systematic review of the quantitative literature. *Journal of Occupational Rehabilitation*, 15, 607-631.
- Tomba, E., de Oliveira, C., Dolinschi, R. & Irvin, E. (2008). A systematic review of disability management interventions with economic evaluations. *Journal of Occupational Rehabilitation*, 18, 16-26.
- Verjans, M. & Rommel, A. (2008). *Disability Management als meerwaarde bij jobbehoud & re-integratie*. Brussel: Prevent.

Polyneuropathy or encephalopathy caused by organic solvents, in isolation or in mixtures



The second edition of the Occupational Diseases Report 1317 enables quality-assured processing in cases with a suspicion



of work-induced damage to the nervous system by organic solvents on the basis of technical and medical expert knowledge. The Occupational Diseases Report thus offers accident insurers and medical assessors a well-founded basis for assessment for processing OD No. 1317.

In the first part, there is technical information with specific information on solvents and mixtures whose neurotoxicity has been proved according to the current level of knowledge. The report contains overviews on the incidence of the substances in various industries as well as substance dossiers with chemical and physical data, limit values and absorption paths. In individual cases, this information should support the necessary investigations on the nature and extent of possible damaging effects and allow an overall technical evaluation for work. The second focus of the report is on the recommendations for assessment drawn up by experts from various disciplines with extensive experience in observation, treating and assessing the relevant diseases. In the annex, there is additional information in the form of evaluating summaries of literature data on the neurotoxic effect threshold of individual substances and mixtures.

The research publication was a collaboration between the Deutsche Gesetzliche Unfallversicherung (DGUV), Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA), Berufsgenossenschaft (BG) der Bauwirtschaft, BG Rohstoffe und chemische Industrie, BG Holz und Metall and several German universities.

More information:

<http://www.dguv.de/ifa/en/pub/rep/rep07/bk0207/index.jsp>

New Director General appointed at NIOH Norway (STAMI)



Pål Molander (40) has, in Cabinet, been appointed as Director General at The National Institute of Occupational Health in Norway (STAMI) for a term of 6 years. Pål Molander is the Research Director at the NIOH in Norway and, as well, the acting director.

Molander is Dr. Scient in analytical chemistry from the University of Oslo (2000) and was appointed professor in 2005. Pål Molander started his work at the NIOH in 2001 and was appointed Research Director in 2006.

Dr. Molander is considered especially qualified for the position due to his solid scientific competence within the core of the NIOHs areas of research and work and due to his experience as a leader within research.

He will start in August 2010.

Safety Climate Tool provides insight in safety culture of companies



The HSL Safety Climate Tool (SCT) has been developed to enable organisations to gain invaluable insight into their safety culture.

Organisational factors have a strong impact on safety performance in organisations. Safety culture, or the way safety is perceived, valued and prioritised in an organisation, not only has an obvious and direct effect on accident rates, it also

impacts on productivity, reliability, competitiveness and even employee morale. Organisations with an effective safety culture have realised that by making an asset of safety rather than a risk, brings positive, demonstrable results throughout their business.



The HSL Safety Climate Tool (SCT) has been developed to enable organisations to gain invaluable insight into their safety culture.

For information on how organisations are using the Safety Climate Tool, the benefits they are gaining, a video demonstration of the tool, and how to order it, see the HSL website: <http://www.hsl.gov.uk/health-and-safety-products.aspx>

You can also learn about the science underpinning the Safety Climate Tool in:

Sugden et al. (2009) The Development of HSL's Safety Climate Tool, in *Contemporary Ergonomics*, 245-252. London: Taylor & Francis. ISBN 978-0-415-80433-2.

Patent Kit for measuring airborne trichloramine



Swimming pool or agri-food industry workers can be exposed to trichloramine. This highly volatile gas is an irritant for the eyes, the skin, and the respiratory tracts. INRS has patented a sampling and analysis system known as "Triklorame" that makes it possible to measure, in situ, the concentration of that molecule in the ambient air of the work stations.

The device is in the form of a measurement kit, usable directly by firms. Simple and quick, it gives the results of the trichloramine concentration and therefore of the exposure level of the people involved. It thus offers the possibilities of performing regular monitoring and of rapidly taking the necessary measurements for keeping the concentration below the recommended limit value (0.3 mg/m³ in France). Marketing of the kit has been entrusted to an industrial partner.

More information:

<http://www.inrs.fr/actus/Triklorame.html> (in French only)

Risk of injuries at the Norwegian workplace

Hans Magne Gravseth, STAMI



Workplace injury is thought to account for approximately 12 percent of all injury incidents in Norway. Workplace injuries occur more often among young people, particularly young men. Craftsmen and related trade workers, and employees in the primary industry sector are most at risk.

An estimate from 1995/1996 suggests that the total cost of workplace injury and illness amounts to nearly 12 billion Norwegian crowns per year. In Sweden, it is estimated that the expenses associated with workplace injury alone accounts for two to four percent of the GDP. The Norwegian Labour Inspection Authority registers 20-25 000 workplace injuries annually, but the actual numbers are estimated to be closer to 80-90 000. Reporting that is incomplete and biased makes it difficult to give a complete overview of the occurrence of workplace injuries in Norway.

Highest risk in the primary industry sector

The risk of being injured in the Norwegian workplace is around three percent annually, but varies substantially between occupation and industry sector. The highest injury risk is found in the primary industry sector, that is agriculture and fishing, and among craft and related trade workers. Carpenters and construction workers are among the occupational groups with many injuries, and the risk of having a workplace injury in these occupations is just above 10 percent. The figure below shows the ten occupations with the highest annual injury risk.

Shift work and rotation work is among the risk factors for workplace injuries. This is especially true for women, where the risk is more than double compared to those who work normal hours. Long work weeks is another well documented risk factor for injury. In particular, having work weeks exceeding 45 hours appears to lead to a marked increased risk of workplace injuries.

Generally there is high risk of injury among young employees, especially young men. This can be seen in the table, which shows that men aged 16-24 have a workplace injury risk that is approximately twice as high as men over 45 years. The same pattern is evident in women, where risk of injury is also highest in the youngest age group.

Figure:

The figure shows the annual risk of workplace injury in the ten most-at-risk occupations. Average for all occupations: three percent. Source: Statistics Norway, LFS-supplement 2007.

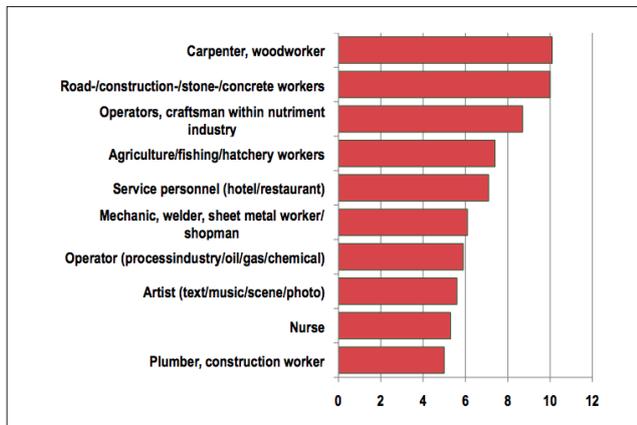


Table:

The table shows the annual risk of workplace injury by gender and age group. Source: Statistics Norway, LFS-supplement 2007.

Age	Men	Women
16-24	5,9	3,6
25-34	4,9	1,7
35-44	3,4	2,9
45-54	3,3	2,4
55-74	2,2	1,4
Total	3,7	2,4

Many injuries due to falls

The most frequent types of injuries are blunt trauma due to falling/falls or contact with objects, humans, or animals. When also including cuts, bites, stings, and shots, these types of injuries account for nearly 60 percent of all injuries. The type of injury also varies by occupation and industry segment. In the building and construction section, injury due to falls and cuts dominate, while within forestry, farming, and finishing, squeezed/trapped/crushed is the most common type of injury. Approximately half of all the injuries lead to sickness absence, and approximately 25 percent of the injured report some degree of reduced function following the injury. Based on this, one can estimate that at any given time, 20 000 people suffer from reduced work ability to due a workplace injury.

In Statistics Norway's Living Condition Report (LCR), the occurrence of workplace injury is reported, based on self-reporting. The question of workplace injury was phrased somewhat differently in the current report compared to the LCR. The numbers are therefore not directly comparable. In LCR one can, however, study trends, since the same question has been asked since 1989. During this period the annual risk of injury

has been around three percent. LCR 2009 finds that this risk has dropped to 2.1 percent. While there are some uncertainties associated with these figures, this is a weak suggestion that the risk of workplace injuries is declining. Numbers from the Norwegian Labour Inspection Authority and from the insurance industry registry DAYSY (Data on workplace injuries and occupational illnesses) also suggest a decline in the occurrence of workplace injuries.

Musculoskeletal pain is the most common health problem

Slightly over 11 percent of people of working age report work-related health problems. This includes both physical and mental health problems and disability. This amounts to more than 340 000 people, and among these 22 percent report having at least two different health problems. The risk increases with age, and is higher for women than men, and for people with a low education level.

Health care occupations, farmers and fishers are among the occupations with the highest occurrence of health problems. Among industry sectors, the occurrence is highest for men within agriculture, forestry, fishing, and building and construction sectors, while for women it is highest in the transportation/storage/communication sector.

Musculoskeletal pain accounts for more than 2/3 of all work-related health problems. Approximately nine percent of all women report work-related musculoskeletal pain. Work-related mental problems is the second largest group, accounting for approximately nine percent of all the health problems, followed by cardiovascular disease and breathing problems/lung disease, which together add up to five percent.

Report on workplace injuries and work-related health problems

The National Surveillance System for Work Environment and Occupational Health (NOA) at the National Institute of Occupational Health, published a report in 2010 based on Statistics Norway's supplementary module to the annual Labour Force Survey (LFS). The aim of the survey was to map out the occurrence of work injuries and work-related illness, based on self-report. A national sample of approximately 16 000 people, aged 16-74, who were or had been a part of the workforce, participated in the survey, which was conducted in 2007. Here we present the main findings from the survey.

Annual risk of sickness absence due to work-related health problems among those of working age is approximately seven percent. Nearly 60 percent of those with work-related health problems have been on sick leave the prior year as a result of the health problem. This amounts to approximately 25 000 people that at any given time are on sick leave, while ten times as many people report that their health problem limits their function at work and/or during their daily activities.

It is also important to note that the occurrence of health problems is high in people who have been, but no longer are, in the workforce. Sixteen percent of them report having health problems due to their work. This accounts to slightly less than 100 000 people nationally. Only ¼ of these expect to return to the workforce.

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Why should chemical protective gloves be used?



A business placing a hazardous substance on the market is obliged to state suitable chemical protective gloves on the material safety data sheet; however, the information provided is often not satisfactory or comprehensible to the user. IFA provides users in the field with assistance in selecting chemical protective gloves and with information on their marking and the standards governing them.



Practical work involving chemical protective gloves, Source: IFA

Human skin offers natural protection against external influences. This protection is unfortunately often inadequate. The human body therefore sometimes needs clothing which not only keeps it warm, but also protects it against exposure to hazardous substances. Such substances range from moisture to chemicals with a variety of properties. Where skin-care or barrier products do not provide the skin with adequate protection, chemical protective gloves must be worn. In practice, however, the gloves present users with a problem because chemical protective gloves do not provide protection against all chemicals.

Chemical protective gloves are able to protect the skin only when they are proof against the chemical (indicated by the "waterproof glove" pictogram). For this purpose, they must above all be resistant to the chemical (the chemical must not destroy the material and resist permeation). A glove material's resistance to permeation is determined not only by its properties, but also by its thickness. The thickness of chemical protective glove materials is however subject to practical limits:

if gloves are too thick, the resulting limited flexibility hinders work. It is not therefore sufficient for the user simply to wear any glove; for certain tasks involving chemicals, comprehensive information is required on the suitability of the gloves and their limits of use.

A business placing a hazardous substance on the market is obliged to state suitable chemical protective gloves on the material safety data sheet; however, the information provided is often not satisfactory or comprehensible to the user. Therefore, IFA provides users in the field with assistance in selecting chemical protective gloves and with information on their marking and the standards governing them. FAQ provide tips for use in practice, and a facility for asking questions. A list of links is provided for further and more detailed information.

More information:

www.dguv.de/lifa/en/prax/chemikalienschutzhandschuhe/index.jsp

New on line portal on safety in home and living environment

Valeria Rey, Giancarlo Sozi, INAIL, Department of Organisation Processes, former ISPESL Rome, Italy



Helping to reduce fatal accidents in home environment is the goal of the renewed portal on health and safety in living environment, created by the National Epidemiological Centre of former ISPESL, the Italian National Institute for Prevention and Safety at Work now incorporated in INAIL, the Italian Workers' Compensation Authority.

With a refreshed layout and updated contents, the portal offers both to citizens and experts a number of scientific and legal evidences useful to counter a category of injuries that results causing 8.000 fatal accidents and 4.5 million minor injuries each year in Italy.

Easy to use, the new web platform has been designed as a popular and deepening means focused on risks in home and living environments in order to spread out a safety culture in an area where misinformation and imprudent behaviours are the main causes of accidents.



The portal has been enriched with numerous sections, including several dedicated to

chemical, physical, biological risks as well as the ones deriving from lifestyle, plus one section specifically dedicated to the safety of housing, with emphasis on electrical and gas plants exposed to risk of explosion.

In a dedicated area of the website citizens can use interactive tools to assess, for example, the hazardous level of their home environment. With a self-assessment test even children can check their knowledge of the hazards present in their everyday life environment.

With regard to the accessibility to information, the portal has been designed keeping in mind the categories of citizens - such as the elderly and handicapped - who might not have immediate access to the information because of the surfing complexity or their sensory and/or motor limitations. This was done on the basis of the Italian legislation and the international guidelines on accessibility.

With the aim to meet the diverse information needs about prevention and safety in living environments, a dedicated area has been created to collect national and international laws, including European decrees and directives.

The portal also offers the possibility to download all the Centre's publications and news regarding conferences, seminars and press conferences, as well as accessing the home accidents database built up on the base of Ispesl research through the years.

In addition, tools are available to deal with the dangers that lurk in the domestic environment: the list of poison control centers, emergency and useful numbers to keep at hand.

Among the available tools there is a section devoted to the decoding of the hazard symbols to allow a correct reading of mass market product labels, such as detergents or biocides. To facilitate the reading of the content a glossary has been provided of technical and scientific terms used in the portal and in publications.

This new online platform is the institutional crossroads and works as a liaison with local actors: operators of specific regional departments have access to the back office of the site to add information on accidents in the living environment.

The goal is to provide an effective tool to help citizens through the dissemination of best practices in order to dramatically reduce a phenomenon affecting 5% of the Italian population every year with a significant impact in terms of cost on the NHS.

Further info: www.ispesl.it/ossvita

TNO advises the Turkish and Estonian governments on health and safety at work.



TNO is active in Turkey, a pre-accession EU state, and Estonia, a new EU member state, where civil servants of the labour ministries of the two countries are being assisted to evaluate current national policy on health and safety at work. TNO is also making recommendations to solve shortcomings, and these recommendations will be incorporated directly into law and policy.



The Turkish Working Group in action

In Turkey, TNO experts are investigating how to set up health and safety services there; a report on this has been written in collaboration with a Turkish working group.

In 2010 and 2011 a delegation of civil servants from the Turkish Ministry of Labour and

Social Security is paying a series of study visits to Germany, Spain and Great Britain to find out about the practice there. TNO is undertaking this project for the Dutch Ministry of Social Affairs and Employment in the context of the MATRA (2) programme for bilateral support to the Turkish ministry in question.

The study in Estonia is broader. Following the country's accession to the European Union in 2004 little has actually changed in terms of policy and law. Now the Ministry of Labour wants to know whether Estonian law and legislation on health and safety at work is up to date and whether the policy and its implementation need to be improved. This project is being funded by the respective Estonian ministry.

Both projects will run for a year.

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(2) MATRA stands for Maatschappelijke Transitie (Social transition). The programme is funded by the Dutch government to support pre-accession countries.

Report supports companies in risk analysis on hand-arm and whole-body vibration



Hand-Arm Vibrations (HAV) and Whole-Body Vibrations (WBV) can be dangerous for the health and safety of employees. A new report published by IFA summarizes the obligations on companies to assess the risks.



The effects of vibration when working with handheld and hand-guided devices (Hand-Arm Vibration – HAV) and when driving mobile work machines and vehicles (Whole-Body Vibrations – WBV) can endanger the health and safety of employees. Damage to bones and joints and circulatory problems in the hand and arm systems as well as

disc damage to the spine as a result of the effects of vibrations are recognised occupational diseases. Since the entry into force of the EC Vibration Protection Directive 2002/44/ EC in 2002 there has been an obligation on companies throughout Europe to assess the risks of jobs with vibration.

The statutory provisions and their implementation in Germany are explained in this report. It supports companies in identifying and assessing the risks and in choosing appropriate preventive measures by providing tables with data. It describes the key data of the EC directive, which are not identical to the key data previously used in Germany to assess vibration. Conversions of these key data into the new key data systems are explained using practical examples. Software available on the internet to identify the assessment key data can also be used to plan technical and organisational preventive measures. Annexes 1 and 2 to the report bring together key data ranges for many devices, work machines and vehicles relevant to vibration. Annex 3 includes the measurement results for the vibration-reducing effect of seats on mobile machines and vehicles as a preventive measure to aid choice for WBV.

More information:

<http://www.dguv.de/ifa/en/pub/rep/rep05/bgia0606/index.jsp>

National OSH Management Survey in Spain

Highlights after twelve years of legal standards launching



In 2009 the INSHT conducted the National Occupational Safety and Health (OSH) Management Survey. The aim was to gather feasible information from employers about the OSH management in Spanish companies. The sample represented statistically all the activities branches and company sizes and 5.147 employers were interviewed following a standard questionnaire.

The results show that slightly over 40% of workplaces with six or more employees have prevention representatives (50% in industrial branches). Only slightly more than 20% of these representative positions are assumed by women. With regard to the OSH management, the external preventive services role has increased, in the last ten years, in all payroll sizes considered. Outsourcing represents the most common OSH management option adopted by companies (73%). The preventive specialties hired, in order of frequency, are: Safety (92%), Occupational Medicine (71%), Hygiene (67%), and finally, Ergonomics and Psychosociology (61.7%).

The most recurrent OSH activities carried out at the workplace are health surveillance (81.1%) and risk assessment (76.9%). Preventive activities increase with the dimensions of the workplace; and, according to economic activity, Construction and Industry (especially in Chemistry) are the sectors representing the highest percentages in the various preventive actions considered. The most frequently evaluated aspects have been: "the safety of machinery, equipment, materials, and work facilities"; "working postures, physical strains, and repetitive movements" and "workplace design (furniture, space, surfaces, etc.)".

Regarding the employers' perception about risks linked to working conditions, the results underline the recognition of non-traditional risks, such as those related to stress, depression or anxiety. The identification of these non-traditional risks is three times higher than some conventional risks, such as chemical, physical, or biological agents.

In general, preventive action on a workstation following an occupational accident or disease can clearly be improved upon. In more than two out of three situations, the affected worker is returned to a workstation in the same environmental or

safety conditions that existed at the time of the accident or disease.

87.7% of business managers do not have data on the economic costs of accidents occurring at their workplaces, the most sensitive companies to this issue being those with 250 or more employees; despite of this, only 27% of large companies have data on the economic impact of accidents.

Over half of the workplaces have carried out some training activity relating to health and safety at work in the last two years (61.3%). Training activities have been carried out mainly in the Construction, Chemical, and Metalworking sectors, and the number and variety of training activities increase in big companies.

40% of the workplaces surveyed reported to have invested in the acquisition of new machinery in the last two years, but only 16% of total machinery acquired or renovated was new. In workplaces with more than 249 employees the percentage of new machinery acquired reached 39%. This value highlights the importance of other means of machinery renovation, such as second-hand, leasing or self-manufacture, for which a significant effort must be made to ensure compliance with health and safety requirements.

This survey, carried out periodically, is a useful tool to estimate the impact and accomplishment of OSH policies at enterprise level.

More information: <http://www.oect.es>



About PEROSH

PEROSH is a partnership of European working environment research institutes aiming to collaborate and to coordinate their research and development efforts for healthier, longer and more productive working lives.

Member Institutes

- Federal Institute for Occupational Safety and Health (BAuA), Germany, www.baua.de
- Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA), Germany, www.dguv.de/ifa
- Central Institute for Labour Protection - National Research Institute (CIOP-PIB), Poland, www.ciop.pl
- Finnish Institute of Occupational Health (FIOH), Finland, www.ttl.fi
- Health and Safety Laboratory (HSL), United Kingdom, www.hsl.gov.uk
- Institut National de Recherche et de Sécurité (INRS), France, www.inrs.fr
- Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), Spain, www.insht.es
- National Institute for Occupational Safety and Prevention (INAIL), Italy, www.ispesl.it
- National Research Centre for the Working Environment (NRCWE), Denmark, www.nrcwe.dk
- Institute for Occupational Safety and Health (Prevent), Belgium, www.prevent.be
- National Institute of Occupational Health (STAMI), Norway, www.stami.no
- Netherlands Organisation for Applied Scientific Research (TNO), Netherlands, www.tno.nl
- Occupational Safety Research Institute (VUBP), Czech Republic, www.vubp.cz

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